



Australian  
Competition &  
Consumer  
Commission

# Water NSW

## Annual review of regulated charges: 2015-16

### Final decision

June 2015

ISBN 978 1 922145 46 8

Australian Competition and Consumer Commission

23 Marcus Clarke Street, Canberra, Australian Capital Territory, 2601

© Commonwealth of Australia 2015

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attribution 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication

The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications, ACCC, GPO Box 3131, Canberra ACT 2601, or [publishing.unit@accg.gov.au](mailto:publishing.unit@accg.gov.au).

## Table of contents

1. Executive Summary .....	1
2. Introduction .....	4
2.1 Assessment framework .....	4
2.2 Regulated charges set in 2014 Determination .....	5
2.3 2015-16 review process .....	6
3. Water NSW's application and additional information .....	7
4. Approach to making the final decision.....	8
5. Step one: calculation of the charges set according to the 2014 Determination.....	9
5.1 Overview of the adjustments .....	9
5.3 Summary of submissions .....	10
5.4 Final decision (step one) .....	11
6. Step two: the 'change in forecasts' test.....	15
6.1 Summary of the ACCC's draft decision.....	15
6.2 Summary of submissions .....	15
6.3 Final decision (step two) .....	16
7. Step three: the 'price stability' test.....	17
7.1 Summary of the ACCC's draft decision.....	17
7.2 Summary of submissions .....	18
7.3 Final Decision (step three) .....	19
8. Matters outside the scope of this review .....	22
8.1 The requirement to act in accordance with the WCIR.....	22
8.2 The UOM .....	22
8.3 Scrutiny of MDBA and BRC amounts.....	22
Attachment A: Final 2015-16 charges and ICD rebates .....	24
Attachment B: Revenue requirements and recovery .....	27
Attachment C: Water NSW application – charges .....	28
Attachment D: Entitlement holdings .....	29
Attachment E: Water usage.....	30
Attachment F: Water allocations.....	32
Attachment G: Factors contributing to changes in the level of charges .....	33
Attachment H: Expected bills for customers .....	35

# 1. Executive Summary

In March 2015 the Australian Competition and Consumer Commission (ACCC) commenced a review of Water NSW's regulated charges for the 2015-16 financial year. This report sets out the ACCC's final decision on Water NSW's regulated charges for 2015-16.

This review relates to the ACCC's final decision on Water NSW's (then, the State Water Corporation of NSW) charges for the 2014-17 regulatory period (2014 Determination). In its 2014 Determination, the ACCC set the charges that Water NSW is able to levy during the regulatory period. The ACCC did this by setting the methodology that is used to calculate Water NSW's regulated charges for 2015-16 and 2016-17, in order to ensure that the charges were based on the most up-to-date inflation and usage information.<sup>1</sup>

The Water Charge (Infrastructure) Rules 2010 (the WCIR) limit the ACCC's ability to depart from the methodology set in the 2014 Determination to when one or both of the following tests are satisfied:

- it is reasonably necessary to vary the charges having regard to changes in the demand or consumption forecasts submitted by Water NSW in its application from those used in the 2014 Determination (the 'change in forecasts' test)
- it is reasonably necessary to vary the charges having regard to price stability (the 'price stability' test).

These tests impose a high threshold which must be met before the ACCC is able to depart from the methodology set in its 2014 Determination. This is important as the methodology set in the 2014 Determination is designed to balance the interests of Water NSW's customers, in terms of price stability, and Water NSW itself, in terms of revenue stability, by basing charges on the most recent usage information.

## ***The ACCC has decided not to approve Water NSW's application***

Water NSW's application sought ACCC approval of charges that are lower in most cases than those determined in accordance with the 2014 Determination and the unders and overs mechanism (UOM) set in this determination. Water NSW sought to depart from the UOM on the grounds of price stability. Water NSW's application also sought to carry forward the portion of the under-recovery that would have been added to its 2015-16 revenue requirement if the UOM was applied as intended, for recovery in future years.

The ACCC acknowledges that the majority of submissions from interested parties support Water NSW's application as it results in lower charge increases in 2015-16 in most valleys. In making its decision, the ACCC has carefully considered all of the information provided by Water NSW and its customers. However, for the reasons set out below, the ACCC has decided that the price stability test has not been met and therefore it cannot approve Water NSW's proposal.

While the WCIR does not define price stability, the ACCC considers that it involves an assessment of the likely impact of any increases or decreases in charges on Water NSW's customers.

The ACCC conducted an analysis of expected bills for Water NSW's customers in order to assess the likely impact of the charge increases. This analysis showed that, based on the same typical water

---

<sup>1</sup> This includes the application of a price control mechanism—the unders and overs mechanism. The unders and overs mechanism adjusts Water NSW's revenue requirement, allowing a portion of Water NSW's 2014-15 under-recovery of revenue to be recovered in 2015-16 charges (with further recovery in subsequent years).

entitlements and usage, the combination of fixed and variable charges set in the 2014 Determination is likely to mitigate the impact of individual charge increases.<sup>2</sup>

Bills for high security and general security customers in the Border, Lachlan and Macquarie valleys are expected to increase by between 2.7% in real terms (4.1% nominal) to 10.7% in real terms (12.2% nominal). These increases are primarily due to low water availability in 2014-15.

Bills for high and general security customers in the Gwydir, Namoi, Murray and Murrumbidgee valleys are expected to decrease. This is primarily due to the effect of favourable water supply conditions during 2013-14 in these valleys which, through the operation of the UOM, led to lower usage charges. In the case of Murray valley, the adjustment of usage data to include the volume of water allocation traded out of NSW was the main driver of lower expected bills.

In its 2014 Determination, the ACCC capped charge increases in the Peel valley at 10% in real terms per annum, noting that Peel valley charges were already much higher than in other valleys. The ACCC had regard to this decision in considering whether the percentage increases in bills were such that the ACCC should depart from its 2014 Determination.

The ACCC also considers that it is important to consider price stability in the longer term, rather than just the year that is the subject of the annual review. The ACCC considers that varying the 2015-16 charges and allowing Water NSW to carry forward the under-recovery risks more significant charge increases in the future, should there be similar weather conditions to those experienced in 2014-15. Therefore, while accepting Water NSW's proposal may lead to lower price increases in the short term, it will not necessarily lead to greater price stability over a longer term.

The ACCC notes that the charges it determines are the maximum charges that Water NSW is able to levy and it is open to Water NSW to set its charges below this level if it considers that it is in its commercial interests. If Water NSW were to set its prices at a lower level the ACCC would not expect Water NSW to seek to claim this discount as an under-recovery in a future review of regulated charges.

***The ACCC has decided to set Water NSW's 2015-16 charges in accordance with its 2014 Determination with minor adjustments***

In late 2014 Water NSW advised the ACCC that during 2014-15, it had imposed usage charges in relation to trades of water allocation from NSW to other Basin States. In its application for the 2015-16 year, Water NSW provided data for previous years (and where it was not possible to obtain, estimated data) on the volumes of water allocation traded out of NSW to other Basin States. This data was not provided to the ACCC when it made its 2014 Determination.

The ACCC has decided that, as Water NSW collects revenue from usage charges on irrigators who trade water allocation from NSW to other Basin States, the data now provided by Water NSW should be taken into account in calculating charges. Including these volumes in the calculation of demand forecasts had a downward impact on the usage charges in the Border, Murray and Murrumbidgee valleys.

Accordingly, the ACCC's final decision is to determine Water NSW's 2015-16 charges in accordance with its 2014 Determination, with a variation to take account of usage data that has not previously been provided to the ACCC.

Tables 1.1 and 1.2 below set out the charges that Water NSW is able to levy in 2015-16, compared to 2014-15 charges. These charges will apply from 1 July 2015.

---

<sup>2</sup> In its 2014 Determination, the ACCC set Water NSW's revenue requirement for each year of the 2014-17 regulatory period and decided that a fixed: variable tariff structure was appropriate, where Water NSW can recover 40% of its revenue requirement through fixed (entitlement) charges and 60% through variable (or usage) charges. Therefore, the increase in bills depends on a weighted average of the increases in entitlement and usage charges and the percentage increase for usage charges is lower than the percentage increase for entitlement charges in most cases.

The 2015-16 entitlement and access charges are higher in most valleys than in 2014-15. However, usage charges for Gwydir, Namoi, Murray and Murrumbidgee valleys are lower. As noted above, this is primarily due to the effect of favourable water supply conditions during 2013-14 and, in the case of Murray valley, the adjustment of usage data.

Large reductions in usage, particularly in northern valleys, have resulted in some under-recovery of revenue by Water NSW. The UOM results in modest charge increases in most valleys, with higher charge increases in the:

- Border valley, reflecting low water usage in 2014-15, combined with full recovery of 2014-15 under-recovery on Border River Commission contributions set by the NSW government (and added to Water NSW's revenue requirement in full in accordance with the 2014 Determination)<sup>3</sup>
- Macquarie valley, reflecting low usage in 2013-14 and 2014-15 and low allocations for general security entitlement holders which in turn increased the average water allocation ratio (AWA ratio) and high security premium.<sup>4</sup>

The full list of charges that Water NSW is able to levy in 2015-16 is in Attachment A.

**Table 1.1: 2014-15 charges (\$2014-15/ML) and final 2015-16 charges (\$2015-16/ML) – Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray, Murrumbidgee and Lowbidgee valleys**

Valley	High security entitlement charge		General security entitlement charge		Usage charge	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
Border	\$9.83	\$11.20	\$3.31	\$3.90	\$9.63	\$10.18
Gwydir	\$13.57	\$14.00	\$3.34	\$3.44	\$12.15	\$11.89
Namoi	\$16.51	\$16.81	\$7.68	\$7.99	\$19.93	\$19.80
Peel	\$28.39	\$31.65	\$3.12	\$3.48	\$46.90	\$52.27
Lachlan	\$12.84	\$14.84	\$3.19	\$3.24	\$18.42	\$19.33
Macquarie	\$12.55	\$14.35	\$3.40	\$3.51	\$14.40	\$15.89
Murray	\$4.65	\$4.79	\$2.64	\$2.66	\$6.88	\$6.40
Murrumbidgee	\$3.57	\$3.63	\$1.55	\$1.53	\$4.31	\$4.28
Lowbidgee	-	-	\$0.73	\$0.78	-	-

**Table 1.2: 2014-15 charges (\$2014-15/KL) and final 2015-16 charges (\$2015-16/KL) – Fish River Water Supply Scheme**

Customer type	Access charge –MAQ		Usage charge (below MAQ)		Usage charge – usage above MAQ	
	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16
Raw water (EnergyAustralia)	\$0.33	\$0.34	\$0.37	\$0.39	-	-
Raw water (minor customers)	\$66.25	\$68.31	\$0.37	\$0.39	\$0.70	\$0.73
Filtered water (minor customers)	\$128.22	\$132.21	\$0.64	\$0.72	\$1.29	\$1.38

Note: MAQ is the minimum annual quantity that Fish River customers must purchase.

<sup>3</sup> The UOM provides that for BRC and MDBA contributions, the full amount of any under (or over) collection of revenue in a particular year is added to (or subtracted from) Water NSW's revenue requirement for the following year. For Water NSW's own costs, any under (or over) collection of revenue in a particular year will be added into (or subtracted from) a rolling unders and overs account. The value of this account will be multiplied by the rate of return and the result added to (or subtracted from) Water NSW's revenue requirement for the following year.

<sup>4</sup> High security entitlement charges are calculated using a 'high security premium' (HSP) which is calculated with reference to the ratio of water allocated to high security customers and general security customers. The larger the difference between the percentage of water allocated to high security customers and percentage of water allocated to general security customers, the larger the HSP.

## 2. Introduction

Under the WCIR, the ACCC can approve or determine regulated charges in the Murray-Darling Basin of an infrastructure operator that is not a member owned operator and holds water entitlements of its own or its customers in excess of 250GL.<sup>5</sup>

The ACCC only has responsibility for approving or determining the regulated charges imposed by Water NSW within the Murray-Darling Basin.

### 2.1 Assessment framework

#### 2.1.1 Water Charge (Infrastructure) Rules 2010

The WCIR sets out a two stage process for approving or determining the regulated charges for Water NSW for a defined regulatory period.

##### *First stage—approval or determination*

Water NSW must apply in writing to the ACCC for approval or determination of its proposed regulatory charges for each year of the regulatory period. After a consultation process, the ACCC must either approve or determine Water NSW's regulated charges in respect of each year of the regulatory period. The ACCC determined these charges for the regulatory period 1 July 2014 to 30 June 2017 in June 2014 (see section 2.2).

##### *Second stage—annual review of regulated charges*

For each year after the first year of the regulatory period, Water NSW must apply to the ACCC for a review of its regulatory charges for that year (the annual review). This process allows for regulated charges to be updated during the regulatory period. This final decision relates to the annual review for 2015-16 charges. The ACCC must not approve changes to the regulated charges decided in the original determination unless it is satisfied that it is reasonably necessary to do so having regard to:

- changes in demand or consumption forecasts (described in this report as the 'change in forecasts' test); and
- price stability (described in this report as the 'price stability' test).<sup>6</sup>

In reviewing the application, the ACCC must undertake a consultation process, including publishing a draft decision and inviting stakeholder submissions.

Within three months of receiving the application, the ACCC must either approve Water NSW's proposed charges or determine the charges, although there are provisions for extending that period. In this review the period was extended for a further three days, the period during which information requests to Water NSW were outstanding.<sup>7</sup>

---

<sup>5</sup> WCIR, rule 29.

<sup>6</sup> WCIR, rule 37.

<sup>7</sup> WCIR, rules 35 and 37.

## 2.2 Regulated charges set in 2014 Determination

In its 2014 Determination, the ACCC set the revenue requirement for each year of the regulatory period.<sup>8</sup> The 2014 Determination also set the regulated charges for the first year of the regulatory period and formulae for calculating regulated charges for subsequent years of the regulatory period. The 2014 Determination also included, for illustrative purposes, 'indicative charges' for the subsequent years of the regulatory period, which would apply if demand was exactly as forecast.

### 2.2.1 The unders and overs mechanism

Water NSW recovers 60 per cent of its revenue requirement from variable (usage) charges. As water usage fluctuates from year to year, Water NSW's actual revenue will likely differ from the targeted revenue requirement, resulting in under or over-recovery of revenue. To address this, the ACCC determined that Water NSW infrastructure charges for the Border, Gwydir, Namoi, Lachlan, Macquarie, Murray, Murrumbidgee valleys and the Fish River Water Supply Scheme (Fish River) should be subject to a hybrid form of price control.<sup>9</sup> Charges are to be calculated using an annual price control model featuring a UOM which allows for an annual adjustment to Water NSW's charges to recover or repay any under or over-recovery of revenue.

In the annual review for 2015-16 charges, the UOM calculates the under/over-recovery as the difference between estimated revenue in 2014-15 and the original revenue requirement set by the ACCC for 2014-15. This amount is added to a cumulative unders and overs account, which may fluctuate as future years' under/over recoveries are added to it.

There are two components to Water NSW's revenue requirement—first, Water NSW's own costs and second, amounts that Water NSW is required to pay towards the recovery of the NSW Government's contributions to the MDBA and BRC.<sup>10</sup> The UOM calculates a revenue adjustment, which differs between two components of Water NSW's revenue requirement:

- i. For Water NSW's own costs, the revenue adjustment is the unders and overs account balance multiplied by the rate of return. The rate of return, also known as the weighted average cost of capital (WACC), is 5.64% for 2015-16.<sup>11</sup> The balance of the unders and overs account is carried forward into future years.
- ii. For the component due to the NSW Government's contributions to the Murray-Darling Basin Authority (MDBA) and Border Rivers Commission (BRC) in the Murray, Murrumbidgee and Border valleys, the revenue adjustment is the full amount of any under/over-recovery from the previous year.

These adjustments are added to the original revenue requirements for each valley. If the balance is a net under-recovery, the adjustment increases the revenue requirement. A net over-recovery decreases the revenue requirement.<sup>12</sup>

Actual charges for 2015-16 are then calculated, broadly, by dividing the adjusted revenue requirement by updated volume forecasts for each charge type.

---

<sup>8</sup> ACCC, *Final decision on State Water pricing application 2014-15 to 2016-17*, June 2014.

<sup>9</sup> This is a hybrid form in that it includes elements of both a price cap and a revenue cap. Revenue caps provide for charges to be adjusted to fully recover/repay any under/over-recovery of revenue in the previous year.

<sup>10</sup> Under a direction from the NSW Treasurer, Water NSW is required to pay prescribed amounts towards the recovery of the NSW Government's contributions to the MDBA and BRC. These amounts must be paid to the NSW Consolidated Fund on 15 June each year of the 2014-17 period. The NSW Treasurer determined the apportionment of Water NSW's user shares of the NSW contribution to the MDBA and BRC for each year of the regulatory period prior to the ACCC's 2014 Determination. These amounts are set out in table B1 in Attachment B. In its 2014 Determination, the ACCC decided that, because of the explicit regulatory obligation, any under/over-recovery of these contributions should be fully recovered or repaid via charges in the year immediately following, as far as possible.

<sup>11</sup> This is the nominal pre-tax WACC, based on a real WACC of 4.26% set in the 2014 Determination.

<sup>12</sup> Because the revenue adjustment in 2015-16 is based on an estimate of usage and revenue for 2014-15 before the end of the year, there will be a smaller secondary adjustment in 2016-17 charges after the actual revenue for 2014-15 is known.



## 2.3 2015-16 review process

On 9 March 2015 Water NSW submitted its application to vary its 2015-16 charges. The ACCC released its draft decision on Water NSW's application on 16 April 2015.<sup>13</sup> This commenced a public consultation period which ended on 6 May 2015.

The ACCC received six submissions in response to the draft decision. All public submissions received by the ACCC during its consultation processes, including additional material provided with submissions or in separate correspondence, are available on the ACCC's website.<sup>14</sup> The ACCC carefully considered all submissions in making the final decision.

This is the ACCC's final decision, setting out Water NSW's regulated charges for 2015-16 with the reasons for its decision, including its consideration of stakeholder submissions.

The ACCC acknowledges the limited time between the publication of the draft decision and the implementation of the charges on 1 July 2015. However, the annual review process requires the latest best available estimates of usage for 2014-15 in order to calculate 2015-16 charges, as earlier estimates are subject to significant changes. The latest estimates are based on actual usage from 1 July 2014 to 31 March 2015.

The ACCC is also currently undertaking a review of the Commonwealth Water Charge Rules, including the WCIR. The ACCC has released an issues paper seeking input from stakeholders on possible amendments to the Commonwealth Water Charge Rules. The issues paper is available on the ACCC website.<sup>15</sup> This provides an opportunity for interested parties to put forward views on alternative approaches to the regulation of infrastructure operators' water charges in the Murray-Darling Basin. The closing date for submissions to the issues paper is 29 June 2015.

---

<sup>13</sup> ACCC, *Annual review of Water NSW's regulated charges: 2015-16 - draft decision*, April 2015.

<sup>14</sup> <http://www.accc.gov.au/regulated-infrastructure/water/water-projects/water-nsw-formerly-state-water-annual-price-review-2015-16>.

<sup>15</sup> See <http://acc.gov.au/regulated-infrastructure/water/water-projects/review-of-the-water-charge-rules-advice-development>.

### 3. Water NSW's application and additional information

In its application, Water NSW showed charges for 2015-16 calculated using the 2014 Determination price control model with updated volume data. However, Water NSW proposed to depart from charges calculated using this model. Specifically, it requested that:

- charges be maintained at the levels set out in tables 1-1, A1 and B1-B5 in the 2014 Determination, adjusted for changes in inflation<sup>16</sup>
- the UOM not be applied to set 2015-16 charges
- the revenue adjustment that would have resulted from applying the UOM in 2015-16 be added to the unders and overs account and carried forward.

Water NSW noted that the lower than forecast water usage in 2014-15 would result in higher charges for its customers if the UOM was applied. Water NSW stated that:

In the current environment of low water availability, Water NSW considers that this adverse price impact is not in the best interests of our customers.<sup>17</sup>

Water NSW proposed maintaining the indicative 2015-16 charges listed in the 2014 Determination without adjustment for the lower than expected water usage during 2014-15 on the grounds of price stability. The charges proposed by Water NSW are shown in tables C1 and C2 in Attachment C.

In its submission to the ACCC's draft decision, Water NSW maintained its position set out in its application.

Water NSW's application and submission also noted that it considers that it would be able to manage its business with greater efficiency if it had more flexibility in the setting of charges. Water NSW also indicated that it will explore pricing initiatives such as product based pricing with its customers and the ACCC for potential implementation in the determination for the regulatory period commencing 1 July 2017.<sup>18</sup>

On 11 May 2015, Water NSW submitted a revised version of the annual price control model with updated volume and consumer price index (CPI) data, showing the 2015-16 charges that would result if the UOM were applied.

---

<sup>16</sup> Water NSW clarified its request for an inflation adjustment on 27 March 2015 in response to an ACCC information request.

<sup>17</sup> Water NSW, Application to the ACCC for annual review of regulated charges, 9 March 2015, p. 1.

<sup>18</sup> Water NSW, submission to ACCC draft decision, 6 May 2015, p.1.

## 4. Approach to making the final decision

As noted above, in deciding whether to approve Water NSW's application, the WCIR requires the ACCC to consider whether it is reasonably necessary to depart from the charges set by the ACCC's 2014 Determination, having regard to changes in demand or consumption forecasts and price stability.

In its 2014 Determination, the ACCC decided that the charges for 2015-16 are to be calculated using formulae set out in the decision, rather than the indicative charges in tables 1-1, A1 and B1-B5 in the 2014 Determination. These formulae include adjustments for movements in CPI, changes in volume forecasts and the application of the UOM.

The ACCC has undertaken a three-step process in making this final decision. This process is summarised in the flow chart below.

### Step 1: calculate the 2015-16 charges set according to the 2014 Determination (section 5)

This step involves adjustments to the indicative charges in the 2014 Determination through the application of the unders and overs mechanism with updated CPI movements and water volume data.

### Step 2: the 'change in forecasts' test (section 6)

This step involves consideration of additional information that changes the demand or consumption forecasts used in the 2014 Determination.

### Step 3: the 'price stability' test (section 7)

This step involves consideration of the impact of any increases or decreases in charges on Water NSW's customers.

Water NSW's application asks for the ACCC to approve charges that are lower than those which would be calculated according to the 2014 Determination on the grounds of price stability. The ACCC has considered whether it should approve Water NSW's application on these grounds in step three.

## 5. Step one: calculation of the charges set according to the 2014 Determination

### Summary of the final decision

In this final decision, the ACCC applies the same methodology for step one as in the draft decision. The resultant charges differ only insofar as the final decision applies more recent CPI and volume data, submitted by Water NSW in its updated forecasts in May 2015.

The 2014 Determination set out indicative charges for 2015-16 (in real \$2013-14) that would result from the application of the pricing model if demand forecasts used by the ACCC in making its 2014 Determination were accurate.

Step one involves the ACCC calculating the 2015-16 charges according to the 2014 Determination methodology, using:

- actual CPI movements up to the March quarter 2015
- updated data for water usage volumes, the number of entitlements on issue and water allocation percentages.

The calculations include an adjustment to Water NSW's revenue requirement for 2015-16, following the calculation of any under- or over-recovery incurred by Water NSW during 2014-15, and the application of the UOM.

### 5.1 Overview of the adjustments

#### 5.1.1 Adjustments for inflation

The revenue requirements and regulated charges in the 2014 Determination were set out in \$2013-14. In this final decision, all 2015-16 charges are expressed in nominal \$2015-16, reflecting the following movements in the CPI from the 2013-14 base year:<sup>19</sup>

- 2.93% to inflate from \$2013-14 to \$2014-15, based on the actual CPI increase between March quarter 2013 and March quarter 2014
- 1.33% to inflate from \$2014-15 to \$2015-16, based on the actual CPI increase between March quarter 2014 and March quarter 2015.<sup>20</sup>

For infrastructure charges in the Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys and Fish River, CPI is used to update the revenue requirement and the nominal weighted average cost of capital in the pricing model.

The following charges and rebates are not subject to the UOM and are adjusted only to reflect movements in CPI:

- Lowbidgee Flood Control and Irrigation District (Lowbidgee) general security entitlement charge – as this charge is 100% fixed
- Peel valley entitlement and usage charges, as increases in these charges are capped at 10% real per annum
- metering service charges
- charges for testing meter accuracy under dispute

<sup>19</sup> The CPI is published by the Australian Bureau of Statistics (ABS).

<sup>20</sup> In the draft decision, charges in \$2015-16 reflected an interim forecast of the CPI increase at 1.72 per cent.

- environmental gauging station charges
- Fish River connection and disconnection charges
- allocation trade processing charges
- Irrigation Corporation and District (ICD) rebates.

Tables A4-A6 in Attachment A set out the above charges and rebates in nominal \$2015-16.<sup>21</sup>

### 5.1.2 Adjustments related to volumes

In order to calculate the infrastructure charges for the Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys and Fish River, updated data for the following volumes are required:

- entitlement volumes—an estimate for 2014-15 and forecast for 2015-16 (Attachment D)
- water usage—an estimate for 2014-15 and actual 2013-14 (Attachment E)
- water allocations—actual average allocations for 2013-14 (Attachment F)
- number of customers (for Fish River only).

Water NSW supplied updated data for the required volumes in its initial application. The ACCC used this data in making its draft decision. These volumes were based on:

- actual usage recorded up to 31 December 2014<sup>22</sup>
- a forecast of water usage for the remaining six months of the year, based on water orders, current storage levels, rainfall forecast by the Bureau of Meteorology, available water within access licences and historical water usage trends.

In its subsequent submission to the ACCC's draft decision, Water NSW provided a further update on its estimate of usage for 2014-15 based on actual usage up to 31 March 2015 and a forecast for the remaining three months of the year (calculated as set out above).

The ACCC considers that the forecasts and estimates submitted by Water NSW in its updated application are reasonable and calculated in accordance with appropriate methodology. No submissions were received in relation to this step of the annual review process.

## 5.3 Summary of submissions

The Peel Valley Water Users Association (PVWUA) submitted that charges for the Peel valley increased by more than the 10% cap set in the ACCC's 2014 Determination.<sup>23</sup> The PVWUA further submitted that the pricing differential between valleys was inequitable and the Tamworth Regional Council (TRC) submitted that it remains opposed to the variation in charges between valleys.<sup>24</sup> Peel valley charges are considered in section 5.4.2.

Murray Irrigation Limited's (Murray Irrigation) submission queried why the entitlement volumes in the Murray valley differed from those in the forecasts for the 2014 Determination.<sup>25</sup>

These submissions are addressed in section 5.4 below.

<sup>21</sup> Table A5 includes the Yanco Creek levy which was determined to be \$0.90/ML in nominal terms for each year in the regulatory period and so does not require adjustment.

<sup>22</sup> Note that for step one, the ACCC only used data for water usage within NSW, as in the 2014 Determination. The usage data provided by Water NSW for the annual review also included volumes of water allocation traded outside NSW, but the addition of these volumes is considered in step two as a change in demand forecasts.

<sup>23</sup> TRC, submission to ACCC draft decision, 29 April 2015.  
PVWUA, submission to ACCC draft decision, 30 April 2015, pp.2-3.

<sup>24</sup> PVWUA, 30 April 2015, pp.1, 4.

<sup>25</sup> Murray Irrigation, submission to ACCC draft decision, 6 May 2015, p.1.

## 5.4 Final decision (step one)

### 5.4.1 Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys

For the Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys there are three infrastructure charges:

- i. high security entitlement charge
- ii. general security entitlement charge
- iii. usage charge.

The methodology set in the 2014 Determination for these valleys is designed to allow Water NSW to fully recover the costs of providing infrastructure services in these valleys with 40% of its revenue recovered through the 'fixed' entitlement charges, and 60% through the 'variable' usage charge. The 2015-16 charges for all these valleys are subject to the UOM.

Table 5.1 below sets out the 2015-16 charges, calculated in accordance with the methodology set out in the ACCC's 2014 Determination. These charges are expressed in nominal terms, based on the UOM with the updated inflation and volume data described above.

It is important to note that the charges for the Border, Murray and Murrumbidgee valleys set out in table 5.1 (highlighted) are not the final charges proposed by the ACCC, as these charges are further adjusted in step two (explained in section 6 below). Table 1.1 on page 3 sets out the final charges for these valleys.

**Table 5.1: 2015-16 charges (in \$2015-16) set in the 2014 Determination - \$/ML and % change from 2014-15 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys)**

Valley	High security entitlement charge		General security entitlement charge		Usage charge	
	\$/ML	% change	\$/ML	% change	\$/ML	% change
<b>Border</b>	\$11.21	14.0%	\$3.90	17.8%	\$10.93	13.6%
<b>Gwydir</b>	\$14.00	3.2%	\$3.44	3.2%	\$11.89	-2.1%
<b>Namoi</b>	\$16.81	1.8%	\$7.99	4.1%	\$19.80	-0.7%
<b>Lachlan</b>	\$14.84	15.6%	\$3.24	1.8%	\$19.33	5.0%
<b>Macquarie</b>	\$14.35	14.3%	\$3.51	3.1%	\$15.89	10.4%
<b>Murray</b>	\$4.97	6.9%	\$2.76	4.5%	\$7.26	5.6%
<b>Murrumbidgee</b>	\$3.64	2.2%	\$1.54	-0.7%	\$4.39	1.7%

#### *Entitlement volumes*

Water NSW's application provided updated forecasts of entitlement numbers for 2015-16 and estimates for 2014-15. The submission by Murray Irrigation queried why these numbers have changed since the 2014 Determination, given that entitlements are relatively stable due to constraints on water availability in the Murray-Darling Basin.

Water NSW's customers hold different types of water entitlements in all valleys with the exception of Fish River. These are generally high security and general security entitlements. Entitlements give customers access to a share of the water resource.

The volume of entitlements is influenced by the issuing of access licences, which is governed by the *Water Management Act 2000* (NSW) (WMA). Under the WMA, access licences are issued by the

NSW Minister for Water.<sup>26</sup> The volume of entitlements is determined through the process of issuing access licences. In the 2014 Determination, the ACCC stated that it understands that entitlement volumes determined by the NSW Office of Water may change as a result of the NSW metering project and other water efficiency projects and that if this occurs, Water NSW should provide revised forecasts at the time of the relevant annual review.

Water NSW stated that it used the latest information on entitlements recorded in the water accounting system by the NSW Office of Water. The ACCC understands that entitlement numbers in certain valleys have changed due to a range of factors, including water efficiency projects. The ACCC considers that these forecasts are reasonable. Consideration of the process by which the NSW Office of Water allocates entitlement volumes is outside the scope of this annual review.

### *How charges are affected by step one*

The following factors are responsible for the largest contributions to changes in charges:

- Low usage estimates for 2014-15, particularly in northern valleys  
For Border, Namoi and Macquarie valleys, usage is 70%, 58% and 68% respectively below the 20-year average. However, the impact of this on charges is moderated by the UOM which only adds the rate of return on the unders and overs balance to the 2015-16 revenue requirement.
- The method of recovery of contributions to the MDBA and BRC  
Border valley is affected particularly, as the relatively low 2014-15 usage volume caused a significant under-recovery of revenue, and BRC contributions account for 32% of Border valley's revenue requirement. As the UOM allows Water NSW to recover the full amount of any under-recovery of MDBA/BRC amounts in the following year, the low usage has an upward effect on charges of 16% in 2015-16.<sup>27</sup>
- Actual usage in 2013-14  
This had a relatively small effect for most valleys because it affected only one year in the 20-year moving average used for the usage forecast. Low usage in the Macquarie valley had an upward effect of 4.6% on the usage charge. Above average usage in the Gwydir valley had a downward effect of 5.9% on the usage charge.
- Low water allocations for general security customers, which lead to an increase in AWA ratio<sup>28</sup> and therefore the high security premium  
Lower than average general security water allocation percentages in 2013-14 had a limited impact on charges for most valleys, as the AWA ratio is a 20-year moving average. However, in the Lachlan and Macquarie, zero allocations for general security customers in 2013-14 displaced very high allocations in 1993-94 from the 20-year moving average, as shown in table G3 in attachment G. This resulted in a material change to the AWA ratio (and therefore the high security premium) for these two valleys, resulting in an upward effect of around 9% on the high security entitlement charge for these two valleys.

Tables G1 to G3 in Attachment G show the contribution of each of the main factors influencing changes to the level of charges for each type of charge in each valley. The way in which these factors affect charges was discussed in more detail in sections 5.3 and 6.4 of the ACCC's draft decision.

---

<sup>26</sup> *Water Management Act 2000* (NSW), s. 63.

<sup>27</sup> Note that these effects reflect the influence of just one factor, whereas the overall change in charges from 2014-15 depends on the combined impact of all the changing factors.

<sup>28</sup> The AWA ratio is the ratio of the average allocation percentage for high security entitlements to the average actual allocation percentage for general security entitlements.

## 5.4.2 Peel valley

There are three infrastructure charges for users in the Peel valley—high security entitlement charge, general security entitlement charge and usage charge.

The appropriate level of charges for Peel valley was considered in detail by the ACCC in its 2014 Determination.

In making the 2014 Determination, the ACCC was required to balance a number of objectives and principles set out in the *Water Act 2007* (the Water Act) and WCIR. A primary consideration for the ACCC was setting charges in a manner that allowed recovery of efficient costs for Water NSW and promoted efficiency in the use of water resources and infrastructure assets. However, the ACCC considered that as Peel valley’s costs and charges were considerably higher than other valleys, and it had not yet achieved full cost recovery, an immediate move to full cost recovery would impose an excessive price shock. The ACCC considered that this would constitute a perverse pricing outcome and implemented a 10% cap on real charge increases each year. The resulting charges result in an under-recovery in 2014-15 and 2015-16, but increase revenue to approximately full cost recovery by 2016-17.

As charges for Peel valley users are set below the level required for full cost recovery, the 2014 Determination provides that these charges will increase by 10% in real terms each year regardless of water allocations or water usage. As there is a set cap on charge increases, the UOM does not apply in the Peel valley.

### *How charges are affected by step one*

As noted above, in its 2014 Determination, the ACCC set a cap of 10% on real annual increases for all charges in the Peel valley. That is, the 2015-16 charge should be no more than 10% above the equivalent 2014-15 charge when both are expressed in the same real price level, excluding inflation.

The PVWUA submitted that the ACCC’s draft 2015-16 charges for the Peel valley were more than 10% higher than 2014-15 charges.

The 2014-15 charges set out in the ACCC’s 2014 Determination were expressed in \$2013-14, whereas the 2015-16 charges in the ACCC’s draft decision were expressed in nominal \$2015-16. This means that in order to compare 2014-15 charges with 2015-16 charges, the charges set out in the 2014 Determination must be converted to nominal \$2015-16 by applying two years of inflation adjustments (4.3% in total).

The table below sets out the entitlement and usage charges for Peel valley users for 2014-15 as set out in the 2014 Determination (in \$2013-14) and as actually imposed (in \$2014-15), along with the charges for 2015-16 (in both \$2014-15 and \$2015-16).

**Table 5.2: Derivation of Peel valley 2015-16 charges from 2014-15 charges (\$/ML)**

Charge	High security entitlement	General security entitlement	Usage
<b>2014-15 charge (\$2013-14)</b> (as listed in ACCC’s 2014 final decision, Appendix B)	\$27.58	\$3.03	\$45.56
<b>2014-15 charge (\$2014-15)</b> (after adding annual CPI adjustment of 2.93%)	\$28.39	\$3.12	\$46.90
<b>2015-16 charge (\$2014-15)</b> (after adding capped 10% real increase)	\$31.23	\$3.43	\$51.59
<b>2015-16 final charge (nominal \$2015-16)</b> (after adding annual CPI adjustment of 1.33%)	\$31.65	\$3.48	\$52.27



### 5.4.3 Infrastructure charges for the Fish River

Infrastructure charges for Fish River are also adjusted by a UOM which operates in the same way as the UOM for the other valleys. However, the application of the UOM is more complex due to the different charge structure for Fish River customers, where there are:

- different charges for the delivery of raw and filtered water
- access and usage charges for each type of water
- different charges for major and minor customers.

The ACCC sets the charges for EnergyAustralia (the single major customer for raw water) and 282 minor customers. However, charges set by the ACCC depend partly on the volumes used by other customers whose charges are regulated by IPART, as both groups share certain joint costs.<sup>29</sup> Water NSW submitted updated volume information for all Fish River customers in its application for this annual review.

Table 5.2 below sets out the Fish River charges calculated in accordance with the methodology set out in the ACCC's 2014 Determination with updated data. The largest charge increases were for usage charges for filtered water, where charges for usage below MAQ increased by 11.8% and for usage above the MAQ by 7.5%. The increase was mainly due to actual usage in 2013-14 being lower than normal, which reduced the forecast usage for 2015-16 by 9%, based on the updated 20-year moving average.

**Table 5.3: 2015-16 charges set in the 2014 Determination - \$/KL and % change from 2014-15 (Fish River)**

Customer type	Access charge for MAQ		Usage below MAQ		Usage above MAQ	
	\$/KL	% change	\$/KL	% change	\$/KL	% change
<b>Raw water (EnergyAustralia)</b>	\$0.34	3.1%	\$0.39	4.1%	-	-
<b>Raw water (minor customers)</b>	\$68.31	3.1%	\$0.39	4.1%	\$0.73	3.6%
<b>Filtered water (minor customers)</b>	\$132.21	3.1%	\$0.72	11.8%	\$1.38	7.5%

<sup>29</sup> IPART is responsible for setting charges for three major customers in Fish River - the Lithgow and Oberon councils and the former Sydney Catchment Authority (now part of Water NSW). When the ACCC made its 2014 Determination, IPART intended to use information from the ACCC's review of charges in Fish River in its own review of charges. However, on 14 July 2014, IPART announced that it was deferring its review of these charges and that the 2013-14 charges for the Lithgow and Oberon councils and SCA will apply until 1 July 2017. Any under or over-recovery of revenue due to IPART setting charges different from those determined by the ACCC for major customers will not affect customers whose charges are regulated by the ACCC. This is because the ACCC's UOM calculates estimated revenue for 2014-15 on the basis of the charges set by the ACCC in 2014, rather than the actual charges set by IPART.

## 6. Step two: the ‘change in forecasts’ test

### Summary of the final decision

The ACCC's final decision is that the ‘change in forecasts’ test is satisfied and therefore, the charges that would result from the application of the formulae in the 2014 Determination should be varied in order to take into account the volume of water allocation traded to other Basin States.

This maintains the position taken in the ACCC's draft decision.

The second step taken by the ACCC in undertaking this review involved considering any additional information not included at step one that changed the demand or consumption forecasts adopted in the 2014 Determination.

### 6.1 Summary of the ACCC’s draft decision

The charges set by the ACCC in its 2014 Determination were based on demand forecasts which did not take into account the volume of water traded from NSW to other Basin States. The only valleys with trade out to other Basin States are Border (to Queensland) and Murray and Murrumbidgee (to Victoria and South Australia). Trade between NSW and the Australian Capital Territory should also be possible, but is not currently occurring.

In its application for this annual review, Water NSW included historical and forecast data on the volumes of water traded to other Basin States. It advised that it could only provide actual data from 2004-05 when its predecessor, the State Water Corporation of NSW, was created. However, it extrapolated this data by applying the average trade volume from 2004-05 to 2014-15 to each of the earlier years back to 1994-95, for each valley, for the purpose of establishing the 20-year rolling average. The ACCC accepted this historical and forecast data as reasonable, calculated in accordance with appropriate methodology, and therefore adjusted the 20-year average used to forecast usage, and estimated usage for the current year to reflect these volumes.

In its draft decision, the ACCC’s decided that the change in forecasts test had been satisfied and that as Water NSW collects revenue from the usage charges for water traded out of NSW from the Border, Murray and Murrumbidgee valleys, the charges in these valleys should reflect these volumes.

### 6.2 Summary of submissions

Murray Irrigation’s submission supported the ACCC's draft decision to include the volume of water traded out of NSW from the Murray valley to other Basin States.<sup>30</sup>

---

<sup>30</sup> Murray Irrigation, 6 May 2015, p.1.

## 6.3 Final decision (step two)

The ACCC notes Murray Irrigation's support for this variation, at least as it applies to the Murray valley, and that no further submissions were received in relation to this step in the annual review process.

The ACCC's final decision is that the 'change in forecasts' test is satisfied and therefore, the charges that would result from the application of the formulae in the 2014 Determination should be varied in order to take into account the volume of water allocation traded from NSW to other Basin States.

### 6.3.1 How charges are affected by step two

Corrections for the volume of water allocations traded out of NSW affect charges in two ways.

- By changing the 20 year moving average used to calculate usage charges.

The inclusion of these volumes for the years 1994-95 to 2013-14 has increased the 20-year moving average used to forecast usage in 2015-16. This has had a downward effect on charges for 2015-16. It affects usage but not entitlement charges.

- By changing the amount in the unders and overs account.

The inclusion of these volumes increases the estimate of revenue for 2014-15 and therefore reduces any under-recovery for 2014-15. This has had a downward effect on charges for 2015-16. This affects both usage and entitlement charges by the same proportion.

As shown in Table 6.1 below, interstate water allocation trade from the Murray valley is the most significant relative to its usage volumes, and accordingly the volume corrections have the highest downward impact on charges in this valley—reducing the usage charge by 11.8% and entitlement charges by 2.5% compared to a scenario where usage data is not adjusted.

**Table 6.1. Effect of interstate trade volumes on usage and charges, by valley**

	Volume traded out as % of forecast usage for 2015-16	Volume traded out as % of estimated usage in 2014-15	% effect on usage charge
<b>Border</b>	6.7	2.6	-6.8
<b>Murray</b>	8.5	9.3	-11.8
<b>Murrumbidgee</b>	2.2	1.6	-2.5

## 7. Step three: the ‘price stability’ test

### **Summary of the final decision**

The ACCC's final decision is that, based on consideration of the likely impact on Water NSW's customers' bills, the price stability test has not been satisfied, and it is not reasonably necessary to vary charges on these grounds for any valley.

The ACCC has decided to determine charges in accordance with its 2014 Determination, as varied by the changes in demand forecasts due to the inclusion of interstate water allocation trade volumes.

The ACCC considers that varying charges in the manner suggested by Water NSW could risk more significant charge increases in the future.

In annual reviews, the ACCC must have regard to price stability when deciding whether to vary the charges set out in the 2014 Determination. While the WCIR does not define price stability, the ACCC considers that it involves an assessment of the likely impact of any increases or decreases in charges on Water NSW's customers. The ACCC also considers that it is important to consider price stability in the longer term, rather than just the year that is the subject of the annual review.

### **7.1 Summary of the ACCC's draft decision**

In its draft decision the ACCC decided that the price stability test had not been satisfied and therefore the ACCC did not consider it reasonably necessary to vary the charges set according to its 2014 Determination.

The WCIR does not define the term price stability. In its draft decision, in assessing whether charges should be varied on the grounds of price stability, the ACCC considered the impact of charge increases on Water NSW's customers.

To consider the impact, the ACCC undertook an analysis of the expected bills for Water NSW's customers. This analysis showed that the combination of fixed and variable charges set in the 2014 Determination is likely to mitigate the impact of individual charge increases. As a result, Water NSW's customers would be unlikely to experience bill increases of more than 10.6% in real terms.

In addition, the ACCC considered the longer-term impact of approving Water NSW's application. The UOM set in the 2014 Determination is designed to balance price stability and revenue stability. In its draft decision, the ACCC considered that overriding the UOM in 2015-16 and allowing Water NSW to carry forward the under-recovery was likely to lead to more significant charge increases in the longer term, should there be similar weather conditions to those experienced in 2014-15.

In its 2014 Determination, the ACCC rejected a general cap on charge increases of 5%, proposed by Lachlan Valley Water, stating that this cap may not allow State Water to recover its costs during the regulatory period and it would potentially lead to large charge adjustments in subsequent regulatory periods to recover the balance of under recovery.

The ACCC also considered the level of the charges with the highest percentage increases. In its 2014 Determination, the ACCC capped the increase in regulated charges in the Peel valley at 10% (real) per year until the end of the 2014-2017 regulatory period, noting that Peel valley charges were

already much higher than in other valleys. For similar reasons, in its 2010 Determination, IPART capped annual increases in regulated charges in three valleys at 10% (real).<sup>31</sup>

## 7.2 Summary of submissions

Submissions on the ACCC's draft decision relating to price stability fell into two broad categories:

- the level of charges and percentage increases
- the approach taken by the ACCC to assessing whether charges should be varied on the grounds of price stability.

These submissions are addressed in 7.3 below.

### 7.2.1 Level of charges and percentage increases

The New South Wales Irrigators' Council (NSWIC) submitted that the increases proposed by the ACCC are excessive<sup>32</sup> and the New South Wales Farmers' Association (NSWFA) submitted that the proposed charge increases are 'so volatile so as to trigger the price stability test and should not be made.'<sup>33</sup> The NSWIC's submission supported the proposed 2015-16 charges proposed by Water NSW in its application. The NSWIC further stated that Water NSW's statement in its submission that the increases under the UOM are not in the best interests of its customers indicates that Water NSW is 'better able to handle the annual price volatility for consumption variability than its customers.'<sup>34</sup>

Water NSW reiterated its position that the current pricing structure is not in the interests of Water NSW's customers.

Murray Irrigation supported the ACCC's draft decision to reject Water NSW's proposal to defer application of the UOM and carry the balance forward. However, it noted its concern with the 'ongoing impact of the UOM for customers' prices if there are a series of dry sequence years.'<sup>35</sup>

Both the Tamworth Regional Council (TRC) and Peel Valley Water Users Association (PVWUA) submitted that the ACCC's draft charge increases for users in the Peel are too high. The TRC submitted that high security entitlement charges in the Peel Valley had increased 233% since 2002-03 and that this should be taken into account when setting charges.<sup>36</sup> The PVWUA submitted that the differential between the dollar value of charges in Peel Valley and other valleys is a perverse pricing outcome within the meaning of the Water Act.<sup>37</sup> The PVWUA further submitted that there should be no increase in general security entitlement charges in the Peel Valley as the 2015-16 allocation for general security entitlements is likely to be zero.<sup>38</sup>

---

<sup>31</sup> IPART, *Review of bulk water charges for State Water Corporation - from 1 July 2010 to 30 June 2014*, June 2010.

<sup>32</sup> NSWIC, submission to ACCC draft decision, 6 May 2015, p.1.

<sup>33</sup> NSWFA, submission to ACCC draft decision, 6 May 2015, p.2.

<sup>34</sup> NSWIC, 6 May 2015, p.1.

<sup>35</sup> Murray Irrigation, 6 May 2015, p.2.

<sup>36</sup> TRC, 29 April 2015.

<sup>37</sup> PVWUA, 30 April 2015, pp.2-3.

<sup>38</sup> *Ibid*, p.4.

## 7.2.2 Approach to considering price stability

Murray Irrigation submitted that the ACCC's draft decision is consistent with the parameters of the 2014-17 determination.<sup>39</sup>

Both the NSWFA and NSWIC submitted that the ACCC should not have regard to the dollar value of charges in other valleys when considering price stability as there is a principle of no cross-subsidisation of costs between valleys and irrigators make business decisions based on the charges in their own valley only.<sup>40</sup>

The NSWIC submitted that the price stability test should be strictly applied and compared to a 'sensible benchmark', such as CPI.<sup>41</sup>

## 7.3 Final Decision (step three)

The ACCC's final decision is that the price stability test has not been satisfied and that it is not reasonably necessary to vary from the approach to setting charges set out in the 2014 Determination. In forming this view, the ACCC considered the factors that it considered in making its draft decision, along with matters raised by interested parties in submissions.

### 7.3.1 The impact of charges on customers

The NSWFA submitted that individual charge increases in some valleys under the ACCC's draft decision are such that they should trigger the price stability test.<sup>42</sup> The NSWIC submitted that the charge increases are a serious concern as they are more than three times the CPI increase over the same timeframe.<sup>43</sup>

The ACCC has carefully considered these submissions. However, the ACCC maintains its view that an analysis of expected bills is the most appropriate method of assessing the impact of charge increases on Water NSW's customers, given that customers will face a combination of fixed and variable charges.

The ACCC has updated its analysis of the likely impact of the charge increases set out in tables 1.1 and 1.2 on customer bills.

The charges set in the 2014 Determination lead to nominal charge increases of between 10.4% and 17.6% for certain charges for users in the Border, Lachlan and Macquarie valleys. However, the impact on expected customer bills will depend on the changes in both the fixed and variable charges that they will face. The ACCC's analysis indicates that Water NSW's customers are unlikely to experience bill increases of more than 12.2% nominal terms or 10.7% in real terms. The impact on expected bills is shown in full in Attachment H.

The ACCC understands there is no cross-subsidisation of Water NSW's costs between valleys, and the level of charges in other valleys is not directly relevant to Water NSW's customers when making business decisions in a particular valley.

In its 2014 Determination, the ACCC applied a uniform 10% cap on annual charge increases in the Peel valley, in part to take account of the significantly higher charges in that valley (in particular the high security entitlement charge and the usage charge) compared to other valleys. In its draft decision, the ACCC referred to the high dollar value of charges in the Peel Valley as an example of when a cap on charge increases was appropriate.

---

<sup>39</sup> Murray Irrigation, 6 May 2015, p.1.

<sup>40</sup> NSWFA, 6 May 2015, p.1.

NSWIC, 6 May 2015, p.1.

<sup>41</sup> NSWIC, p.2.

<sup>42</sup> NSWFA, 6 May 2015, p.2.

<sup>43</sup> NSWIC, 6 May 2015, p.1.

The ACCC does not consider the absolute value of those charges in other valleys that will face the largest percentage increases justifies a similar cap on charge increases.

The ACCC has considered NSWIC's proposal that a benchmark such as the CPI would be more appropriate for the price stability test. The ACCC considers that given the high percentage of its revenue requirement gained from variable (usage) charges by Water NSW, and the wide fluctuations in water usage, restricting changes in the level of charges to small percentages over the longer term would not allow Water NSW to recover sufficient revenue.

The ACCC considers that this decision is consistent with its 2014 Determination and previous decisions made by IPART in relation to price stability.

### **7.3.2 The longer term impact of approving Water NSW's application**

In its 2014 Determination, the ACCC considered the application of the UOM was desirable as it achieved an appropriate balance between revenue stability for Water NSW and price stability for its customers. The UOM should allow Water NSW to recover sufficient revenue over time.

The ACCC considers the application of the UOM reduces volatility in the level of charges because it generally requires Water NSW to recover its shortfall in its revenue requirement for a particular year over a number of years, compared with a system such as a revenue cap where a shortfall is fully recovered in the following year. The NSWIC's submission stated that it supported Water NSW's proposal to not apply the UOM as it would lead to lower charges and less volatility over the 2015-16 year. The NSWIC further submitted that Water NSW's application indicated that it conceded that it was better placed to handle volatility in the level of charges than its customers.

It is important to note that while Water NSW's application sought ACCC approval of lower charges than those calculated in accordance with the UOM, it did not propose to absorb any associated under-recovery. Instead, Water NSW's application sought to carry forward into later years the portion of the under-recovery that would have been added to its 2015-16 revenue requirement if the UOM was applied as intended.

For the reasons set out in 7.1 above, the ACCC considers that approving Water NSW's application for charges in 2015-16 would likely result in more significant charge increases in later years. The ACCC does not consider that the charge increases for 2015-16 are so significant that the ACCC should risk more significant charge increases in future by approving Water NSW's application.

### **7.3.3 Consideration of whether to cap the charges in the Peel valley further**

The ACCC has considered TRC and PVWUA's submission that the charge differential between the Peel and other valleys is inequitable and PVWUA's submission that this constitutes a perverse outcome for the purposes of Part 2 of Schedule 2 of the Water Act.

The ACCC acknowledges that high security entitlement charges and usage charges for Peel valley customers are significantly higher than for customers in other valleys. However, the charge differential reflects:

- the higher costs of providing infrastructure services in the Peel valley when compared with other valleys
- the gradual movement towards full cost recovery in the Peel valley. The ACCC expects that there will be full cost recovery in the Peel valley from 2016-17.<sup>44</sup>

The Water Act does not define the term perverse pricing outcomes. However, the ACCC's 2014 Determination provided two examples of what the ACCC considered to be perverse outcomes—the economic impact of imposing high fixed charges for irrigation water in dry periods, and the price

---

<sup>44</sup> ACCC, June 2014, p.48.

shock that would result from an immediate move to full cost recovery in the Peel valley. The ACCC decided in its 2014 Determination to impose a 10% cap on charge increases in the Peel valley, in order to avoid a perverse price outcome.

As noted in section 2.1.1, the ACCC can only vary regulated charges from those set according to the 2014 Determination if it is reasonably necessary to do so, having regard to:

- changes in demand or consumption forecasts
- price stability.

In the absence of additional information to support the departure from the ACCC's 2014 Determination, the ACCC does not consider that it has grounds to vary charges in the Peel valley.



## 8. Matters outside the scope of this review

In addition to the matters outlined above, some submissions raised matters that are outside the scope of this review. These matters and the ACCC's responses to these are set out below. However, as these matters are outside the scope of this review, the ACCC has not considered them in detail.

As noted in section 2.3, the ACCC is currently undertaking a review of the Commonwealth Water Charge Rules, including the WCIR. The ACCC has released an issues paper seeking input from stakeholders. The issues paper is available on the ACCC website.<sup>45</sup> This provides an opportunity for interested parties to put forward its views on alternative approaches to the regulation of infrastructure operators' charges in the Murray-Darling Basin. The closing date for submissions to the issues paper is 29 June 2015.

### 8.1 The requirement to act in accordance with the WCIR

The PVWUA submitted that the ACCC should not be constrained by the tests in the WCIR in conducting the annual review.<sup>46</sup> In addition, the PVWUA and the TRC proposed that the ACCC reconsider the way that infrastructure charges are calculated.<sup>47</sup>

As set out in detail in section 2.1.1, the ACCC is only able to vary the charges set in the 2014 Determination in accordance with the WCIR.

### 8.2 The UOM

In its submission, Murray Irrigation noted that while it does not support Water NSW's proposal to defer the application of the UOM and carry the total balance forward, it is concerned about the ongoing impact of the UOM for customers' charges if there are a series of dry years.<sup>48</sup> Murray Irrigation referred to a submission made to the ACCC's consultation on the 2014 Determination, in which it stated that the 2014 Determination must provide continued pressure on Water NSW to be commercially responsive to changing circumstances.<sup>49</sup> Murray Irrigation's submission queried whether the UOM process is applying such pressure.<sup>50</sup>

The WCIR does not enable the ACCC to revisit the price control mechanism set in the 2014 Determination.

### 8.3 Scrutiny of MDBA and BRC amounts

Submissions made by Murray Irrigation, the NSWIC and the NSWFA all raise concerns regarding the level of scrutiny the ACCC applies to Water NSW's contributions to the MDBA and BRC.<sup>51</sup>

The payment of these amounts by Water NSW is a statutory obligation. Under a direction made by the State Treasurer, Water NSW is required to pay a specified amount to the NSW Consolidated Fund by 15 June each year. The amount that the NSW Government requires Water NSW to recover from its customers is that part of the Government's contributions to the MDBA/BRC that it deems payable by those customers.

---

<sup>45</sup> See <http://accg.gov.au/regulated-infrastructure/water/water-projects/review-of-the-water-charge-rules-advice-development>.

<sup>46</sup> PVWUA, 30 April 2015, p.3.

<sup>47</sup> TRC, 29 April 2015.

<sup>48</sup> Murray Irrigation, 6 May 2015, p.2.

<sup>49</sup> Murray Irrigation, 6 May 2015, p.2.

<sup>50</sup> Murray Irrigation, 6 May 2015, p.2.

<sup>51</sup> Murray Irrigation, 6 May 2015, p.2.

NSWIC, 6 May 2015, p.2.

NSWFA, 6 May 2015, p.2.

As this is a statutory obligation, the ACCC decided in the 2014 Determination that it was prudent and efficient for Water NSW to recover these costs. For the same reasons, the ACCC does not consider it appropriate to reconsider the MDBA/BRC contributions on the grounds of price stability. The regulation of MDBA/BRC charges, and how Basin State government contributions are recovered from customers, will be examined further in the current review by the ACCC of the Commonwealth's Water Charge Rules.<sup>52</sup>

As set out in detail in section 2.1.1, the ACCC is only able to vary the charges set in the 2014 Determination in accordance with the WCIR.

The WCIR does not enable the ACCC to revisit the way that the MDBA and BRC amounts were dealt with in the 2014 Determination.

---

<sup>52</sup> See sections 5.12 and 5.13 of the ACCC's issues paper for the review of water charge rules.

## Attachment A: Final 2015-16 charges and ICD rebates

Note: Charges in nominal \$2015-16 and percentage changes include CPI increase at 1.33% over \$2014-15.

**Table A1: Final charges – nominal \$2015-16/ML and percentage change from 2014-15 (Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray, Murrumbidgee and Lowbidgee valleys)**

Valley	High security entitlement charge		General security entitlement charge		Usage charge	
	\$	% increase	\$	% increase	\$	% increase
Border	11.20	13.9	3.90	17.6	10.18	5.8
Gwydir	14.00	3.2	3.44	3.2	11.89	-2.1
Namoi	16.81	1.8	7.99	4.1	19.80	-0.7
Peel	31.65	11.5	3.48	11.5	52.27	11.5
Lachlan	14.84	15.6	3.24	1.8	19.33	5.0
Macquarie	14.35	14.3	3.51	3.1	15.89	10.4
Murray	4.79	3.0	2.66	0.7	6.40	-6.9
Murrumbidgee	3.63	1.9	1.53	-0.9	4.28	-0.8
Lowbidgee	-	-	0.78	7.0	-	-

**Table A2: MDBA/BRC component of final charges – nominal \$2015-16/ML and percentage change from 2014-15**

Valley	High security entitlement charge		General security entitlement charge		Usage charge	
	\$	% increase	\$	% increase	\$	% increase
Border	4.43	41.3	1.54	45.9	4.03	31.2
Murray	3.04	4.1	1.69	1.8	4.06	-5.9
Murrumbidgee	0.66	-0.5	0.28	-3.3	0.78	-3.1

**Table A3: Final charges – nominal \$2015-16/KL and percentage change from 2014-15 (Fish River)**

Customer type	Access charge for MAQ		Usage below MAQ		Usage above MAQ	
	\$	% increase	\$	% increase	\$	% increase
Raw water – EnergyAustralia	0.34	3.1	0.39	4.1	-	-
Raw water – minor customers	68.31	3.1	0.39	4.1	0.73	3.6
Filtered water – minor customers	132.21	3.1	0.72	11.8	1.38	7.5

Note: Access charge for minor customers is an annual charge.

**Table A4: Final charges – metering service charges per annum 2015-16 (\$2015-16)**

Type of meter	Cth-funded meters with telemetry	Cth-funded meters without telemetry	Water NSW–funded meters with telemetry	Water NSW–funded meters without telemetry
50 mm	352.51	370.47	1,286.16	1,024.15
80 mm	352.60	370.57	1,294.06	1,032.07
100 mm	353.08	371.04	1,338.25	1,076.26
150 mm	371.27	389.23	1,435.62	1,173.62
200 mm	391.25	409.22	1,492.45	1,230.45
250 mm	395.99	413.96	1,568.71	1,306.71
300 mm	397.25	415.21	1,685.08	1,423.09
350 mm	406.52	424.48	2,123.35	1,861.36
400 mm	451.87	469.84	2,496.41	2,234.41
450 mm	548.69	566.34	2,682.54	2,420.24
500 mm	556.25	573.91	2,875.17	2,612.88
600 mm	585.22	602.89	3,253.91	2,991.61
700 mm	595.84	613.51	3,614.47	3,352.17
750 mm	596.89	614.56	3,712.28	3,449.98
800 mm	628.27	645.93	4,284.45	4,022.16
900 mm	676.08	693.75	4,503.40	4,241.11
1000 mm	679.52	697.18	4,823.45	4,561.15
Channel	6,790.40	-	12,659.20	-

**Table A5: Final charges – miscellaneous 2015-16 (\$2015-16)**

Type of charge	Charge (\$)
Charges for testing meter accuracy under dispute	1,688.13
Environmental gauging station charges (per annum)	8,675.73
Fish River connection charges	467.39
Fish River disconnection charges	259.65
Allocation trade processing – charge per application	38.50
Allocation trade processing – charge per ML of allocation traded	0.51
Allocation trade processing – cap on total charge	151.99
Yanco Creek levy	0.90

**Table A6: Final ICD rebates 2015-16 (\$2015-16)**

<b>Valley and Irrigation Corporation or District</b>	<b>ICD Rebate (\$)</b>
<b>Lachlan valley</b>	
<b>Jemalong</b>	64,303
<b>Murray valley</b>	
<b>Murray Irrigation</b>	935,514
<b>Western Murray</b>	32,689
<b>West Corugan</b>	51,917
<b>Moira</b>	25,942
<b>Eagle Creek</b>	9,150
<b>Murrumbidgee valley</b>	
<b>Murrumbidgee Irrigation</b>	649,461
<b>Coleambally</b>	285,011
<b>Total rebates</b>	<b>2,053,986</b>

## Attachment B: Revenue requirements and recovery

**Table B1: Revenue Requirements 2014-15 and 2015-16 (\$'000, real \$2013-14)**

Valley	Water NSW costs			MBDA/BRC contributions			
	2014-15	2015-16	% change	2014-15	2015-16	% change	% of total 2015-16 rev. requirement
<b>Border</b>	1,493	1,501	0.5	700	700	0.0	32
<b>Gwydir</b>	4,837	4,905	1.4	-	-	-	0
<b>Namoi</b>	5,131	5,166	0.7	-	-	-	0
<b>Lachlan</b>	6,790	6,927	2.0	-	-	-	0
<b>Macquarie</b>	6,522	6,644	1.9	-	-	-	0
<b>Murray</b>	6,057	5,950	-1.8	10,200	10,400	2.0	64
<b>Murrumbidgee</b>	9,986	9,955	-0.3	2,300	2,300	0.0	19
<b>Fish River</b>	9,445	9,548	1.1	-	-	-	0
<b>Total</b>	<b>50,261</b>	<b>50,596</b>	<b>0.7</b>	<b>13,200</b>	<b>13,400</b>	<b>1.5</b>	<b>21</b>

*Note:* The revenue requirement is the sum of the annual building block revenue requirement and ICD rebates.

**Table B2: Revenue recovery (\$'000 nominal \$)**

Valley	Under-recovery in 2014-15	Amount to be recovered in 2015-16	% recovered	Unders and overs balance carried forward
<b>Border</b>	949	357	37.6	646
<b>Gwydir</b>	1,148	65	5.6	1,148
<b>Namoi</b>	1,832	103	5.6	1,832
<b>Lachlan</b>	753	42	5.6	753
<b>Macquarie</b>	2,728	154	5.6	2,728
<b>Murray</b>	-134	-92	68.4	-50
<b>Murrumbidgee</b>	-408	-99	24.4	-331
<b>Fish River</b>	1,147	65	5.6	1,147
<b>Total</b>	<b>8,015</b>	<b>595</b>	<b>7.4</b>	<b>7,872</b>

*Note:* An under-recovery is a positive figure and over-recovery negative.

## Attachment C: Water NSW application – charges

Note: Charges in nominal \$2015-16 include CPI increase at 1.33% over \$2014-15.

**Table C1: Water NSW proposed charges – nominal \$2015-16/ML and percentage change from 2014-15 (Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray, Murrumbidgee and Lowbidgee valleys)**

Valley	High security entitlement charge (\$)	General security entitlement charge (\$)	Usage charge (\$)	% change (all charges)
Border	10.00	3.37	9.79	1.7
Gwydir	13.94	3.43	12.48	2.7
Namoi	16.84	7.83	20.34	2.0
Peel	31.65	3.48	52.27	11.5
Lachlan	13.27	3.29	19.04	3.4
Macquarie	12.95	3.51	14.87	3.2
Murray	4.74	2.69	7.01	1.9
Murrumbidgee	3.60	1.57	4.36	1.1
Lowbidgee	0.00	0.78	0.00	7.0

**Table C2: Water NSW proposed charges – nominal \$2015-16/KL and percentage change from 2014-15 (Fish River)**

Customer type	Access charge for MAQ (\$)	Usage below MAQ (\$)	Usage > MAQ (\$)	% change (all charges)
Raw water – EnergyAustralia	0.34	0.38	-	2.4
Raw water – minor customers	67.87	0.38	0.72	2.4
Filtered water – minor customers	131.35	0.66	1.32	2.4

## Attachment D: Entitlement holdings

**Table D1: Updated high security entitlement forecasts (ML) for 2015-16 and % change from forecast in 2014 Determination**

Valley	2015-16 high security entitlements – 2014 Determination forecast	2015-16 high security entitlements – updated forecast	% change
Border	3,122	3,122	0.00
Gwydir	21,458	22,707	5.80
Namoi	8,881	8,882	0.00
Lachlan	60,745	57,512	-5.30
Macquarie	42,606	42,719	0.30
Murray	261,401	261,515	0.04
Murrumbidgee	436,928	438,339	0.30

**Table D2: Updated general security entitlement forecasts (ML) for 2015-16 and % change from forecast in 2014 Determination**

Valley	2015-16 general security entitlement – 2014 Determination forecast	2015-16 general security entitlement – updated forecast	% change
Border	263,238	263,238	0.0
Gwydir	509,665	509,665	0.0
Namoi	256,076	256,212	0.1
Lachlan	632,837	633,256	0.1
Macquarie	631,716	632,466	0.1
Murray	2,075,822	2,081,742	0.3
Murrumbidgee	2,260,113	2,267,963	0.3



## Attachment E: Water usage

Note: Usage includes allocations traded to non-NSW buyers.

Total usage in tables E2 and E4 includes usage by major customers for filtered water whose charges are not regulated by the ACCC.

**Table E1: Actual water usage in 2013-14 and impact on 2015-16 forecasts (ML) and % change (Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys)**

Valley	Actual water usage 2013-14	Forecast 2015-16 usage (2014 Determination)	Revised forecast 2015-16 (Final decision)	% change
<b>Border</b>	197,437	140,677	156,230	11
<b>Gwydir</b>	407,295	245,877	261,298	6
<b>Namoi</b>	270,507	158,961	166,374	5
<b>Peel</b>	17,307	11,164	11,530	3
<b>Lachlan</b>	242,067	227,697	225,552	-1
<b>Macquarie</b>	268,934	279,671	267,387	-4
<b>Murray</b>	2,056,031	1,459,689	1,589,430	9
<b>Murrumbidgee</b>	1,782,634	1,759,740	1,779,057	1
<b>Total usage</b>	<b>5,242,211</b>	<b>4,283,475</b>	<b>4,456,858</b>	<b>4</b>

Note: Actual usage for 2013-14 replaces 1993-94 usage in the 20-year moving forecast for 2015-16.

**Table E2: Actual water usage 2013-14 and impact on 2015-16 forecasts (KL) and % change (Fish River)**

Customer	Actual water usage 2013-14	Forecast 2015-16 usage (2014 Determination)	Revised forecast 2015-16 (Final decision)	% change
<b>Raw water – major customers</b>	7,984	9,319	9,236	-1
<b>Raw water – minor customers</b>	54	52	49	-6
<b>Filtered water – minor customers</b>	66	132	120	-9
<b>Total usage</b>	<b>8,899</b>	<b>10,488</b>	<b>10,326</b>	<b>-2</b>

**Table E3: Estimated 2014-15 water usage and comparison with forecast in 2014 Determination (ML) and % change (Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys)**

Valley	Forecast usage 2014-15 (2014 Determination)	Estimated usage 2014-15 (Final decision)	% change
Border	140,677	42,074	-70
Gwydir	245,877	150,000	-39
Namoi	158,961	67,000	-58
Lachlan	227,697	189,000	-17
Macquarie	279,671	90,000	-68
Murray	1,459,689	1,476,841	1
Murrumbidgee	1,759,740	1,850,302	5
<b>Total usage</b>	<b>4,272,311</b>	<b>3,865,217</b>	<b>-10</b>

**Table E4: Estimated 2014-15 water usage and comparison with forecast in 2014 Determination (ML) and % change (Fish River)**

Customer	Forecast 2014-15 (2014 Determination)	Estimated usage 2014-15 (Final decision)	% change
Raw water – Major customers	9,319	7,074	-24
Raw water – minor customers	52	48	-8
Filtered water – minor customers	132	52	-61
<b>Total usage</b>	<b>10,489</b>	<b>7,840</b>	<b>-25</b>

**Table E5: Volumes of water allocations traded to non-NSW buyers**

Source valley	Average volume traded 1994-95 to 2013-14	Volume traded out as % of usage forecast 2015-16	Estimated volume traded 2014-15	Volume traded out as % of usage estimate 2014-15
Border	10,487	6.7	1,074	2.6
Murray	134,995	8.5	136,841	9.3
Murrumbidgee	39,379	2.2	30,302	1.6

## Attachment F: Water allocations

Notes: In tables F1 and F2, AWA is the average of the previous 20 years of actual water allocation percentages.

The AWA ratio is the ratio of the average allocation percentage for high security entitlements to the average actual allocation percentage for general security entitlements.

**Table F1: Updated 2015-16 AWA for high security entitlement forecasts (%) and % change**

Valley	Forecast 2015-16 AWA for high security entitlement allocations (2014 Determination) (%)	Forecast 2015-16 AWA for high security entitlement allocations (Final decision) (%)	% change
Border	100	100	0.0
Gwydir	100	100	0.0
Namoi	100	100	0.0
Peel	100	100	0.0
Lachlan	83	83	0.0
Macquarie	100	100	0.0
Murray	95	95	0.0
Murrumbidgee	98	98	-0.1

**Table F2: Updated 2015-16 AWA for general security entitlement forecasts (%) and % change**

Valley	Forecast 2015-16 AWA for general security entitlement allocations (%) (2014 Determination)	Estimated 2015-16 AWA for general security entitlement allocations (%) (Final decision)	% change
Border	43	45	3
Gwydir	45	45	0
Namoi	58	59	2
Peel	68	65	-4
Lachlan	50	44	-12
Macquarie	51	46	-10
Murray	68	66	-2
Murrumbidgee	69	67	-3

**Table F3: Forecast AWA ratios for 2015-16**

Valley	Forecast AWA (2014 Determination)	Forecast AWA (Final decision)	% change
Border	2.32	2.25	-3
Gwydir	2.25	2.25	0
Namoi	1.72	1.68	-2
Peel	1.47	1.53	4
Lachlan	1.65	1.87	14
Macquarie	1.96	2.17	11
Murray	1.41	1.44	2
Murrumbidgee	1.41	1.45	3

## Attachment G: Factors contributing to changes in the level of charges

Notes: Tables G1 to G3 show percentage change from 2014-15 charges to 2015-16 charges due to each incremental change in input data.

'Total change' is the combined effect of the changes in each column, together with the CPI increase of 1.33% which applies to all charges.

**Table G1: Factors contributing to changes in the level of charges – high security entitlement charges 2015-16 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys) (%)**

Valley	Change in revenue requirement (real terms)	Change in estimated usage (2014-15)	Change in AWA ratio	Change in entitlement numbers	Change in usage due to inclusion of trade out of NSW	Total change
Border	0.3	15.7	-3.1	0.0	-0.1	13.9
Gwydir	1.4	1.3	0.0	-0.9	0.0	3.2
Namoi	0.7	1.9	-2.1	-0.1	0.0	1.8
Lachlan	2.0	0.6	9.6	1.5	0.0	15.6
Macquarie	1.9	2.2	8.5	-0.2	0.0	14.3
Murray	0.6	3.3	1.9	-0.3	-3.7	3.0
Murrumbidgee	-0.2	-0.5	2.0	-0.4	-0.3	1.9

**Table G2: Factors contributing to changes in the level of charges – general security entitlement charges 2015-16 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys) (%)**

Valley	Change in revenue requirement (real terms)	Change in estimated usage (2014-15)	Change in AWA ratio	Change in entitlement numbers	Change in usage due to inclusion of trade out of NSW	Total change
Border	0.3	15.7	0.1	0.0	-0.1	17.6
Gwydir	1.4	1.3	0.0	-0.9	0.0	3.2
Namoi	0.7	1.9	0.2	-0.1	0.0	4.1
Lachlan	2.0	0.6	-3.5	1.5	0.0	1.8
Macquarie	1.9	2.2	-2.1	-0.2	0.0	3.1
Murray	0.6	3.3	-0.4	-0.3	-3.7	0.7
Murrumbidgee	-0.2	-0.5	-0.9	-0.4	-0.3	-0.9

**Table G3: Factors contributing to changes in the level of charges – usage charges 2015-16 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys) (%)**

<b>Valley</b>	<b>Change in revenue requirement (real terms)</b>	<b>Change in estimated usage (2014-15)</b>	<b>Change in forecast usage (2015-16)</b>	<b>Change in entitlement numbers</b>	<b>Change in usage due to inclusion of trade out of NSW</b>	<b>Total change</b>
<b>Border</b>	0.3	15.7	-3.5	0.0	-6.8	5.8
<b>Gwydir</b>	1.4	1.3	-5.9	0.0	0.0	-2.1
<b>Namoi</b>	0.7	1.9	-4.5	0.0	0.0	-0.7
<b>Lachlan</b>	2.0	0.6	1.0	0.0	0.0	5.0
<b>Macquarie</b>	1.9	2.2	4.6	0.0	0.0	10.4
<b>Murray</b>	0.6	3.3	0.4	-0.1	-11.8	-6.9
<b>Murrumbidgee</b>	-0.2	-0.5	1.2	0.0	-2.5	-0.8

## Attachment H: Expected bills for customers

Notes: Expected bills are displayed in real terms, in \$2014-15.

In conducting this analysis, the ACCC made the following assumptions about expected bills:

- a 500ML entitlement per user, for users in the Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys. 500ML is assumed to be a medium-level of entitlement held by irrigators. This assumption does not affect the percentage changes
- minimum annual quantities for Fish River based on water sharing plan for major customers, and 200 KL per annum for minor customers
- usage based on the average percentage water allocation for each valley and the average forecast usage for each Fish River customer type, calculated using the 20-year moving average figures.

**Table H1: Final Decision - Expected bills – high security entitlement holder (real \$2014-15) – Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys**

Valley	Total bill at 2014-15 charges	Total bill—2015-16 charges	% Change
Border	9,730	10,550	8.4
Gwydir	12,858	12,776	-0.6
Namoi	18,223	18,064	-0.9
Peel	37,646	41,410	10.0
Lachlan	14,017	15,195	8.4
Macquarie	13,475	14,923	10.7
Murray	5,603	5,374	-4.1
Murrumbidgee	3,888	3,853	-0.9

**Table H2: Final Decision - Expected bills – general security entitlement holder (real \$2014-15) – Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys**

Valley	Total bill at 2014-15 charges	Total bill—2015-16 charges	% change
Border	3,801	4,161	9.5
Gwydir	4,372	4,311	-1.4
Namoi	9,762	9,750	-0.1
Peel	16,897	18,587	10.0
Lachlan	5,658	5,812	2.7
Macquarie	5,015	5,341	6.5
Murray	3,589	3,396	-5.4
Murrumbidgee	2,223	2,176	-2.1
Lowbidgee	366	386	5.6

**Table H3: Final Decision - Expected bills – Fish River customers (real \$2014-15)**

Customer	Total bill at 2014-15 charges	Total bill—2015-16 charges	% change
EnergyAustralia – raw water	5,028,307	5,139,101	2.2
Minor customers – raw water	465	476	2.3
Minor customer – filtered water	742	787	6.1

Note: The percentage changes in table H3 are lower than the percentage changes shown in table 7.3 in the draft decision. This is due to a drafting error in the draft decision, not a change in estimated usage volumes for Fish River.