



Australian  
Competition &  
Consumer  
Commission

## Water NSW

# Annual review of regulated charges: 2015-16

## Draft decision

April 2015

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Australian Competition and Consumer Commission

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

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# Table of Contents

1. Executive summary .....	1
2. Introduction .....	5
2.1. Consultation and timetable for the final decision.....	5
2.2. Assessment framework.....	6
3. Water NSW application.....	10
4. Approach to making the draft decision.....	11
5. Step one: calculation of the regulated charges set in the 2014 Determination .....	12
5.1. Charges set according to the 2014 Determination .....	12
5.2. Inflation adjustments .....	14
5.3. Other adjustments .....	14
5.4. ACCC consideration of the estimates and forecasts submitted by Water NSW .....	16
6. Step two: the ‘change in forecasts’ test.....	18
6.1. Interstate trade .....	18
6.2. Effects of adjusting usage data .....	18
6.3. ACCC consideration of the changes in demand and consumption .....	19
6.4. Charges set in the 2014 Determination, amended to take into account changes in the demand or consumption forecasts.....	19
7. Step three: the ‘price stability’ test.....	22
7.1. Meaning of price stability.....	22
7.2. Previous consideration of price stability .....	22
7.3. ACCC's consideration of price stability.....	23
Attachment A: Draft 2015-16 charges and ICD rebates .....	27
Attachment B: Factors contributing to price changes .....	30
Attachment C: Revenue requirements and recovery .....	32
Attachment D: Water NSW application – charges.....	33
Attachment E: Entitlement holdings .....	34
Attachment F: Water usage.....	35
Attachment G: Water allocations .....	37

# 1. Executive summary

The Australian Competition and Consumer Commission (ACCC) has reached its draft decision on Water NSW's application for review of its regulated charges for 2015-16.

This is the first annual review of Water NSW's regulated charges conducted by the ACCC and it 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 (the 2014 Determination). In the 2014 Determination, the ACCC set Water NSW's revenue requirement for each year and decided that a fixed: variable tariff structure was appropriate, where Water NSW can recover 40% of its revenue requirement through fixed charges and 60% through variable (or usage) charges on the volume delivered.

The 2014 Determination set the regulated charges for 2014-15 and included formulae to calculate regulated charges for 2015-16 and 2016-17. This includes the application of a price control mechanism—the unders and overs mechanism (UOM). The UOM 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). The objective of the UOM is to balance revenue stability for Water NSW and price stability for Water NSW's customers. The UOM is described in detail in section 2.2.2 below.

The Water Charge (Infrastructure) Rules 2010 (the WCIR) limit the ACCC's ability to change Water NSW's charges from those set by the 2014 Determination. The ACCC can only vary the charges set by the 2014 Determination if one or both of the following tests are satisfied:

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

## ***Water NSW's application***

Water NSW's application seeks ACCC approval of charges that are different to those determined in accordance with the 2014 Determination. Water NSW's application also seeks 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.

Water NSW's application sought ACCC approval of lower charges for most valleys based on the indicative charges set out in its 2014 Determination, with CPI adjustments, rather than charges determined in accordance with the UOM. Water NSW sought to depart from the UOM as '[i]n the current environment of low water availability, Water NSW considers that this adverse price impact [of higher charges] is not in the best interests of customers.'<sup>1</sup>

## ***The ACCC's draft decision***

The ACCC's draft decision is to not approve Water NSW's application and to determine Water NSW's regulated charges for 2015-16 in accordance with the formulae for calculating regulated charges set by the ACCC's 2014 Determination.

The ACCC acknowledges that its draft charges are generally higher than those requested by Water NSW and that Water NSW's customers would benefit in the short term from lower increases in charges for 2015-16. However, the ACCC is constrained by the tests in the WCIR (set out above).

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

The ACCC considers that the 'change in forecasts' test is satisfied and therefore, the charges set by the 2014 Determination should be varied to take account of usage data that has not previously been provided to the ACCC.

The ACCC does not consider that the 'price stability' test has been satisfied and therefore, the ACCC does not propose to cap Water NSW's 2015-16 charges in the manner requested by Water NSW. The reasons for this are set out more fully below.

### **Additional usage volumes**

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, 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 available 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 2015-16 charges. Inclusion of these usage volumes leads to a small negative effect on the usage charges in the Border, Murray and Murrumbidgee valleys.

### **Price stability**

The ACCC considered two key matters in determining whether to cap charges on the grounds of price stability—the dollar value of the charges and the likely impact of the charges on Water NSW's customers' bills.

High security entitlement charges in the Border, Lachlan and Macquarie valleys and the general security entitlement charge in the Border valley will increase by more than 10% in real terms under this draft decision. However, the dollar value of these charges remains more than 50% lower than the level of Water NSW's highest regulated charge.

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 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 and Water NSW's customers are unlikely to experience bill increases of more than 10.6% in real terms (or 12.5% in nominal terms).

The ACCC does not consider that the expected bill increases satisfy the 'price stability' test for the ACCC to cap charges, taking into account the risk of substantially larger increases in future charges to recover the 2014-15 under-recovery.

Tables 1 and 2 below compare the percentage changes in expected bills from 2014-15 to 2015-16, using both the charges proposed by Water NSW and the ACCC's draft charges.

Bills for high and general security customers in the Gwydir, Murray and Murrumbidgee valleys are likely to be lower under the ACCC's draft decision than under Water NSW's proposal. Bills for high security customers in the Namoi valley are also likely to be lower under the ACCC's draft decision. 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 bills.

**Table 1.1: Percentage change in expected bills (2014-15 charges to draft 2015-16 charges) (real \$2014-15) – Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray, Murrumbidgee and Lowbidgee valleys**

Valley	High security entitlement holder		General security entitlement holder	
	% change (Water NSW proposed charges)	% change (draft ACCC charges)	% change (Water NSW proposed charges)	% change (draft ACCC charges)
Border	0.3%	8.8%	0.3%	9.9%
Gwydir	1.4%	-0.9%	1.4%	-1.7%
Namoi	0.7%	-0.7%	0.7%	0.0%
Peel	10.0%	10.0%	10.0%	10.0%
Lachlan	2.0%	8.2%	2.0%	2.5%
Macquarie	1.9%	10.6%	1.9%	6.4%
Murray	0.6%	-0.8%	0.6%	-2.2%
Murrumbidgee	-0.2%	-0.5%	-0.2%	-1.8%
Lowbidgee	-	-	5.6%	5.6%

**Table 1.2: Percentage change in expected bills (2014-15 charges to draft 2015-16 charges) (real \$2014-15) – Fish River Water Supply Scheme**

Customer	% change (Water NSW proposed charges)	% change (draft ACCC charges)
Delta electricity – raw water	1.1%	3.7%
Minor customers – raw water	1.1%	3.7%
Minor customer – filtered water	1.1%	7.1%

The ACCC considers that capping charges in 2015-16 and allowing Water NSW to carry forward the under-recovery is likely to lead to more significant price increases in the longer term, should there be similar weather conditions to those experienced in 2014-15. It is open to Water NSW to discount its charges and absorb any associated under-recovery if it considers that it is necessary to do so.

### **Draft 2015-16 charges**

Tables 1.1 and 1.2 below set out the draft nominal charges using a forecast CPI of 1.7%.<sup>2</sup> These charges are calculated by the UOM and varied by the inclusion in the 20-year moving average of the volumes of water allocation traded out of the Border, Murray and Murrumbidgee valleys to other Basin States.

The draft 2015-16 entitlement and access charges are higher in most valleys than in 2014-15. However, usage charges for Gwydir, Namoi and Murray 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.

<sup>2</sup> Charges in nominal \$2015-16 include an inflation adjustment of 1.72% over 2014-15, based on an interim forecast for the CPI increase between March quarter 2014 and March quarter 2015. These nominal charges will be updated in the ACCC's final decision with the actual CPI increase between these quarters.

Large reductions in usage, particularly in northern valleys, has resulted in some under-recovery of revenue by Water NSW. The UOM results in modest price 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 (AWA) and high security premium.

**Table 1.3: 2014-15 charges (real \$2014-15/ML) and draft 2015-16 charges (nominal \$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	Draft 2015-16	2014-15	Draft 2015-16	2014-15	Draft 2015-16
Border	\$9.83	\$11.28	\$3.31	\$3.92	\$9.63	\$10.26
Gwydir	\$13.57	\$14.01	\$3.34	\$3.44	\$12.15	\$11.90
Namoi	\$16.51	\$16.89	\$7.68	\$8.03	\$19.93	\$19.90
Peel	\$28.39	\$31.77	\$3.12	\$3.49	\$46.90	\$52.48
Lachlan	\$12.84	\$14.87	\$3.19	\$3.25	\$18.42	\$19.36
Macquarie	\$12.55	\$14.39	\$3.40	\$3.52	\$14.40	\$15.94
Murray	\$4.65	\$4.97	\$2.64	\$2.76	\$6.88	\$6.65
Murrumbidgee	\$3.57	\$3.65	\$1.55	\$1.54	\$4.31	\$4.31
Lowbidgee	-	-	\$0.73	\$0.79	-	-

**Table 1.4: 2014-15 charges (real \$2014-15/KL) and draft 2015-16 charges (nominal \$2015-16/KL) – Fish River Water Supply Scheme**

Customer type	Access charge – min. annual quantity (MAQ)		Usage charge (below MAQ)		Usage charge – usage above MAQ	
	2014-15	Draft 2015-16	2014-15	Draft 2015-16	2014-15	Draft 2015-16
Raw water (Delta Electricity)	\$0.33	\$0.34	\$0.37	\$0.39	-	-
Raw water (minor customers)	\$66.25	\$68.60	\$0.37	\$0.39	\$0.70	\$0.73
Filtered water (minor customers)	\$128.22	\$132.77	\$0.64	\$0.72	\$1.29	\$1.39

### **Next steps**

The ACCC seeks written submissions on this draft decision by 6 May 2015 and intends to publish its final decision in relation to Water NSW's application by **12 June 2015**.

<sup>3</sup> The UOM provides that for Border Rivers Commission and Murray Darling Basin Authority contributions, the full amount of any under or over collection of revenue in a particular year is added to 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 a rolling unders and overs account. The value of this account will be multiplied by the rate of return and added to Water NSW's revenue requirement for the following year.

## 2. Introduction

Under the Water Charge (Infrastructure) Rules 2010 (the WCIR), the Australian Competition and Consumer Commission (ACCC) can approve or determine regulated charges in the Murray-Darling Basin of an operator that is not a member owned operator and holds water entitlements of its own or its customers in excess of 250GL.<sup>4</sup>

Currently, the ACCC only has responsibility for approving or determining the regulated charges imposed within the Murray-Darling Basin by Water NSW (previously the State Water Corporation of NSW).

On 9 March 2015 Water NSW submitted an application for ACCC review of its regulatory charges for the 2015-16 financial year.

The ACCC is conducting public consultation under the WCIR on its draft decision in relation to this application.

### 2.1. Consultation and timetable for the final decision

The ACCC encourages industry participants, other stakeholders and the public more generally to consider and make submissions on this draft decision.

To foster an informed and consultative process, all submissions will be considered as public submissions and published on the ACCC website. However if a submitter claims that their submission contains confidential information, the ACCC will publish a version of the submission that excludes the confidential information, subject to the WCIR.<sup>5</sup>

Interested parties wishing to submit commercial-in-confidence material to the ACCC should submit both a public and a commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or 'c-i-c'.

The ACCC expects that claims for commercial in confidence status of information by parties will be limited in nature in order to allow the widest possible participation in the public inquiry.

The *ACCC-AER information policy: the collection, use and disclosure of information* sets out the general policy of the ACCC and the Australian Energy Regulator on the collection, use and disclosure of information. This policy can be downloaded from the ACCC's website.

The ACCC seeks written submissions on this draft decision by **6 May 2015** to [waternswreview@acc.gov.au](mailto:waternswreview@acc.gov.au).

The ACCC prefers to receive submissions in electronic form, either in PDF or Microsoft Word format which enables the submission text to be searched. Please email [waternswreview@acc.gov.au](mailto:waternswreview@acc.gov.au) with any questions you have concerning this consultation.

The ACCC intends to publish its final decision in relation to the application by **12 June 2015**.

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<sup>4</sup> WCIR, Rule 29.

<sup>5</sup> The WCIR provides that the ACCC must not publish a submission if the submitter claimed, when the submission was made, or the ACCC decides that the submission contains confidential information. However, where the submitter claims a submission contains confidential information, the ACCC may publish it without the confidential information. Before doing so, the ACCC must write to the submitter and give them the opportunity to withdraw their claims of confidentiality. If the submitter does not do so, the ACCC may publish that submission without the confidential information. However, the ACCC must not have regard to the omitted information when approving or determining the regulated charges relating to the application.

## 2.2. Assessment framework

### 2.2.1. 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, 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.<sup>6</sup> 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.<sup>7</sup> The ACCC determined these charges in June 2014 (see section 2.2.2).

Second, 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).<sup>8</sup> This process allows for regulated charges to be updated during the regulatory period. This draft decision relates to the annual review.

#### *Annual review*

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 vary those charges 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>9</sup>

In reviewing this application, the ACCC must undertake a consultation process, including publishing a draft decision and inviting stakeholder submissions.<sup>10</sup>

Within three months of receiving the application, the ACCC must either approve Water NSW's regulated charges or determine the charges.<sup>11</sup> The ACCC may extend this timeframe by one month at a time provided it informs Water NSW regarding why it has been unable to make its decision during the required timeframe.<sup>12</sup> In addition, if the ACCC requests further information from Water NSW during the review, any day in which this information request remains unfilled extends the ACCC's three month period for this application.<sup>13</sup>

### 2.2.2. Regulated charges set in the ACCC's 2014 Determination

In June 2014, the ACCC released its final decision on Water NSW's charges for the 2014-17 regulatory period (the 2014 Determination).<sup>14</sup> This set the revenue requirement for each year of the regulatory period and the regulated charge amounts for the first year of the regulatory period. The 2014 Determination also included formulae for calculating regulated charges for subsequent years of

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<sup>6</sup> WCIR, Rule 25.

<sup>7</sup> WCIR, Rules 28-29.

<sup>8</sup> WCIR, Rule 34.

<sup>9</sup> WCIR, Rule 37(2).

<sup>10</sup> WCIR, Rule 36.

<sup>11</sup> WCIR, Rule 37(1).

<sup>12</sup> WCIR, Rule 37(5).

<sup>13</sup> WCIR, Rule 37(4).

<sup>14</sup> ACCC, *Final decision on State Water pricing application 2014-15 to 2016-17*, June 2014.

the regulatory period. The 2014 Determination document also set out indicative charges that would result from the application of this formula if demand forecasts provided by Water NSW and considered by the ACCC in making its 2014 Determination were accurate.

### ***Revenue requirement***

In making its 2014 Determination, the ACCC was required to be satisfied that Water NSW's total forecast revenue was reasonably likely to meet the prudent and efficient costs of providing infrastructure services in the regulatory period.<sup>15</sup> The ACCC set this revenue requirement using the Building Block Model. The Building Block Model calculates the revenue requirement for each year of the regulatory period as the total of allowances for operating costs, a return on capital, and a return of capital (depreciation).

The revenue requirements for each valley are set out at Appendix A of the 2014 Determination.

The annual review does not permit the ACCC to change the original revenue requirement. However, consistent with the 2014 Determination, charges for 2015-16 are based on an adjusted revenue requirement which includes (i) the original revenue requirement, and (ii) an additional revenue amount (which may be negative or positive) based on the outcome of the price control mechanism explained in further detail below.

### ***The unders and overs mechanism***

As noted above, the ACCC was required to be satisfied that Water NSW's revenue for the regulatory period is reasonably likely to meet the prudent and efficient costs of providing infrastructure services in that regulatory period.<sup>16</sup> In practice, the recovery of the revenue requirement is difficult to ensure as demand for infrastructure services cannot be controlled and is likely to change throughout the regulatory period. For example, if demand for infrastructure services is less than the forecasts made in the 2014 Determination, then Water NSW would under-recover its costs of providing infrastructure services. Conversely, if demand for infrastructure services is more than the forecasts made in the 2014 Determination, then Water NSW would over-recover its costs of providing infrastructure services.

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 should be subject to a hybrid form of price control (the UOM). The UOM consists of price caps that can be partially adjusted for under or over collection of revenue.

The UOM is designed to reduce Water NSW's revenue volatility by allowing it to annually adjust its charges to recover a portion of the revenue requirement not recovered because water usage is lower than forecast, or to return a portion of revenue to customers if water usage is higher than forecast.

In regard to the recovery of Water NSW's own costs, the UOM provides that any under or over collection of revenue in a particular year will be added into a rolling unders and overs account. This form of control is symmetrical, as it reduces future charges if Water NSW has over recovered revenue in the previous regulatory year, and increases them if it has under recovered. If there are a number of dry years in succession, the balance of the rolling unders account may grow significantly. However, the UOM approach smooths out the fluctuations in Water NSW's charges in any one

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<sup>15</sup> WCIR, Rule 29.

<sup>16</sup> WCIR, Rule 29(2).

year.<sup>17</sup> The increase or decrease in Water NSW's charges in the next year will therefore reflect the rate of return on the accumulated balance of the unders and overs account, with further adjustments to charges in subsequent years.

The value of the overs and unders account will be multiplied by the rate of return (also known as the weighted average cost of capital (WACC)) to determine the amount by which Water NSW's revenue requirement is to be adjusted in the next year.

For the Border, Murray and Murrumbidgee valleys, the UOM also enables Water NSW to recover the full amount of any under-recovery of the NSW Government's contributions to the Murray-Darling Basin Authority (MDBA) and Border Rivers Commission (BRC).

### **Water NSW's contribution to the Murray-Darling Basin Authority and Border Rivers Commission**

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.<sup>18</sup> 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 user shares are set out in table C1 in attachment C.

In its 2014 Determination, the ACCC decided that, because of the explicit regulatory obligation, if in one year any of the MDBA/BRC contributions are not recovered because water usage is lower than forecast, or over-recovered because water usage is higher than forecast, then this should be fully recovered or repaid via charges in the year immediately following, as far as possible. However, as the unders and overs balance is calculated using estimated usage volumes for the current year, some under-recovery may be recovered in subsequent years.

### **Regulated charges**

The 2014 Determination set the following regulated charges:

- Infrastructure charges for the Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys. For these valleys, the charges determined by the ACCC in 2014 were calculated to allow Water NSW to recover 40% of its revenue through fixed charges (high security entitlement and general security entitlement charges) and 60% through variable charges (usage charges on the volume delivered).
- Infrastructure charges for certain users in the Fish River Water Supply Scheme (Fish River). The ACCC sets charges for one 'major' user—EnergyAustralia and approximately 278 'minor' users. The charges for EnergyAustralia are different to the charges for the minor users.

The 2014 Determination set different charges for raw and filtered water. For raw water, the ACCC's 2014 Determination requires Water NSW to recover 55% of its revenue through fixed charges (access charges) and 45% through variable charges (on the volume delivered). For filtered water, the ACCC's 2014 Determination requires Water NSW to recover 60% of its revenue through fixed charges (access charges) and 40% through usage charges (on the volume delivered).

- Metering service charges.

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<sup>17</sup> ACCC, *Final decision on State Water pricing application 2014-15 to 2016-17*, June 2014, Attachment 9.

<sup>18</sup> Direction by NSW Treasurer under Public Finance and Audit Act 1983 (NSW), 28 May 2014

- Miscellaneous charges—charges for testing meter accuracy under dispute, environmental gauging station charges, Fish River connection and disconnection charges, allocation trade processing charges and the Yanco Creek levy.

While the 2014 Determination included a table setting out indicative charges for 2015-16 and 2016-17 in real \$2013-14, the charges determined for 2015-16 and 2016-17 depend on actual CPI movements. In addition, the infrastructure charges for the Border, Gwydir, Namoi, Lachlan, Macquarie, Murray, Murrumbidgee valleys and the Fish River depend on volume forecasts and unders and overs adjustments, calculated according to the price control mechanism described above. The methodology for each regulated charge is explained in further detail in section 5 below.

### 3. Water NSW application

On 9 March 2015 Water NSW submitted its application to the ACCC to review its regulated charges for 2015-16. Water NSW's application included the price control model provided by the ACCC for the purpose of calculating charges,<sup>19</sup> updated to include Water NSW's revised estimates and forecasts of demand.

Water NSW's application sought ACCC approval of lower charges for most valleys based on the indicative charges set out in its 2014 Determination, with inflation adjustments, rather than charges determined in accordance with the price control mechanism described above on the grounds of price stability. Water NSW's application states that '[i]n the current environment of low water availability, Water NSW considers that this adverse price impact is not in the best interests of [its] customers.'<sup>20</sup>

The charges proposed by Water NSW are shown in tables D1 and D2 in Attachment D.

Water NSW's application also seeks for any under-recovery that arises from setting charges at a lower amount than the charges derived using the UOM to be added to the unders and overs account balance and carried forward.<sup>21</sup> This additional amount would then feed into the calculation of charges in subsequent years.

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<sup>19</sup> ACCC, *Final Decision on State Water Pricing Application: 2014-15 - 2016-17*, June 2014, Appendix B, pp. 68-77.

<sup>20</sup> Water NSW, Application to the ACCC for annual review of regulated charges, 9 March 2015, p. 1.

<sup>21</sup> *Ibid.*

## 4. Approach to making the draft 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 and consumption forecasts and price stability.

Under the 2014 Determination, the charges for 2015-16 are the outcomes of the formulae set out in the decision, rather than the indicative charges in tables 1.1, A.1 and B 1-B5. 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 draft decision. This process is summarised out in the flow chart below.

As Water NSW's application asks for the ACCC to approve charges that are not the charges calculated in step one, the ACCC has considered whether to approve Water NSW's application on the grounds of price stability.

### **Step 1: calculate the 2015-16 charges set according the 2014 Determination (section 4)**

This step involves adjustments to the indicative prices in the 2014 Determination for actual CPI movements, actual water usage in 2013-14 and estimated water usage in 2014-15 along with the application of the unders and overs mechanism.



### **Step 2: the 'change in forecasts' test (section 5, pp 13-15)**

This step involves consideration of whether there is any additional information that changes the forecast water usage for 2015-16 that was included in the 2014 Determination.



### **Step 3: the 'price stability' test (section 6, pp 16-17)**

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

As Water NSW's application asks for the ACCC to approve charges that are not the charges calculated in step one, the ACCC has considered whether to approve Water NSW's application in step three.

## 5. Step one: calculation of the regulated charges set in the 2014 Determination

The first step taken by the ACCC in undertaking this review was to calculate the 2015-16 charges set in the ACCC's 2014 Determination using:

- actual CPI movements (published by the Australian Bureau of Statistics (ABS))
- actual water usage in 2013-14 (submitted by Water NSW in its application)
- estimated usage in 2014-15 (submitted by Water NSW in its application).

This step also involves 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 unders and overs mechanism.

Reference: ACCC, *Final Decision on State Water Pricing Application: 2014-15 - 2016-17*, June 2014, Appendix B, pp. 68-77.

### 5.1. Charges set according to the 2014 Determination

#### 5.1.1. Infrastructure charges for all valleys (excluding Lowbidgee and Fish River)

Table 5.1 below sets out the 2015-16 charges, as determined by the ACCC in its 2014 Determination, expressed in nominal terms, using a forecast CPI of 1.7%.<sup>22</sup> Movements in charges from 2014-15 range from -2% for the usage charge in the Gwydir valley to +19% for the general security entitlement charge in the Border valley.

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 draft charges proposed by the ACCC. Table 1.1 on page 1 of this draft decision sets out the draft charges for these valleys. The ACCC's draft decision to vary the 2015-16 charges set according to the 2014 Determination is explained in section 6 below.

**Table 5.1: 2015-16 charges set in the 2014 Determination\* - \$/ML and % 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	
	\$/ML	% change	\$/ML	% change	\$/ML	% change
Border	\$11.28	15%	\$3.93	19%	\$11.00	14%
Gwydir	\$14.01	3%	\$3.44	3%	\$11.90	-2%
Namoi	\$16.89	2%	\$8.03	5%	\$19.90	0%
Peel	\$31.77	12%	\$3.49	12%	\$52.48	12%
Lachlan	\$14.87	16%	\$3.25	2%	\$19.36	5%
Macquarie	\$14.39	15%	\$3.52	3%	\$15.94	11%
Murray	\$5.13	10%	\$2.84	8%	\$7.49	9%
Murrumbidgee	\$3.66	2%	\$1.54	0%	\$4.41	2%
Lowbidgee			\$0.79	7%		

\* Prices in nominal \$2015-16 include an inflation adjustment of 1.72% over 2014-15, based on an interim forecast for the CPI increase between March quarter 2014 and March quarter 2015.

<sup>22</sup> This CPI forecast is the movement in actual CPI from December 2013 quarter to December 2014 quarter. The ACCC's final determination will list charges in \$2015-16 based on the actual CPI movement between March quarter 2014 and March quarter 2015.

The drivers of the changes in charges are explained in section 6.4 below.

### 5.1.2. Access and usage charges for the Fish River

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 for the Lithgow and Oberon councils and the former Sydney Catchment Authority. 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 the former Sydney Catchment Authority will apply until 1 July 2017.<sup>23</sup> The charges set by the ACCC depend partly on the volumes used by customers whose charges are regulated by IPART, as both groups share certain joint costs. Water NSW submitted this information in its application.

In the ACCC's 2014 Determination, the structure of infrastructure charges for Fish River is different from other valleys. In particular:

- there are different charges for the delivery of raw and filtered water
- the charges for each type of water are structured into access and usage charges
- a different approach is taken for EnergyAustralia than the approach that is taken for the smaller customers.

As set out in table 5.2 below, charges for the delivery of raw water are set to increase in nominal terms by around 4% in 2015-16, and charges for the delivery of filtered water by around 7% in 2015-16. One reason for this is the significant decline in estimated water usage in 2014-15—approximately 25% across all types of supply. This creates an under-recovery which, after multiplying by the rate of return, adds 2% to the Fish River revenue requirement.

**Table 5.2: 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
Raw water (EnergyAustralia)	\$0.34	3.5%	\$0.39	4.5%	-	-
Raw water (minor customers)	\$68.60	3.5%	\$0.39	4.5%	\$0.73	4.1%
Filtered water (minor customers)	\$132.77	3.5%	\$0.72	12.3%	\$1.39	7.9%

\* Charges in nominal \$2015-16 include forecast of CPI increase at 1.7%.

The drivers of the changes in charges are explained in section 6.4 below.

<sup>23</sup> [http://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Rural\\_Water/Review\\_of\\_State\\_Waters\\_prices\\_for\\_the\\_coastal\\_valleys\\_and\\_some\\_Fish\\_River\\_customers\\_from\\_1\\_July\\_2017/14\\_Jul\\_2014\\_-\\_Media\\_Release\\_-\\_Review\\_Deferral/Media\\_Release\\_-\\_Water\\_management\\_and\\_bulk\\_water\\_prices\\_to\\_remain\\_at\\_current\\_levels\\_-\\_14\\_July\\_2014](http://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Rural_Water/Review_of_State_Waters_prices_for_the_coastal_valleys_and_some_Fish_River_customers_from_1_July_2017/14_Jul_2014_-_Media_Release_-_Review_Deferral/Media_Release_-_Water_management_and_bulk_water_prices_to_remain_at_current_levels_-_14_July_2014)

## 5.2. Inflation adjustments

The revenue requirements and charges for each year of the regulatory period were specified in the 2014 Determination in real \$2013-14. Determining charges for 2015-16 in nominal \$2015-16 requires inflation adjustments in two steps:

- First, nominal 2014-15 revenue requirements and charges were calculated using the movement for the actual percentage increase in CPI from the March quarter 2013 to the March quarter 2014 (2.93%). Water NSW's 2014-15 revenue and any under or over-recovery are based on charges in nominal \$2014-15.
- Second, nominal 2015-16 charges are calculated using the movement in CPI from March 2014 quarter to March 2015 quarter. As the CPI for the March quarter 2015 was not available at the time that the ACCC released this draft decision, the ACCC has based the draft nominal charges for 2015-16 in this draft decision on a forecast inflation rate equal to the actual CPI movement from December quarter 2013 to December quarter 2014. This interim figure will be updated in the ACCC's final decision, after the ABS has released the CPI for March quarter 2015.

### 5.2.1. Charges and rebates that are only adjusted for inflation

CPI adjustments are to be applied to all charges, whether or not they are subject to a UOM. The following charges and rebates are not subject to the UOM and are therefore only adjusted to reflect movements in CPI:

- Lowbidgee valley general security entitlement charge, as this charge is 100% fixed, the ACCC decided that the revenue requirement for this valley would not need to be adjusted annually
- Peel valley entitlement and usage charges, as increases of these charges are capped at 10% real per annum
- metering service charges for all valleys
- charges for testing meter accuracy under dispute
- environmental gauging station charges
- Fish River connection and disconnection charges
- allocation trade processing charges
- Yanco Creek levy
- Irrigation Corporation and District (ICD) rebates.

Tables A4-A6 in Attachment A set out the above charges and rebates in nominal \$2015-16 using the forecast CPI adjustment of 1.7%.

## 5.3. Other adjustments

The ACCC determined the charges that Water NSW is allowed to levy in the Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys on the basis of a set of revenues given by the building block model. The methodology for calculating these charges is set out in Appendix B to the ACCC's 2014 Determination.<sup>24</sup>

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<sup>24</sup> ACCC, Final Decision on State Water Pricing Application: 2014-15 - 2016-17, June 2014, Appendix B, pp. 68-72.

In its 2014 Determination, the ACCC decided that it was necessary to cap increases for Peel Valley infrastructure charges at 10% in order to avoid a price shock and perverse pricing outcomes. Without the cap, charges would have increased each year of the regulatory period to bring about full cost-recovery. Subsequent changes in demand do not alter this decision, and Peel valley charges are not considered further in this draft decision.

In addition to the CPI adjustments set out above, the steps set out below are taken to update the infrastructure charges for the Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys.

The 2014 Determination established a UOM for the Fish River which is similar to those other valleys, in that it applies the rate of return to the UOM balance to determine the amount to add to the revenue requirement for 2015-16. It is also subject to CPI adjustment. However, the application of the UOM for Fish River charges is more complex due to the different tariff structures.

### **5.3.1. Entitlement volumes**

Water NSW submitted estimates for the volumes of general and high security entitlements held by customers in 2014-15. It also submitted forecasts for 2015-16 which were equal to the estimates for 2014-15. Entitlement volumes are set by the NSW Office of Water and are relatively stable due to constraints on water availability in the Murray-Darling Basin.

The estimated entitlements for 2014-15 for some valleys differ from the entitlements volumes forecast in the 2014 Determination. The largest change for general security entitlements was an increase of 0.3% for the Murray valley. The largest changes for high security entitlements were in the Gwydir valley (increase of 5.8%) and Lachlan valley (decrease of 5.3%).

Tables E1 and E2 in Attachment E show Water NSW's estimates of entitlement volumes during 2014-15 and a comparison with volumes included in the 2014 Determination.

### **5.3.2. Forecast water usage 2015-16**

In its 2014 Determination, the ACCC decided that Water NSW should use a 20 year moving average of past water usage to forecast demand for water in future years. Each year, the 20 year moving average is updated to reflect actual usage for the previous year and estimated usage for the current year.

In its application, Water NSW submitted actual usage volumes for 2013-14 which allowed the moving average for 2015-16 to be updated, based on the 20 year period 1994-95 to 2013-14.<sup>25</sup> Tables F1 and F2 in Attachment F show Water NSW's data for actual water usage in 2013-14, and the updated forecasts for usage in 2015-16.

### **5.3.3. Estimated water usage 2014-15**

In its application, Water NSW provided an estimate of usage volumes for 2014-15 for each valley. The estimates were based on:

- actual usage from 1 July to 31 December 2014; and
- a forecast of usage for the period 1 January to 30 June 2015, including water ordered in January-February and forecast for March-June, (consistent with current storage levels, a

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<sup>25</sup> Water NSW provided data both for usage within NSW and water allocations traded out of NSW (see section 6).

dryer than average rainfall forecast by the Bureau of Meteorology, available water within access licences, and historical water usage trends).<sup>26</sup>

Tables D3 and D4 in Attachment D shows estimates of 2014-15 water usage volumes, compared to usage volumes forecast in the 2014 Determination. This shows that estimated usage in 2014-15 was considerably lower than forecast in the 2014 Determination for certain northern valleys. In particular, usage in the Border valley was 71% less than forecast, 61% lower in the Macquarie valley and 58% lower in the Namoi valley

### **5.3.4. Average water allocation**

Changes in average water allocations (AWAs) affect the balance between high security and general security entitlement charges. High security entitlement charges are determined by multiplying the general security entitlement charge by a high security premium. The high security premium (HSP) is calculated as:

$$\text{HSP} = \text{AWA ratio} \times \text{Water sharing plan ratio.}$$

The AWA ratio for each valley in a particular year is calculated as the moving average of the actual water allocation percentage to high security entitlements divided by the allocation percentage to general security entitlements for each year, over the previous twenty years of actual data.

The percentage allocation is declared by the NSW Office of Water throughout each irrigation season, and is the percentage of the irrigator's entitlement volume that is available as water allocation to be used, sold or carried over. Tables G1 and G2 in Attachment G set out the average water allocation percentages for general security entitlements and high security entitlements for 2015-16 for each valley. Table G3 shows the change in the AWA ratio from that set out in the 2014 Determination.

### **5.3.5. Adjustment to the revenue requirement**

The adjustments in 5.3.1-5.3.4 are then used to estimate the revenue received in 2014-15. This amount is then deducted from the revenue requirement for 2014-15 set in the 2014 Determination. The UOM then calculates the amount that should be added to the next year's revenue requirement for the purpose of adjusting charges.

The revenue adjustment for unders and overs is treated differently for Water NSW's own costs and MDBA/BRC contributions. For Water NSW costs, the balance in the unders and overs account will be multiplied by the rate of return and used to adjust the revenue requirement. For MDBA/BRC contributions, the whole balance in the unders and overs account will be added to the revenue requirement for the next year.<sup>27</sup>

## **5.4. ACCC consideration of the estimates and forecasts submitted by Water NSW**

The WCIR requires that Water NSW's application include:

- Water NSW's forecast of demand for, or consumption of, infrastructure services for 2015-16<sup>28</sup>
- Water NSW's estimate of demand or consumption during 2014-15<sup>29</sup>

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<sup>26</sup> Water NSW, Application to the ACCC for annual review of regulated charges, 9 March 2015, p. 3.

<sup>27</sup> There is a secondary adjustment in the following year after the actual revenue for the current year is determined.

<sup>28</sup> WCIR, Rule 34(2)(a).

- information about how Water NSW calculated the forecast and estimate.

Water NSW's application states that its 2014-15 consumption estimates are based on:

- actual usage up to 31 December 2014
- trade volumes out of NSW (relevant for the Border, Murray and Murrumbidgee valleys)
- a forecast of usage for the period 1 January to 30 June 2015, including water ordered in January-February and forecast for March-June (consistent with current storage levels, a dryer than average rainfall forecast by the Bureau of Meteorology, available water within access licences and historical water usage trends).<sup>30</sup>

The ACCC considers that the forecasts and estimates submitted by Water NSW in its application are reasonable and calculated in accordance with appropriate methodology. The ACCC considers that the water usage estimates Water NSW provided for 2014-15 in its 2015 application are appropriate considering its forecasting methodology and key drivers of demand, including inflows and the availability of water and current economic conditions.

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<sup>29</sup> WCIR, Rule 34(2)(b).

<sup>30</sup> Water NSW, Application to the ACCC for annual review of regulated charges, 9 March 2015, p. 3.

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

The second step taken by the ACCC in undertaking this review involved consideration of any additional information that changes the forecast usage for 2015-16, i.e. changes that did not arise solely as a result of actual 2013-14 and estimated 2015-16 usage figures.

In its 2014 Determination, the ACCC decided that forecast water usage is to be calculated by averaging the past 20 years of actual usage. Therefore, this step is limited to considering if changes should be made to the figures for historical water usage that the ACCC considered in making its 2014 Determination.

### 6.1. Interstate trade

In December 2014, Water NSW advised the ACCC that during 2014-15, it had imposed usage charges on customers trading water allocation to a person who does not hold a NSW water access licence with an associated water supply works and complying metering. This is the case with water allocation trades from NSW to other Basin States. Water NSW stated that this approach to imposing the usage charge had previously been endorsed by IPART in its 2010 determination of Water NSW’s charges.

Water NSW imposes usage charges at the point of trade on sellers of water allocation to buyers outside NSW, as usage charges cannot be collected from these buyers by Water NSW.

Although Water NSW receives revenue in the form of usage charges imposed on those trading water allocation from NSW to interstate, the volumes of water allocation traded out of NSW were not included in the usage data provided to the ACCC for the purposes of the ACCC’s 2014 Determination. The usage volumes that the ACCC relied upon in making its 2014 Determination were derived from information supplied by Water NSW on volumes used by customers in NSW.

In its application, Water NSW has provided retrospective data on interstate trade volumes. It has advised that it can only provide actual data from 2004-05 when its predecessor, the State Water Corporation of NSW, was created. However, it has 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 moving average.

### 6.2. Effects of adjusting usage data

Corrections for trade out of NSW affect charges through the UOM. The corrections increase:

- actual usage for 2013-14 and earlier years, thereby increasing the 20-year moving average used to forecast usage in 2015-16 which, in turn, has a downward effect on charges for 2015-16. This affects usage but not entitlement charges.
- estimated usage for 2014-15, thereby increasing the estimate of revenue for 2014-15 and reducing any under-recovery for 2014-15, which in turn has a downward effect on charges for 2015-16. This affects both usage and entitlement charges by the same proportion.

There are only three valleys with trade out to other states, due to limited connectivity between parts of the MDB. There is trade out from Murray and Murrumbidgee valleys to Victoria and South Australia, and from Border valley to Queensland.

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 5.8% and entitlement charges by 2.1% compared to a scenario where usage data is not adjusted.

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

	<b>% increase in estimated usage (2014-15)</b>	<b>% increase in forecast usage (2015-16)</b>	<b>% effect on usage charge</b>
Border	1.6%	3.8%	- 6.7%
Murray	9.5%	3.9%	- 11.2%
Murrumbidgee	1.3%	0.9%	- 2.1%

### 6.3. ACCC consideration of the changes in demand and consumption

The ACCC considers that it is necessary to adjust the rolling 20-year average used to forecast demand and consumption to include volumes of water allocation traded from the Border, Murray and Murrumbidgee valleys to other states because Water NSW imposes the usage charge and collects revenue on these transactions.

Accordingly, the ACCC considers that the ‘change in forecasts test’ is satisfied and therefore, the charges that would result from the application of the formula in the 2014 Determination should be changed in order to take into account the volume of water allocation traded from the NSW Murray-Darling Basin to other states.

The ACCC considers that the information provided by Water NSW as part of its application under rule 34 on water allocation traded out of the Border, Murray and Murrumbidgee valleys to other states is reasonable and calculated in accordance with appropriate methodology.

### 6.4. Charges set in the 2014 Determination, amended to take into account changes in the demand or consumption forecasts

Tables 1.1 and 1.2 on page 2 above set out the infrastructure charges calculated in accordance with the 2014 Determination and updated to reflect the changes in demand and consumption forecasts described above.

#### ***Drivers of price changes***

There are several reasons for the price changes, in particular:

- low usage estimates for 2014-15, particularly in northern valleys
- the method of recovery of contributions to the MDBA and BRC
- low actual usage in 2013-14 for Macquarie and some other valleys
- low water allocations for general security customers, which lead to an increase in the High Security Premium.

Tables B1 to B3 in Attachment B summarise the impact of the main factors influencing price changes for each type of charge in each valley. These factors and their contribution to price changes in different valleys are discussed further below.

### **Estimated usage for 2014-15**

Namoi and Macquarie valleys have notably low estimated usage—58% and 61% 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 2015-16 revenue requirement.

Border valley faces one of the largest price increases because estimated usage for 2014-15 is 71% below the 20 year moving average, causing a significant under-recovery for Water NSW. This leads to larger price increases in Border valley as the full amount of the under-recovery associated with the BRC contribution, set by the NSW Government, is added to the 2015-16 revenue requirement.<sup>31</sup>

### **MDBA/BRC contributions recovery method**

The large impact of low usage on charges, for Border and Murray valleys in particular, is due to the operation of the UOM for MDBA and BRC amounts. This provides that entitlement and usage charges are to be adjusted to fully recover any under-recovery from 2014-15 in subsequent years.<sup>32</sup>

NSW contributions to the MDBA are recovered only from users in the Murray and Murrumbidgee valleys, while BRC contributions are recovered only from the Border valley.<sup>33</sup> The percentage of these valleys' revenue requirement attributable to MDBA/BRC amounts is shown in table C1 in Attachment C.

The recovery of NSW contributions to the MDBA accounts for 64% of the Murray valley's total revenue requirement for 2015-16.<sup>34</sup> Similarly, the recovery of NSW contributions to the BRC accounts for 32% of the Border valley's total charges. The UOM, which allows Water NSW to recover the full amount of any under-recovery of MDBA/BRC amounts, combined with the estimated usage reductions, is primarily responsible for the price increases in the Border and Murray valleys.

Price increases for the Murrumbidgee valley are more moderate, the highest being 2.5% for high security entitlements. This is because the recovery of NSW contributions to the MDBA account for only 19% of total charges, and estimated usage in the Murrumbidgee valley is slightly higher than that forecast using the 20 year moving average.

### **Actual usage for 2013-14**

As noted above, actual usage for 2013-14 feeds into the 20-year moving average which is used to forecast usage in 2015-16. This forecast is then used to derive usage charges for 2015-16.

As this is a moving average, the actual usage for 2013-14 replaces the actual usage for 1993-94. Water usage in most valleys in 2013-14 was higher than the equivalent figure for 1993-94. Accordingly, the forecasts for these valleys increased after the actual usage for 2013-14 was added to the moving average. This in turn exerted a downward influence on charges.

However, actual 2013-14 usage in Macquarie and Lachlan valleys was lower than in 1993-94 and this caused a reduction in the 2015-16 forecast. The largest negative effect on forecast usage was for Macquarie valley, which resulted in a reduction in forecast usage by 4%, and a proportional increase in the usage charge.

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<sup>31</sup> This is in contrast to the operation of the UOM for Water NSW's own costs, where any under or over collection of revenue in a particular year will be added into a rolling unders and overs account. The value of this account will be multiplied by the rate of return and added to Water NSW's revenue requirement.

<sup>32</sup> ACCC, *Final Decision on State Water Pricing Application: 2014-15 - 2016-17*, June 2014, p. 9, and Appendix B, pp.75-77.

<sup>33</sup> The recovery of NSW's contributions to the MDBA was spread across all MDB valleys in earlier regulatory periods.

<sup>34</sup> This is based on the original revenue requirement before adding amounts for unders and overs recovery.

### **Average water allocations and high security premium**

The AWA increased by 14% for the Lachlan Valley and by 11% for the Macquarie valley, as shown in table G3 in attachment G. This was the result of very low rainfall leading to zero allocation in 2013-14 for general security customers in Lachlan valley and 0.1% allocation in Macquarie valley, while high security customers still received 100% allocation. This caused an increase in the AWA and high security premium, with overall increases of around 15% nominal in high security charges for these two valleys. The change in allocations does not alter the total amount of revenue recovered from fixed entitlement charges—it only shifts the distribution of revenue from general security towards high security charges.

Changes in AWA ratios for other valleys were generally less than 4%, so had a limited impact on charges.<sup>35</sup>

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<sup>35</sup> Gwydir valley also has zero allocation for GS customers in 2013-14 but this did not alter its 20-year average AWA. The reason is that, in the moving average, the 2013-14 figure replaced the 1993-94 figure which was also zero.

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

This step involves consideration of the likely impact of any increases or decreases in charges on Water NSW’s customers through an analysis of expected bills and consideration of the dollar value of the charges.

### 7.1. Meaning of price stability

The WCIR does not define the term ‘price stability’, nor does it provide guidance as to the matters the ACCC should take into account when considering whether charges should be capped on the grounds of price stability. In considering the ‘price stability’ test in this draft decision, the ACCC has drawn on previous decisions made by both the ACCC and IPART in relation to regulated charges for water infrastructure services. Both regulators have considered the importance of price stability in previous decisions in relation to Water NSW’s regulated charges, in deciding whether it is necessary to impose a cap on the amount that charges are able to increase during a regulatory period.

### 7.2. Previous consideration of price stability

#### 7.2.1. The ACCC’s 2014 Determination

As set out in detail above, the ACCC’s 2014 Determination implemented a hybrid form of price control through the 40:60 tariff structure and the UOM. In addition, the ACCC considered whether it was necessary to impose an additional cap on annual price increases.

The ACCC rejected a proposal for a general cap of 5% on price increases by a customer of Water NSW. In its decision, the ACCC stated that the application of a cap on price changes may not allow State Water to recover its costs during a regulatory period and potentially lead to large price adjustments in subsequent regulatory periods to recover any under recovery.<sup>36</sup>

Further, the application of a price cap to the UOM would distort the balance between revenue stability and certainty for State Water and price stability for customers.<sup>37</sup>

The ACCC’s 2014 Determination resulted in increases of more than 10% for usage and high security entitlement charges in the Murray and Murrumbidgee valleys.

However, in the 2014 Determination the ACCC capped increases at 10% real per annum in the Peel Valley. The ACCC decided that a cap for the Peel Valley was necessary in order to avoid a price shock and perverse pricing outcomes. Without the cap, usage charges would have increased by over 70% to bring about full cost-recovery in the regulatory period.<sup>38</sup> The ACCC’s primary consideration in capping these increases was the fact that Peel valley charges were already much higher than the other valleys.<sup>39</sup> In contrast, charges in the Murray valley, where the ACCC determined that high security entitlement charges should increase by 48% (largely as a result of the MDBA contribution), remained the second-lowest of all valleys.

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<sup>36</sup> ACCC, *Attachments to ACCC Final Decision on State Water Pricing Application: 2014-15 - 2016-17*, June 2014, Attachment 9, pp. 130-131.

<sup>37</sup> ACCC, *Attachments to ACCC Final Decision on State Water Pricing Application: 2014-15 - 2016-17*, June 2014, Attachment 9, p.131.

<sup>38</sup> ACCC, *Attachments to ACCC Draft Decision on State Water Pricing Application: 2014-15 - 2016-17*, March 2014, Attachment 8, pp. 231-232.

<sup>39</sup> The weighted average price for Peel valley in 2013-14 was 9 times the weighted average for all other valleys (weighting each charge by the forecast volume), and 6 times the simple average of other valleys.

## 7.2.2. IPART consideration

In its last two decisions on State Water's regulated charges, IPART implemented caps on bill increases in valleys that were below full cost recovery and had considerably higher charges than in other valleys.

In its determination on State Water's regulated charges for the 2006-2010 regulatory period, IPART capped bill increases in four valleys at the maximum percentage increase of the remaining valleys. This equated to a 14.37% real increase per annum.<sup>40</sup> In this decision, IPART allowed increases above 10% for several other valleys, where the absolute level of charges was lower.<sup>41</sup>

In its determination on State Water's regulated charges for the 2010-2014 regulatory period, IPART capped price increases in three valleys at 10% real per annum. In its decision, IPART stated that it considers that a 5% per annum increase in bills is too low and a 10% per annum cap places an appropriate ceiling on bills for valleys where charges are unlikely to achieve full cost recovery.<sup>42</sup>

IPART stated that its decision to place a cap on charges in three valleys reflects its view that the charges in these valleys were already considerably above the other valleys in absolute terms and severe customer impacts would result if these valleys were moved towards full cost recovery.<sup>43</sup>

IPART allowed bill increases of between 10% and 15% per annum in real terms for some other valleys in its 2010-2014 Determination.<sup>44</sup>

## 7.3. ACCC's consideration of price stability

The ACCC recognises that a number of charges in certain valleys are set to increase by more than 14% (in real terms) under this draft decision and that such increases are significant. The ACCC noted in its 2014 Determination that while the UOM could result in price fluctuations from year to year, it would smooth out fluctuations in revenue and charges over time.

The ACCC considers that, in assessing whether charges should be capped on the grounds of price stability, it should focus on the likely impact of the charge increases on Water NSW's customers. In this draft decision, the ACCC has considered how the charge increases are likely to affect Water NSW's customers in two ways:

- first, consideration of the dollar value of the charges, including a comparison with the dollar value of the charges set in other valleys
- second, an analysis of expected bill increases on typical Water NSW customers in each valley.

Having regard to these two factors, the ACCC does not consider that the 'price stability' test has been satisfied and therefore it does not propose to cap the charges set according to its 2014 Determination.

### 7.3.1. The dollar value of the charges

The ACCC considers that the absolute value of the charges is an important consideration in determining whether a percentage increase should be capped on the grounds of price stability. This is because the impact of a high percentage increase on Water NSW's customers will be more

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<sup>40</sup> IPART, *Review of bulk water charges for State Water Corporation - from 1 July 2010 to 30 June 2014 – final report*, p.150.

<sup>41</sup> *Ibid*, p.5.

<sup>42</sup> *Ibid*, p.151.

<sup>43</sup> *Ibid*.

<sup>44</sup> *Ibid*, pp.168-172.

significant if the absolute charge is high in dollar terms than if the absolute charge is lower. This was the ACCC's primary consideration in capping charge increases in the Peel Valley at 10% per annum in real terms, or 11.9% per annum in nominal terms.

The highest percentage increases are for:

- general and high security entitlement charges in the Border valley (14.7% nominal and 18.5% nominal, respectively)
- high security entitlement charges in the Lachlan valley (15.8% nominal)
- high security entitlement charges in the Macquarie valley (14.7% nominal).

While these entitlement charges will increase by more than 11.9% in nominal terms, the dollar value of these charges will still be than 50% of the level of entitlement charges for the Peel Valley.

The reasons for the large charge increases in these valleys are discussed in section 6.4.

### **7.3.2. Impact of charge increases on Water NSW's customers**

The ACCC considers that an analysis of anticipated bills is the most appropriate method of assessing the impact of charge increases on Water NSW's customers. Accordingly, the ACCC analysed the likely impact of the charge increases set out in tables 1.1 and 1.2 (on page 3 of this report) on Water NSW's customers in order to assess whether it is reasonably necessary to cap the percentage increases.

In conducting this analysis, the ACCC made the following assumptions:

- a 500ML entitlement per user, for users in the Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys. The number of entitlements is assumed to be 500ML of entitlement as a medium-level of entitlement held by irrigators. This assumption does not affect the percentage price 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 Fish River customer type, calculated using the 20-year moving average
- figures for 2014-15 and 2015-16 are in real terms, at \$2014-15 price levels.

Tables 7.1 and 7.2 below show the likely impact on bills for high security and general security entitlement holders in the Border, Gwydir, Namoi, Peel, Lachlan, Macquarie, Murray and Murrumbidgee valleys. Table 7.3 below shows the likely impact on bills for customers in Fish River.

**Table 7.1 : Anticipated 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—draft decision for 2015-16 charges	% Change
Border	\$9,730	\$10,587	8.8%
Gwydir	\$12,858	\$12,738	-0.9%
Namoi	\$18,223	\$18,087	-0.7%
Peel	\$37,646	\$41,410	10.0%
Lachlan	\$14,017	\$15,162	8.2%
Macquarie	\$13,475	\$14,909	10.6%
Murray	\$5,603	\$5,556	-0.8%
Murrumbidgee	\$3,888	\$3,867	-0.5%

**Table 7.2. Anticipated 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—draft decision on 2015-16 charges	% change
Border	\$3,801	\$4,176	9.9%
Gwydir	\$4,372	\$4,298	-1.7%
Namoi	\$9,762	\$9,762	0.0%
Peel	\$16,897	\$18,587	10.0%
Lachlan	\$5,658	\$5,799	2.5%
Macquarie	\$5,015	\$5,335	6.4%
Murray	\$3,589	\$3,511	-2.2%
Murrumbidgee	\$2,223	\$2,184	-1.8%
Lowbidgee	\$ 366	\$ 386	5.6%

**Table 7.3. Anticipated bills – Fish River customers (real \$2014-15)**

Customer	Total bill at 2014-15 charges	Total bill—draft decision on 2015-16 charges	% change
Delta electricity – raw water	\$5,032,975	\$5,217,264	3.7%
Minor customers – raw water	\$464	\$481	3.7%
Minor customer – filtered water	\$762	\$816	7.1%

As noted above, the ACCC has previously determined that a 10% cap on charges for users in the Peel Valley was appropriate in order to avoid significant price increases, given the already high level of charges. Similarly, IPART has previously determined that price caps of 10% were appropriate for users in valleys with a high absolute level of charges.

While the charges set in the 2014 Determination lead to nominal price increases of between 11 and 18.5% for certain charges for users in the Border, Lachlan and Macquarie valleys, the 40:60 tariff structure adopted in the 2014 Determination reduces the impact on Water NSW's customers. The ACCC's analysis indicates that Water NSW's customers are unlikely to experience bill increases of more than 12.5% nominal or 10.6% in real terms.

On this basis, the ACCC does not consider that it is reasonably necessary to cap the charge increases for any valley, as the anticipated bills indicate that Water NSW's customers' bills are unlikely to increase as significantly as some of the individual charges.

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

### **7.3.3. Other considerations**

As noted above, the price control mechanism set in the 2014 Determination is designed to balance price stability and revenue stability.

If the ACCC were to cap the 2015-16 charge increases on the grounds of price stability and allow Water NSW to carry the balance of its unders and overs account into 2015-16, this could result in more significant charge increases in 2016-17 and subsequent years and therefore would not necessarily bring about greater price stability in the longer term. It is possible that water availability and usage may increase in future years, which could then enable Water NSW to recover its past under-recovery without increasing charges. However, this relies on circumstances such as rainfall and user-behaviour that cannot be predicted with sufficient certainty.

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.

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

Notes:

Charges in nominal \$2015-16 include forecast of CPI increase at 1.7%

**Table A1: Draft 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	
Border	\$11.28	14.7%	\$3.92	18.5%	\$10.26	6.6%
Gwydir	\$14.01	3.3%	\$3.44	3.3%	\$11.90	-2.0%
Namoi	\$16.89	2.3%	\$8.03	4.6%	\$19.90	-0.2%
Peel	\$31.77	11.9%	\$3.49	11.9%	\$52.48	11.9%
Lachlan	\$14.87	15.8%	\$3.25	2.0%	\$19.36	5.1%
Macquarie	\$14.39	14.7%	\$3.52	3.4%	\$15.94	10.7%
Murray	\$4.97	6.8%	\$2.76	4.5%	\$6.65	-3.4%
Murrumbidgee	\$3.65	2.5%	\$1.54	-0.3%	\$4.31	0.0%
Lowbidgee	-	-	\$0.79	7.4%	-	-

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

Valley	High security entitlement charge		General security entitlement charge		Usage charge	
Border	\$4.48	42.6%	\$1.56	47.3%	\$4.07	32.5%
Murray	\$3.21	9.9%	\$1.78	7.4%	\$4.29	-0.6%
Murrumbidgee	\$0.68	1.4%	\$0.29	-1.4%	\$0.80	-1.0%

**Table A3: Draft 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	
Raw water – EnergyAustralia	\$0.34	3.5%	\$0.39	4.5%	-	-
Raw water – minor customers	\$68.60	3.5%	\$0.39	4.5%	\$0.73	4.1%
Filtered water – minor customers	\$132.77	3.5%	\$0.72	12.3%	\$1.39	7.9%

**Table A4: Draft 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	353.87	371.90	1,291.10	1,028.09
80 mm	353.95	371.99	1,299.04	1,036.03
100 mm	354.43	372.46	1,343.40	1,080.40
150 mm	372.69	390.72	1,441.13	1,178.13
200 mm	392.75	410.79	1,498.18	1,235.18
250 mm	397.52	415.56	1,574.74	1,311.73
300 mm	398.77	416.80	1,691.56	1,428.56
350 mm	408.08	426.11	2,131.51	1,868.51
400 mm	453.60	471.64	2,506.00	2,243.00
450 mm	550.79	568.52	2,692.84	2,429.54
500 mm	558.38	576.12	2,886.22	2,622.91
600 mm	587.47	605.20	3,266.41	3,003.10
700 mm	598.13	615.86	3,628.36	3,365.05
750 mm	599.18	616.92	3,726.54	3,463.24
800 mm	630.69	648.41	4,300.91	4,037.61
900 mm	678.68	696.42	4,520.70	4,257.40
1000 mm	682.13	699.86	4,841.98	4,578.68
Channel	6,816.49		12,707.83	

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

Type of charge	Charge (\$)
Charges for testing meter accuracy under dispute	1,694.61
Environmental gauging station charges (per annum)	8,709.06
Fish River connection charges	469.18
Fish River disconnection charges	260.65
Allocation trade processing – charge per application	38.65
Allocation trade processing – charge per ML of allocation traded	0.51
Allocation trade processing – cap on total charge	152.58
Yanco Creek levy	0.90

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

<b>Irrigation Corporation or District</b>	<b>ICD Rebate (\$)</b>
Jemalong	64,550
Murray Irrigation	939,108
Western Murray	32,814
West Corugan	52,116
Moira	26,041
Eagle Creek	9,185
Murrumbidgee Irrigation	651,956
Coleambally	286,106
<b>Total rebates</b>	<b>2,061,877</b>

## Attachment B: Factors contributing to price changes

**Table B1: Factors contributing to price changes – high security entitlement charges 2015-16 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys)**

	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%	16.0%	-3.1%	0.0%	0.0%	14.7%
Gwydir	1.4%	1.0%	0.0%	-0.9%	-	3.3%
Namoi	0.7%	2.1%	-2.1%	0.0%	-	2.3%
Lachlan	2.0%	0.3%	9.6%	1.7%	-	15.8%
Macquarie	1.9%	2.1%	8.5%	-0.2%	-	14.7%
Murray	0.6%	6.1%	1.9%	-0.3%	-3.0%	6.8%
Murrumbidgee	-0.2%	-0.3%	1.9%	-0.6%	0.0%	2.5%

Note: Tables B1 to B3 show percentage change in price due to each incremental change in input data.

Total change also includes CPI increase forecast at 1.7% which applies to all charges in tables B1 to B3.

**Table B2: Factors contributing to price changes – general security entitlement charges 2015-16 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys)**

	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%	16.0%	0.1%	0.0%	0.0%	18.5%
Gwydir	1.4%	1.0%	0.0%	-0.9%	-	3.3%
Namoi	0.7%	2.1%	0.2%	0.0%	-	4.6%
Lachlan	2.0%	0.3%	-3.5%	1.5%	-	2.0%
Macquarie	1.9%	2.1%	-2.1%	-0.2%	-	3.4%
Murray	0.6%	6.1%	-0.4%	-0.3%	-3.0%	4.5%
Murrumbidgee	-0.2%	-0.3%	-0.9%	-0.6%	0.0%	-0.3%

**Table B3: Factors contributing to price changes – usage charges 2015-16 (Border, Gwydir, Namoi, Lachlan, Macquarie, Murray and Murrumbidgee valleys)**

	<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>
Border	0.3%	16.0%	-3.5%	0.0%	-6.7%	6.6%
Gwydir	1.4%	1.0%	-5.9%	0.0%	-	-2.0%
Namoi	0.7%	2.1%	-4.5%	0.0%	-	-0.2%
Lachlan	2.0%	0.3%	1.0%	0.0%	-	5.1%
Macquarie	1.9%	2.1%	4.6%	0.0%	-	10.7%
Murray	0.6%	6.1%	0.4%	-0.1%	-11.2%	-3.4%
Murrumbidgee	-0.2%	-0.3%	1.2%	-0.1%	-2.1%	0.0%

## Attachment C: Revenue requirements and recovery

**Table C1: Revenue Requirements 2014-15 and 2015-16 (\$'000, real \$2013-14)**

Valley	Water NSW costs			MDBA/BRC			MDBA/BRC contributions as % of total revenue requirement for 2015-16
	2014-15	2015-16	% change	2014-15	2015-16	% change	
Border	1,493	1,501	0.5%	700	700	0.0%	32%
Gwydir	4,837	4,905	1.4%	-	-	-	0%
Namoi	5,131	5,166	0.7%	-	-	-	0%
Lachlan	6,790	6,927	2.0%	-	-	-	0%
Macquarie	6,522	6,644	1.9%	-	-	-	0%
Murray	6,057	5,950	-1.8%	10,200	10,400	2.0%	64%
Murrumbidgee	9,986	9,955	-0.3%	2,300	2,300	0.0%	19%
Fish River	9,445	9,548	1.1%	-	-	-	0%

**Table C2: Revenue recovery (\$'000 nominal \$)**

Valley	Under-recovery in 2014-15	Amount to be recovered in 2015-16	% recovered	Unders and overs balance carried forward
Border	966	367	38%	658
Gwydir	820	50	6.0%	820
Namoi	1,832	111	6.0%	1,832
Lachlan	440	27	6.0%	440
Macquarie	2,440	148	6.0%	2,440
Murray	696	478	69%	259
Murrumbidgee	203	50	25%	165
Fish River	1,147	69	6.0%	1,147
<b>Total</b>	<b>8,138</b>	<b>1,199</b>	<b>15%</b>	<b>7,431</b>

Note: An under-recovery is a positive figure, and over-recovery negative in this table.

## Attachment D: Water NSW application – charges

**Table D1: 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	% change (all charges)
Border	\$10.04	\$3.38	\$9.83	2.1%
Gwydir	\$13.99	\$3.44	\$12.53	3.1%
Namoi	\$16.91	\$7.86	\$20.41	2.4%
Peel	\$31.77	\$3.49	\$52.48	11.9%
Lachlan	\$13.32	\$3.31	\$19.11	3.8%
Macquarie	\$13.00	\$3.53	\$14.92	3.6%
Murray	\$4.76	\$2.70	\$7.04	2.3%
Murrumbidgee	\$3.62	\$1.57	\$4.37	1.5%
Lowbidgee	-	\$0.79	-	7.4%

Note: Nominal \$2015-16 include forecast CPI increase at 1.7%

**Table D2: Water NSW proposed charges – nominal \$2015-16/LL 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	N/A	2.8%
Raw water – minor customers	\$68.13	\$0.38	\$0.72	2.8%
Filtered water – minor customers	\$131.86	\$0.66	\$1.32	2.8%

## Attachment E: Entitlement holdings

**Table E1: Updated high security entitlement forecasts (ML) for 2015-16 and % change from forecast in 2014 Determination**

<b>Valley</b>	<b>2015-16 high security entitlements – 2014 Determination forecast</b>	<b>2015-16 high security entitlements – updated forecast</b>	<b>% change</b>
Border	3,122	3,122	0.0%
Gwydir	21,458	22,707	5.8%
Namoi	8,881	8,879	0.0%
Lachlan	60,745	57,514	-5.3%
Macquarie	42,606	42,719	0.3%
Murray	261,401	261,518	0.0%
Murrumbidgee	436,928	441,020	0.9%

**Table E2: Updated general security entitlement forecasts (ML) for 2015-16 and % change from forecast in 2014 Determination**

<b>Valley</b>	<b>2015-16 general security entitlement – 2014 Determination forecast</b>	<b>2015-16 general security entitlement – updated forecast</b>	<b>% change</b>
Border	263,238	263,238	0.0%
Gwydir	509,665	509,665	0.0%
Namoi	256,076	256,212	0.1%
Lachlan	632,837	633,166	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 F: Water usage

**Table F1: 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 (Water NSW application)	% change
Border	197,437	140,677	156,194	11%
Gwydir	407,295	245,877	261,298	6%
Namoi	270,507	158,961	166,374	5%
Peel	17,307	11,164	11,530	3%
Lachlan	242,067	227,697	225,552	-1%
Macquarie	268,934	279,671	267,387	-4%
Murray	2,056,031	1,459,689	1,588,493	9%
Murrumbidgee	1,782,634	1,759,740	1,777,705	1%
<b>Total usage</b>	<b>5,242,211</b>	<b>4,283,475</b>	<b>4,454,533</b>	<b>4%</b>

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

Note: Usage for 2013-14 includes allocations traded to non-NSW buyers in tables in this attachment.

**Table F2: 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 (Water NSW application)	% change
Raw water – major customers	7,984	9,319	9,236	-1%
Raw water – minor customers	54	52	49	-6%
Filtered water – minor customers	66	132	120	-9%
<b>Total usage</b>	<b>8,899</b>	<b>10,488</b>	<b>10,326</b>	<b>-2%</b>

**Table F3: 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 (Water NSW application)	% change
Border	140,677	40,283	-71.4
Gwydir	245,877	177,000	-28.0
Namoi	158,961	67,000	-57.9
Lachlan	227,697	206,000	-9.5
Macquarie	279,671	110,000	-60.7
Murray	1,459,689	1,356,215	-7.1
Murrumbidgee	1,759,740	1,800,557	2.3
<b>Total usage</b>	<b>4,283,475</b>	<b>3,757,056</b>	<b>-12.3</b>

**Table F4: Estimated 2014-15 water usage and comparison with forecast in 2014 Determination (ML) and % change (Fish River)**

<b>Customer</b>	<b>Forecast 2014-15 (2014 Determination)</b>	<b>Estimated usage 2014-15 (Water NSW application)</b>	<b>% change</b>
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 F5: Volumes of water allocations traded to non-NSW buyers**

<b>Source valley</b>	<b>Average volume traded 1994-95 to 2013-14</b>	<b>Volume traded out as % of usage forecast 2015-16</b>	<b>Estimated volume traded 2014-15</b>	<b>Volume traded out as % of usage estimate 2014-15</b>
Border	10,451	7%	283	0.7%
Murray	134,057	8%	116,215	9%
Murrumbidgee	38,027	2%	557	0.03%

## Attachment G: Water allocations

**Table G1: 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 (Water NSW application)	% 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 G2: 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 (Water NSW application)	% 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 G3: Forecast AWA ratios for 2015-16**

Valley	Forecast AWA (2014 Determination)	Forecast AWA (Water NSW application)	% 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%

Note: 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.