



Murray Irrigation

Response to State Water Corporation's pricing application for regulated bulk charges

Submission to the Australian Competition
and Consumer Commission.

September 2013

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Executive summary

State Water has based much of its application on a ‘business as usual’ model, while applying to fundamentally change their business model by shifting risk onto customers.

Murray Irrigation acknowledges the revenue volatility State Water is presented with as a result of variability in water usage driven by water availability and climatic conditions. Revenue volatility risks are exacerbated where a large proportion of revenue is driven by usage charges. However, we do not accept that State Water customers should carry the lion’s share of risk for a business that has the advantage of being both a monopoly and a Government owned enterprise.

The purpose of regulating monopoly providers is to ensure service efficiency and consumer welfare. It is imperative that the ACCC, in reviewing State Water’s pricing application, ensures the interests of the customer are preserved and that State Water do not exert monopoly powers.

Murray Irrigation is concerned the pricing application presented by State Water requests a suite of mechanisms for managing revenue risk – revenue cap, rebalancing constraint, carryover and a revised tariff structure – as it will remove the pressure for State Water to improve the efficiency of its business and to prioritise its expenditure when exposed to revenue shortfalls as they have done in the past.

Indeed, State Water has performed well in the past, despite the revenue volatility, effectively returning a net profit before tax over the past two years¹ and only recording a negative net profit after tax in two years between 2006-2012² during the peak of the drought and extreme low water use.

Murray Irrigation believes if accepted, State Water’s application will result in State Water extracting monopoly rents and wealth transfer from customers with NSW Treasury being the ultimate beneficiary as State Water is required to pay shareholder dividends with the NSW Government being the sole shareholder. We do not feel that State Water’s monopoly status should indemnify them from revenue volatility which is a part of doing business in the retail water industry.

Murray Irrigation requests the Australian Competition and Consumer Commission (ACCC) consider how any additional revenue collected to insulate State Water against revenue volatility will be isolated from NSW Treasury and reserved for use in future years; particularly as State Water has requested a carryover mechanism for under-recovery. History has shown that surpluses accumulated by Government owned entities have been subsumed by Government and subsequently not available for the purpose they were collected.

While State Water has submitted a comprehensive pricing application, it is not easy to determine from the outset if the increases in operating expenditure, capital expenditure and required revenue are justified. For example, State Water has socialised metering and compliance charges across all valleys despite at least 50 percent of Murray Valley entitlement users being located in the Murray Irrigation area of operations and therefore not receiving any benefit from State Water metering and compliance services.

Further, State Water has applied for an increase in the Weighted Average Cost of Capital (WACC) but failed to explain why such an increase is needed, particularly in light of other requests which, if accepted, would see the risk profile of the business significantly reduced and should also lead to a reduced WACC.

State Water has failed to exclude Murray-Darling Basin Authority (MDBA) charges from previous determination prices for relevant valleys such as the Murray Valley and therefore it is impossible to evaluate whether State Water are requesting an increase in real charges compared to previous years. The presentation of Valley costs as an overall revenue required amount fails to clearly indicate what the cost drivers for each valley are.

The ACCC must carefully consider if the State Water application reflects prudent and efficient costs of providing infrastructure services. The ACCC must also look closely at how efficient the costs are exclusive of MDBA and Border Rivers Commission costs.

¹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch9.5, p120

² Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T4.3, p37

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Murray Irrigation would argue that the price control mechanisms requested would lead to less efficiency because there would be no obligation on State Water to respond to market influences such as fluctuating water availability or demand. At the same time there would be less incentive for State Water customers to improve their water use efficiency when faced with predominantly fixed charges.

Murray Irrigation notes, as we did in the previous determination process, that achievement of budget versus actual capital expenditure continues to be an issue for State Water and we are therefore concerned that forecast capital expenditure over the next determination will differ from actual capital expenditure. The ACCC must ensure that double accounting of expenditure does not occur between determinations.

Murray Irrigation commends the retention of the large customer rebate but do not accept State Water's arguments justifying a reduction in these rebates. Further, we believe State Water's approach to calculating the value of those entitlement rebates understates the benefits provided by irrigation corporations in both ancillary benefits and true avoided costs.

Murray Irrigation encourages the ACCC to carefully consider each of State Water's proposals to determine the impact such changes may have on the ability for customers to plan and prepare for the future. Further, consideration must be given as to whether changes proposed may themselves lead to increased administrative and enforcement costs for State Water with no material benefit.

Murray Irrigation recommends the ACCC maintain the current tariff structure and price cap model to provide certainty and stability for customers for the period of the determination. We further recommend that the current large customer rebate be maintained throughout the determination to recognise the service provided to State Water by these customers as well as the avoided costs provided by infrastructure operators.

1 Background

Murray Irrigation is pleased to provide this submission to the ACCC and would be available to respond to any queries or to meet with the ACCC to discuss this submission if required.

1.1 Murray Irrigation

Murray Irrigation Limited is an unlisted public company that provides irrigation water and associated services to approximately 1,200 family farm businesses over an area of 748,000ha through 3000km of channels in the NSW southern Riverina. Murray Irrigation's source of water is the regulated River Murray and the company's water supply is almost exclusively NSW Murray General Security Water of which we currently hold at least 50 percent of the total on issue³.

Murray Irrigation holds five water access licences with the NSW Government and has issued contractual rights to our members. Our infrastructure includes two independently metered diversion points at Lake Mulwala and the Wakool offtake on the Colligen Creek and five State Water accredited escapes. Within our area of operation there are around 1,850 regulating structures that control water delivery and maximise efficiency. As reported in our 2012 Annual Report, we service 3,514 large irrigation supply points (metered outlets), 318 small irrigation supply points and 1,271 unmetered pipes for stock and domestic use.

Murray Irrigation is in the process of rolling out system-wide upgrades and efficiency measures to ensure our continued ability to deliver cost effective services and maintain the company's viability. With assistance from the Federal Government's Private Irrigation Infrastructure Program (PIIOP) Murray Irrigation is combining rationalisation with infrastructure upgrades and retirements to implement an improved level of irrigation service delivery. The company is incorporating sub-system retirements as part of the business adjustment to Government investment in environmental water.

Murray Irrigation's Network Service Plan (NSP), published in accordance with the Water Charge (Infrastructure) Rules 2010 (Cth) in June 2012, forecast fees and prices based on a continuation of the then current fee structure with CPI increases applied annually.

Murray Irrigation did not increase the majority of its fees and prices by CPI between 2012/13 and 2013/14 as proposed in the NSP. Further, the Board implemented a decrease in delivery entitlement fees of one dollar per unit for the last quarter of 2012/13 and into 2013/14. These decisions were possible because of Murray Irrigation's successive cost control and efficiency efforts and higher than forecast revenue in 2012/13, arising from higher than forecast water sales.

This action is consistent with Murray Irrigation's non-profit status and commitment to return benefits to shareholders through lower fees and prices, rather than profits or dividends, while maintaining long-term financial viability.

³ Murray Irrigation General Security Licence holdings as at 31 July 2013 as a percentage of total Murray General Security Entitlements referenced in the Pricing application to the ACCC, State Water Corporation, June 2013, T13.4, p147

2 Summary of response

2.1 Introduction

Murray Irrigation is pleased to provide this response to the State Water Corporation pricing application to the Australian Competition and Consumer Commission for regulated charges to apply from 1 July 2014.

In accordance with the Water Charge (Infrastructure) Rules 2010 (WCIR) the ACCC is the responsible body for approving or determining State Water's charges over the regulatory period. Previous determinations for State Water's bulk water charges were regulated by the NSW Independent Pricing and Regulatory Tribunal (IPART).

NSW Water Access Licence holders are also subject to Government bulk water charges for the NSW Office of Water which is still subject to IPART determination.

Murray Irrigation's submission focuses on the issues and priorities for its customers; it does not address all of the issues that arise from the State Water submission. Murray Irrigation is a member of the NSW Irrigators' Council and we endorse its response on behalf of industry.

2.2 Overview

Murray Irrigation notes the delay in the submission of the State Water pricing application, meaning that instead of being delivered by the 1 May 2013 deadline, it was publicly released at the end of July. This increases the pressure on the ACCC to adequately review the application and conduct appropriate consultation in the required time frame. We commend the ACCC for maintaining a commitment to consultation and urge the thorough review of the application against the pricing principles.

Specifically we encourage the ACCC to consider whether the proposal by State Water to move to a higher fixed charge tariff structure would promote the economically efficient use of water infrastructure. Where charges are fixed, rather than related to use, there is no incentive for water users to invest to improve efficiency or for State Water to respond to changed business circumstances.

Further, with the combination of price control mechanisms being requested by State Water, the revenue stability and guarantee that would be afforded would provide little incentive for State Water to invest in management and risk mitigation strategies that underpin efficient business models across industries.

Murray Irrigation does not believe the pricing application reflects pricing transparency as the individual valley costs have not been presented in a way that makes it possible to identify where revenues from charges are going. State Water has adopted a blanket approach to recovering costs for things like metering and compliance and telemetry when, these costs are not derived in some valleys, or the percentage of costs for certain items is much less in some valleys compared to others. Without a breakdown of costs per valley, it is impossible to see if State Water's application reflects a fair distribution of charges to costs.

This lack of transparency is also reflected in the fact that State Water has included in the revenue tables the MDBA pass-through revenues per valley in the 2013-14 financial year⁴. This does not allow customers to evaluate the real changes to State Water charges being proposed. On the surface it would appear that the Murray Valley charges are significantly lower for the next determination period; however, if the MDBA charges were removed from 2013-14, it may actually be that costs to customers are increasing in the next determination.

Without clearer indicators of cost distribution, it will be difficult for the ACCC to evaluate if State Water's application reflects prudent and efficient costs for providing infrastructure services, particularly at a valley level, in line with the pricing principles.

⁴ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T10.4, p125

2 Summary of response

The ACCC must carefully consider whether some cost items contained in the State Water application should be passed on to customers. It is our understanding that State Water has received some funding from the Commonwealth to develop a business case for the Computer Aided River Management system (CARMs) and may apply for further funding to roll the system out into other valleys. The CARMs project in the Murrumbidgee, and to lesser extent private diverters in the Murray Valley, was funded by the Water for Rivers program. The ACCC must ensure there is no duplicate accounting and that only those costs not funded by other means are passed onto customers and only for services that those customers receive.

2.3 ACCC Questions

In this section Murray Irrigation answers the questions posed by the ACCC in *the Information paper on State Water's 2014-17 pricing application*, published in August 2013.

2.3.1 Consultation and information

Since the implementation of the WCIR, State Water has hosted a customer pricing forum for key customer representatives including Murray Irrigation to provide information on the changes to pricing regulation.

State Water has also provided information to customers through Customer Service Committee (CSC), of which Murray Irrigation is represented at the Murray-Lower Darling CSC.

State Water provided updates via customer newsletters and their website and briefings to their top 20 customers, of which Murray Irrigation is one.

Further, State Water has appeared by invitation at NSW Irrigators' Council meetings to provide briefings and respond to direct questions.

While State Water has not incorporated all of the feedback received through the consultations and briefings, it should be commended for its consultation efforts and availability during the process.

Murray Irrigation does not believe State Water has adequately explained why their pricing application was delivered more than two months after it was due. Murray Irrigation is concerned that this delay will compromise the ability of the ACCC to take the time needed to review and evaluate the many changes to price controls, revenue requirements and other areas being requested by State Water.

Furthermore, the ACCC has announced it will release the determination in June 2014 which does not allow enough time for Murray Irrigation to meet the publishing requirements according to the WCIR. To meet the obligations of the WCIR, Murray Irrigation's Board must approve the fees and charges at the May Board meeting for distribution via mail in June and implementation from 1 July 2014. If the ACCC publishes the determination in June, Murray Irrigation will then have to have the Board approve a revised fees and prices schedule and conduct a second mail distribution in July, at a cost of over \$5,000. Murray Irrigation will also have to delay applying the new Government charges to customers until August 2014 at the earliest to meet the regulated 10 business day period between notification and implementation, meaning Murray Irrigation may have to absorb any changes to the Government charges for at least one month.

2.3.2 Changes to tariff structure

Murray Irrigation does not believe State Water has made an acceptable case for the proposed changes to its tariff structure. We address this point in more detail in the next section of this submission.

The implications of a move to higher fixed charges and lower usage charges would mean the burden of financial risk will be placed on customers.

Murray Irrigation does not agree with the proposed 80:20 fixed to variable ratio regardless of how long the transition to its implementation is.

2 Summary of response

The proposed change, particularly if combined with other risk management actions requested by State Water, could lead to reduced water ownership if the cost of owning water, regardless of use, outweighs the potential income its use can derive.

Consideration must also be given to debt recovery costs. Not matching customer cost to their income generating capacity will lead to a higher level of payment default. Murray Irrigation recognises State Water's debtor management code of practice but is concerned that debt management costs will increase under the higher fixed charges tariff structure being proposed.

Murray Irrigation supports State Water's proposal for entitlement charges for high security entitlement holders increase relative to general security entitlements and generally agree with the valley conversion factors proposed.

2.3.3 Revenue Cap

Murray Irrigation does not support the proposed shift from an annual price cap to a revenue cap. We cover this topic in more detail further in this submission.

The proposed revenue cap transfers the burden of risk from State Water onto customers who will face significant uncertainty without knowing what their water charges may be from year to year.

Murray Irrigation believes a potential 15 percent increase (or decrease) on determined charges is too great. Allowing prices to vary by CPI, as has been done in the past, provides customers with a level of certainty that any variation would not be excessive and remains in line with other cost of living fluctuations.

2.3.4 Forecasting

Murray Irrigation did not support the change to consumption forecasts adopted by IPART for the current determination, recommending at the time that consumption forecasts be based on an updated IQQM model output or the use of the CSIRO model data for median 2030 climate and current development.

Murray Irrigation does not support the changes proposed by State Water for a variable consumption forecast based on a rolling 20 year average which would lead to annual price variations based on this forecast⁵. This proposal increases the uncertainty for customers through fluctuating charges, even if the changes are only minor.

Under the previous determination and IPART's price cap model, the consumption forecast was based on the average consumption of the previous 20 years at the time of the determination, not a rolling average as now being requested by State Water. Murray Irrigation, like our customers, operates a business and it is a commercial imperative that we have consistency in prices.

2.3.5 Proposed operating and capital expenditure

Murray Irrigation does not believe the costs outlined in the State Water pricing application are either prudent or efficient. On the one hand State Water claims they will be operating 'business as usual'⁶, yet they propose increased operating expenditure of 13 percent⁷ in real annual average terms.

Murray Irrigation does not agree with many of the reasons put forward by State Water to justify this increased expenditure. We look at valley specific issues further in this document; however, we make the following general observations:

- We do not accept the extent to which State Water claims regulatory costs will increase driven by the ACCC acquiring powers to regulate bulk water charges⁸. Indeed it could be argued that the ACCC's review process is less onerous than IPART's process and therefore compliance and regulatory costs

⁵ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch13.2, p143

⁶ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch3.1, p9

⁷ Information paper on State Water's 2014-17 pricing application, ACCC, August 2013, p 23

⁸ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch5.1, p45

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should decrease or, at the least, remain the same. Other areas that may lead to increased regulatory burdens, such as the proposal to move to a revenue cap with annual price reviews are unnecessary and the associated costs can be avoided by not implementing them.

- The State Water application does not provide enough explanation as to other drivers of cost increases such as 'water delivery and other operational' and 'routine maintenance' where they request average annual increases of around 20 and 24 percent over current prices respectively. These increases need to be clarified and justified.
- The ACCC needs to investigate why State Water says that payroll accounts for approximately 65 percent of the cost base⁹. The ratio of payroll costs at Murray Irrigation is only 18 percent of overall costs. While we accept that State Water is a much larger operation, we are surprised by the size of the payroll ratio. If State Water is saying that 65 percent of its staff activity can be allocated to project costs, they must clarify.
- State Water's pricing application does not clearly outline what assets form the basis for the Regulated Asset Base (RAB). We accept that the opening RAB has been established by rolling forward the previously determined RAB, however, Murray Irrigation cannot identify what the assets are. For example, where the assets fall under a lease agreement with another agency, such as the Menindee Lakes lease to the MDBA, the ACCC should clarify which agency has the responsibility for the capital costs associated with that asset. Furthermore, it is important that the sunken assets, as previously accepted by IPART, continue to be separate from the RAB.
- Murray Irrigation does not accept State Water's claim that additional resources are required to implement the Murray Darling Basin Plan¹⁰. The Basin Plan is a federal commitment and implementation costs should be funded by the Commonwealth. To this end, it is our understanding that the NSW Government is seeking Federal assistance for implementation costs of the Basin Plan. There should be no requirement for State Water to seek any costs associated with the Basin Plan, either for regulatory compliance or metering and monitoring activities, from their customers. Further, environmental water delivery carried out as part of the Murray-Darling Basin Plan is coordinated by the Commonwealth Environmental Water Holder who is obliged to pay the same delivery charges as other State Water customers and should not cause any increased cost burden to State Water.
- State Water mentions non-paying customers¹¹ and their needs but provides no further comment. Murray Irrigation believes this is an area that requires further investigation to assess the impact of these, often high priority users (Basic Landholder Rights and environmental contingencies), who are effectively being subsidised by licence holders.
- State Water notes that environmental water needs are more complex than those of irrigators, urban utilities or other industries¹². Murray Irrigation notes that the Commonwealth Environmental Water Holder and the NSW Office of Environment and Heritage hold water entitlements which have the same characteristics as other consumptive water entitlements and therefore they should be afforded the same level of service (and associated costs). We submit that any extra costs associated with the management of environmental water must be met by the holder of said water.
- Murray Irrigation commends the decrease in proposed capital expenditure (capex) over the term of the next regulatory period¹³; however we note that State Water's actual expenditure for the previous regulatory period is forecast to be below the allowed capex. Murray Irrigation notes that discrepancies in actual versus forecast capex appears to be a regular occurrence for State Water which calls into question State Water's capacity to deliver on major expenditure programs. We encourage the ACCC to consider how any underspend in the last determination may be returned to customers such as through reduced fees and charges.

⁹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch6.2, p68

¹⁰ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch5.2, p47

¹¹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch3.1, p17

¹² Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch5.2, p51

¹³ Information paper on State Water's 2014-17 pricing application, ACCC, August 2013, p 25

3 Submission

3.1 Total revenue requirement

Murray Irrigation acknowledges the decrease in total revenue requirement in the Murray valley¹⁴; however we note that this is a decrease from total charges, including the MDBA pass-through costs. It is not apparent whether the actual State Water charges are set to decrease or increase.

Murray Irrigation requires further analysis of the current and proposed charges for the Murray Valley with the MDBA charges excluded from previous determination prices so we can better understand the real change being proposed by State Water. As the MDBA charges were a direct pass-through they did not form part of State Water's operational or capital costs and therefore should not be included in the tables presented in the price application.

Murray Irrigation understands the reason for the removal of MDBA charges from State Water's price application; however, we acknowledge that the result is likely that any resulting shortfall in NSW Government's share of MDBA charges will be collected from irrigators through other mechanisms such as the NSW Office of Water statutory charges regulated through IPART.

Noting the inclusion of MDBA costs in the financial year 2013-14 and the above point regarding effective comparison, Murray Irrigation notes the decrease of revenue required in the Murray Valley from 2014 into the new determination years averages 55 percent yet State Water proposes decreasing the General Security entitlement fixed charges by only two percent¹⁵. The largest decrease on charges will be passed on through usage charges which, if the ACCC approves changes to State Water's tariff structure will be the smallest portion of a customer's water bill. Murray Irrigation believes the associated reduction on charges should be applied to the fixed proportion of customer charges to ensure the customers receive the benefit in a way that better matches their income generating capacity which is directly linked to water use.

The fact that State Water has not provided a breakdown of what operational and capital expenditure item costs are being recovered in each valley adds to the lack of transparency of this application.

Murray Irrigation is concerned by the statement by State Water that the costs associated with the State wide meter roll out have been allocated across all valleys as part of the metering and compliance activity¹⁶. This ignores the fact that in the Murray Valley at least 50 percent of entitlements¹⁷ are held within Murray Irrigation's area of operations and no metering and compliance activity is undertaken by State Water in association with these holdings.

Murray Irrigation encourages the ACCC to closely review what the cost drivers are per valley and per activity to determine whether the application accurately reflects efficient resource allocation across valleys and industries. The ACCC must ensure that costs are recovered where they are incurred and not socialised across the customer base for services not being provided to all.

3.2 Cost Shares

Murray Irrigation supports the retention of the cost share ratios as adopted by previous IPART determinations. We commend the NSW Government for agreeing to maintain the existing cost share ratios.

Murray Irrigation again notes State Water's reference to "non-paying" customers¹⁸ and believe this matter must be investigated further. In the River Murray there are a multitude of businesses and recreational activities that are reliant on a regulated Murray that are not licensed to consume water and currently make no contribution to either capital or river operation costs, however, these industries place demands and impose costs on State Water and River Murray Water, the majority of which are passed on to water users.

¹⁴ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T10.4, p125

¹⁵ Information paper on State Water's 2014-17 pricing application, ACCC, August 2013, T3.20, p 54

¹⁶ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch5.2, p47

¹⁷ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T14.8 & 14.9, p161

¹⁸ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch3.1, p17

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Murray Irrigation believes the ACCC should investigate the impact “non-paying” customers, including basic landholder rights, environmental contingencies and other users as mentioned above has on overall State Water costs. Murray Irrigation does not believe irrigators and other State Water customers should be subsidising these “non-paying” customers.

To this end, Murray Irrigation does not believe the IPART endorsed ‘impactor pays’ principal is consistent with the ACCC’s recommended ‘user pays’ principal. Further, if the ‘user pays’ principal is to be applied, it must be applied to all users, not just extractive industries.

If the ‘impactor pays’ principal is to be maintained, then steps must be taken to ensure that water access licence holders are not subsidising activities that are undertaken in order to meet the needs of environmental watering¹⁹. As noted before, any additional costs incurred through increased management, analysis or modelling required to ensure the safe delivery of environmental water should be met by those requiring the extra service; that is, the environmental water holders.

3.3 Weighted Average Cost of Capital

State Water’s proposed increase in the WACC could have a significant impact on charges, yet without access to financial models and assumptions used by State Water and without adequate time and resources, customers are unable to adequately evaluate the reasons for change.

Murray Irrigation cannot support any variation to the ACCC’s proposed WACC calculation formula as contained in the pricing principals without fully understanding the reasoning. Murray Irrigation recommends the ACCC carefully consider why State Water is requesting a significantly higher WACC than would be achieved by following the pricing principles²⁰.

The ACCC recognises that where the rate of return is set too high businesses may recover revenues that exceed costs which may encourage inefficient investment. This again raises the issue of whether State Water’s application promotes the economically efficient use of water and water infrastructure.

Further the ACCC notes:

“In determining the WACC, it will be necessary to ensure the rate of return is commensurate with the commercial risk associated with the business’ regulated activities such that the business recovers its efficient costs.”

Murray Irrigation notes that if any of the price control mechanisms applied for by State Water are adopted in the next determination, it would reduce the business risk for State Water and should therefore result in a lower WACC than proposed.

Murray Irrigation is aware of the time needed to undertake a comprehensive analysis of the WACC proposal submitted by State Water. We note the State Water price application was submitted over two months late and hope this will not limit the ACCC’s capacity to fully review all of their proposals and particularly the proposed change in the WACC.

3.4 Form of price control

Murray Irrigation does not support the proposed price control mechanisms suggested by State Water. It is our opinion that State Water is transferring all of its business risk onto the customer, with no benefit. Customers are not able to pass on costs and are less able to absorb risk. Further, the reduction of risk and the provision of guaranteed income streams removes any incentive for State Water to ensure they are adopting the most cost effective and efficient practices.

¹⁹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, 5.2, p51

²⁰ Water Charge Infrastructure Rules – Pricing Principles, ACCC, July 2011, p26

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Murray Irrigation understands the impact fluctuating water availability and water use has on a business reliant on water sales and delivery, however, we believe it is imperative that the approved price determination continues to apply pressure on State Water to improve its efficiency and productivity and be commercially responsive to circumstances.

State Water's application seeks to shift risk from it to its customers in a way that is completely unsympathetic to the businesses of those customers. Farmers, unlike State Water or Murray Irrigation, do not necessarily have a fixed income stream that they can rely on to pay their bills. Their income is based on their production which in the case of many State Water customers is directly linked to water use. This means that in times of extended drought and low water availability – the reason State Water claims it needs revenue security - farm production is low, farm income is low and farmers' ability to pay is at its most limited.

Further, State Water has not considered the cost of compliance or enforcement measures that these changes may result in. The price control mechanisms may lead to increased customer payment defaults and State Water has not, in our view, adequately considered the increased burden on debtor management and resulting debt collection or mitigation.

The fact that State Water has effectively returned a profit in all but two years since 2006²¹ indicates that price control is not necessary for State Water to maintain commercial viability, which they identify as a reason for changing the current business risk models and tariff structure²².

Each unique price control mechanism requested by State Water individually transfers risk onto customers insulating State Water from revenue volatility. However, State Water is proposing a suite of measures that, if applied in combination, provide a level of income security rarely seen in any business. To implement the entire proposed price control mechanisms would be excessive and would see customers subjected to significant price volatility.

3.4.1 Revenue Cap and rebalancing constraint

Murray Irrigation does not support the proposal by State Water to move away from the historic price cap model to a revenue cap which would shift the business risk from State Water to the customer.

State water notes that a revenue cap operates by allowing prices to vary (up or down) depending on whether actual water sales volumes are lower or higher than forecast water sales volumes on which initial prices are set. This effectively means that no credence can be given to the figures in the pricing application as customer prices can vary depending on whether State Water delivered a lot or a little water. This makes business planning for the individual farmer extremely difficult, while the monopoly business is secure in receiving a guaranteed income.

Murray Irrigation asked Marsden Jacobs and Associates to review State Water's proposal to implement a revenue cap and rebalancing constraint. Their report (attachment A) notes that such a move will result in increased price volatility year on year for State Water's customers.

Marsden Jacobs also find that there is potential for large price increases and price shocks for customers in the event of consecutive years of under-recovery.

While State Water argue that applying a rebalancing constraint of 15 percent will offer customers some protection from price volatility²³, this is a significantly greater variation than the current Consumer Price Index adjustments that customers are accustomed to. Murray Irrigation refers the ACCC to their pricing principle that states:

*"Price stability is important to encourage efficient water use and efficient investment in on-farm water infrastructure assets."*²⁴

²¹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T4.3, p37

²² Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch12.2, p129

²³ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T12.4, p137

²⁴ ACCC WCIR pricing principles, July 2011, p 66.

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State Water say that the 15 percent is equivalent to that requested by Goulburn Murray Water in the current determination with the ESC, however Murray Irrigation notes that in the final determination handed down by the ESC in June 2013, the rebalancing constraint approved was 10 percent with the condition that customers must be consulted before material tariff changes are implemented²⁵. The ESC requires annual tariff approvals to be conducted and for water businesses to provide evidence of customer consultation and a statement on customer impacts and how they will be addressed. State Water's application is misleading because it has not acknowledged the final ESC recommendation.

This annual review process should be replicated by the ACCC and State Water if the revenue cap model was implemented to ensure regulatory oversight and compliance. This in itself could lead to unnecessary increases in the regulatory burden on State Water and the ACCC by moving from a fixed term price cap to a revenue cap with annual price reviews. It is our opinion that such a change is unnecessary and any resulting compliance costs can be avoided by not adopting this proposal.

Further, State Water's pricing application requests both a revenue cap and a higher weighted average cost of capital (WACC). Murray Irrigation submits that, if implemented, a move from a price to a revenue cap would significantly change the risk profile of State Water and this should be reflected in a lower WACC. It would appear that State Water have based much of their application, such as the WACC on a 'business as usual' model, while applying to fundamentally change their business model by shifting risk onto customers.

3.4.2 Tariff Structure

Murray Irrigation does not support the transition over the determination to an 80:20 fixed to variable tariff structure.

Murray Irrigation believes the proposed shift to higher fixed fees places a significant burden on customers while protecting State Water from fluctuating water availability scenarios. Murray Irrigation passes through the Government charges therefore it is our customers who will have to meet high fixed charges even in years of low water availability and diminished farm income and it is our customers who are least able to meet the cost demands in such years.

Murray Irrigation appreciates the issues facing State Water, where 60 percent of the revenue is planned to be from usage charges, therefore price setting relies on the infrastructure operator assuming a volume of use; however, there are two important differences between State Water and Murray Irrigation in its price setting approach.

1. State Water's prices assume a return on capital with a dividend paid to Government; and
2. State Water has a revenue stream for pre 1997 capital works which are funded 100% by Government.

On the other hand, Murray Irrigation is a not-for-profit company committed to minimising costs to customers rather than returning dividends and, unlike State Water, we do not have a guaranteed revenue stream from Government.

Murray Irrigation faces the same issues as State Water where customers demand reduced fixed charges because their capacity to earn an income is diminished by low water availability while infrastructure costs are largely fixed and operating costs are not strongly linked to the volume of sales. However, unlike State Water who propose to increase fixed charges, Murray Irrigation adopted the key performance target in the 2009-2014 Strategic Plan to *"become an increasingly variable cost-based business to give the company the ability to reduce customer "water bills" in drought years"*²⁶.

To enable this target to become a reality Murray Irrigation implemented a program to enable it to alter its consumption forecast, defer capital and maintenance expenditure and reduce costs and minimise operating losses.

²⁵ Price review 2013: Rural water businesses – Final decision, Essential Services Commission Victoria, p55.

²⁶ <http://www.murrayirrigation.com.au/media/2222/2014%20Strategic%20Plan%20Summary.pdf>, p9

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State Water argues that transition to higher fixed charges will better align charges with the nature of its costs, however, that position fails to recognise that there are opportunities to influence the nature of fixed costs and the degree to which they can be made variable or flexible in their incursion.

Marsden Jacobs and Associates point out that moving to a higher fixed to variable tariff structure is inconsistent with the Council of Australian Government (COAG) Water Resource Pricing Principles that encourage pricing structure designed to encourage efficient use of water²⁷. Consistent with this principle, the ACCC notes:

“One of the Basin water charging objectives and principles is the efficient use of water and water related infrastructure”²⁸.

A move to higher fixed charges and lower usage charges is inconsistent with this principle. It is widely accepted that the most efficient way to ensure efficient use is to make people pay to use. By fixing charges for irrigators (and other water users), it removes any incentive for them to ensure they are using water efficiently and getting the best return from their inputs.

State Water proposes the higher fixed charge tariff structure will provide consistency across sectors and jurisdictions, referring to Goulburn Murray Water and Lower Murray Water tariff structures regulated by the ESC in Victoria²⁹. What this comparison fails to recognise is the difference in water products between the jurisdictions. Victorian irrigators predominantly hold High Reliability Water Share which, as the name suggests; have a higher level of reliability or security than NSW General Security entitlement holders. The table below shows the announced allocations for NSW General Security (GSE), NSW High Security (HSE) and Victorian Murray High Reliability Water Share (HRWS) at the peak and towards the end of the drought for the years 2008 to 2011. This chart clearly shows that Victorian Murray HRWS holders are more likely to have an allocation than not, even in critical times.

The higher reliability means that water holders in Victoria experience less volume volatility than NSW Murray General Security Entitlement holders and are therefore less susceptible to income variations associated with water availability. To compare the two jurisdictions tariff structures is to ignore the different environments in which the water customers operate.

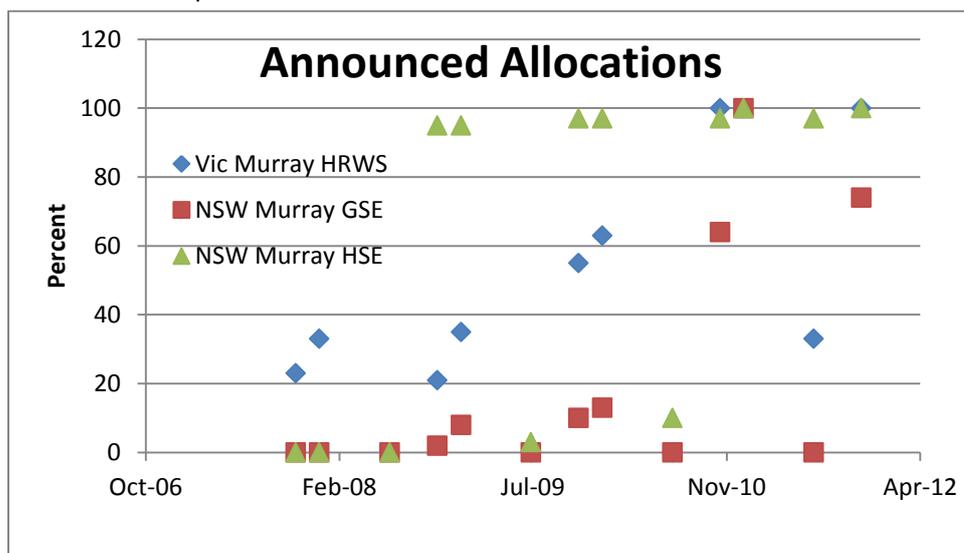


Table 1: Announced allocations from November 2007 to November 2011 (source Goulburn Murray Water and NSW Office of Water)

²⁷ Marsden Jacobs and Associates review of State Water Corporation’s price control application. Attachment A

²⁸ ACCC WCIR pricing principles, July 2011, p 66

²⁹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch12.6, p141

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In recognition of the different products, in NSW, high security entitlement holders have paid a fixed charge premium compared to general security entitlements which is appropriate acknowledgement of these customers having more secure access to water and associated storage costs.

Murray Irrigation supports the retention of the current fixed to variable ratio with high security entitlement premiums.

3.5 Large customer rebates

Murray Irrigation supports the retention of large customer rebates in recognition of the significant service irrigation infrastructure operators (IIOs) provide and the associated avoided costs. Murray Irrigation is concerned that State Water is again proposing to reduce the large customer rebate and do not believe their reasons to do so are justified.

While Murray Irrigation accepts State Water's position that if the annual rebate paid is not linked to the entitlements owned by the irrigation corporation (IC), in the event that the volume of water entitlements owned by the IC changes (decreases) significantly during the determination period, the rebate, could result in advantages to IC customers. One solution to this problem is to link the rebate to entitlements.

But State Water's approach to calculating the value of those entitlement rebates effectively ignores the benefits to river regulation provided by Murray Irrigation. Specifically Murray Irrigation's capacity to release regulated flows through accredited escapes to the Edward River, River Murray, Billabong Creek, Wakool River and Niemur River. Further, Murray Irrigation is able to assist the Office of Environment and Heritage, the Commonwealth Environmental Water Holder and State Water by delivering water through our system into ephemeral creeks and streams such as Tuppal Creek, Jimaringle and Cockrans Creek and the Colligen Creek.

Further, State Water notes that the rebate is based on avoided costs for activities such as metering and compliance, billing, telemetry installation and data transfer³⁰. State Water goes on to say that as most meters installed through the State metering project will be connected via telemetry, the benefits received from irrigation corporations and districts (ICDs) as far as real-time data monitoring will be removed. Murray Irrigation points out that, while State Water is in the process of rolling out the metering project and the Computer Aided River Management system (CARMs), where they have installed data transfer modems on Murray Irrigation infrastructure, the modems read the data from Murray Irrigation's offtake and escape meters and Murray Irrigation still bears the costs of having them installed, calibrated, maintained and regularly audited. Further, far from reduce the burden on Murray Irrigation, the company still sends hourly file transfer protocol (FTP) downloads to State Water even from the sites they have installed their own modems.

The table below shows the sites within Murray Irrigation where data is collected for, and transferred to, State Water. All hardware is owned and maintained by Murray Irrigation with State Water effectively "piggy backing" off our infrastructure at a site level to access data directly where they have installed their own data transfer modem.

³⁰ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch14.6, p159

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Site Name	FTP Data Sent to SW	Comments	Equipment maintained	Flow calculation method	Changes 2013
Mulwala Offtake	Flow, water levels, gate positions	Accredited	Moscad Remote telemetry unit, level sensors etc	Calculated flow value from MIL Gate control software	
Mulwala Offtake AFFRA	Flow	separate flow valve	MIL Affra Flow Meter, Campbell logger	MIL Affra Flow Meter, Campbell logger	State Water installed RTU and modem
Wakool Main Offtake	Flow, water levels, gate positions	Accredited	Moscad Remote telemetry unit, level sensors etc	Calculated flow value from MIL Gate control software	
Wakool AFFRA Meter	Flow	separate flow valve	MIL Affra Flow Meter, Campbell logger	MIL Affra Flow Meter, Campbell logger	State Water installed RTU and modem
Perricoota Escape	Flow	Accredited	MIL Flumegate	Flumegate flow calculation	
Billabong Main Escape	Flow		MIL Flumegate	Flumegate flow calculation	
Finley Escape	Flow, water levels	Accredited	level sensors, Campbell Logger	Knife edge weir flow alogaythm (Thiess maintained)	
Edward River Escape	Flow, water levels, gate positions	Accredited	Moscad Remote telemetry unit, level sensors etc	Knife edge weir flow alogaythm (Thiess maintained)	State Water installed RTU and modem
Wakool River Escape	Flow, water levels, gate positions	Accredited	Moscad Remote telemetry unit, level sensors etc	Calculated flow value from MIL Gate control software	

Table 2. Murray Irrigation accredited infrastructure.

Murray Irrigation believes State Water’s approach to calculating avoided costs and their argument that the state metering project will decrease the benefit they receive from large customers oversimplifies the service that Murray Irrigation provides and the true avoided costs.

Specifically, Murray Irrigation does not believe the identified average avoided costs go anywhere near covering the true avoided costs when you apply State Water’s proposed metering and telemetry charges against the number of outlets and meters Murray Irrigation owns and services and the additional services we provide as mentioned previously.

State Water claim that customers of an ICD, if transformed off the ICDs network, can incur costs for State Water³¹, however the avoided costs proposed in no way reflect the revenue State Water claims would be required to service these customers if you accept the proposal that their proposed metering service charges are representative of cost recovery.

The following table outlines costs that State Water would receive if our customers were the responsibility of State Water and charged the proposed metering service charge fees. As the customers meters are not owned by State Water (owned by Murray Irrigation), we have used the proposed charges for Commonwealth funded meters with no telemetry onsite³². They are charges State Water says are best estimates for full cost recovery.

³¹ Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, Ch14.6, p160

³² Pricing application to the ACCC for regulated charges to apply from 1 July 2014, State Water Corporation, June 2013, T15.2, p168

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Meter size (mm)	Number of meters ³³	FY15 (\$000)	FY16 (\$000)	FY17 (\$000)
>600 (large irrigation)	3514	3,081*	3,086*	3,068*
>300 (small irrigation)	318	196**	196**	196**
Total		3,277	3,282	3,264

* Commonwealth funded meters – regulated sources, no telemetry on site, 300mm meter.

** Commonwealth funded meters – regulated sources, no telemetry on site, 600mm meter.

Table 3: State Water costs applied to Murray Irrigation irrigation customer outlets for 2012-13

Murray Irrigation is not saying the full amount should be provided as a rebate, we are merely identifying the true extent of avoided costs if State Water was to recover costs for the operation of our customer meters and you accept that the charge in their application is for only cost recovery.

Murray Irrigation does not accept State Water’s argument that customers who transform their water entitlements do so to become customers of State Water²¹. It is our experience that the majority customers who transform their water do so to sell it to the Commonwealth who are already a customer of State Water and therefore are not a “new customer”. Further, transformations do not necessarily mean customers leave our network. Again, it is our experience that most customers who transform their entitlement or sell their water to the Commonwealth, do not sell their entire holding and remain customers of Murray Irrigation, and the costs associated with servicing their needs remain with Murray Irrigation even where the customers’ water use has decreased.

There has been no associated reduction in our metering and compliance costs or our licence compliance costs with State Water to justify a reduction in large customer rebates. Further, where water that has been transformed from our licence is delivered through our channel system, Murray Irrigation is required to pay all Government charges for that extraction and it is then up to us to recover the costs. Murray Irrigation would therefore argue that, based on experience, transformations have little impact on State Water’s bottom line and do not reduce Murray Irrigation’s costs so there is no justification to use this example to claim a reduction in large customer rebates.

For this reason Murray Irrigation would recommend that the ACCC review the method for calculating the entitlement based large customer rebate. As noted above, the majority of the cost savings identified by State Water are related to the number of licences and extraction points and not related to entitlement volume or usage.

At the very least, Murray Irrigation believes the current large customer rebate must be maintained with CPI increases because we do not believe the benefits we provide State Water have decreased.

³³ Annual Report 2011-12, Murray Irrigation, 2012, At A Glance, p8

4 Conclusion

Murray Irrigation understands the pressures confronted by a business that incurs largely fixed costs while the revenue generated can be highly variable in nature. However, we believe it is this pressure that ensures the business operates in the most efficient and cost effective manner.

The price determination process is to ensure that customers are protected against monopoly behaviour and ACCC must ensure that State Water is not able to abuse their market power.

Murray Irrigation supports in principal the proposed reduction in charges for customers in the Murray Valley; however, we note it is difficult to calculate if this is a real reduction in State Water charges or if it is merely as a result of the MDBA charges no longer being passed through to customers via State Water.

Murray Irrigation recommends the ACCC consider the issue of 'non-paying' customers. We also believe that water access licence holders should not be subsidising operational or management actions needed to deliver environmental water.

Murray Irrigation believes the suite of price control mechanisms requested by State Water is excessive and transfers all the business risk onto customers who are least able to bear it.

Murray Irrigation recommends the ACCC review State Water's proposed reduction in large customer rebates to ensure they are adequate to reflect the true avoided costs ICDs provide State Water.

Murray Irrigation commends the ACCC for remaining committed to customer consultation despite the late submission of State Water's pricing application and we urge the ACCC to use all resources at their disposal to ensure a thorough review of all of the significant and potentially harmful changes proposed by State Water.



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26 August 2013

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Water Policy Officer
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State Water Corporation Pricing Application

As per your request, we have undertaken a quick and independent review of State Water's pricing application that relates to proposed regulated charges which would apply from 1 July 2014. Our assessment is attached to this letter.

Kind regards,



Matthew Clarke

Senior Consultant

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1. What we have been asked to do

NSW State Water Corporation (State Water) has recently submitted its pricing application to the Australian Competition and Consumer Commission (ACCC) for regulated charges to apply to water customers from 1 July 2014. The ACCC have called for public submissions to be received before 13 September 2013.

Murray Irrigation Limited (Murray Irrigation) has asked Marsden Jacob Associates (MJA) to undertake a quick and independent review of State Water's pricing application and report on the proposed price controls, focussing on what the shift will mean for State Water customers. MJA understands that the independent review document will be used by Murray Irrigation to support its public submission.

This short paper summarises MJA's independent views of State Water's proposals and its structure as follows:

- **Types of form of price control – revenue and price caps.** This section provides an overview of the different types of price control.
- **State Water proposed form of price control.** This section provides an overview of the changes that State Water is proposing to make to the way it form of price control, including its relative ratio of fixed to variable charges.
- **Implication of State Water's proposed price controls.** This section provides an overview of the implications of the proposed form of price controls and MJA's assessment of whether the changes deliver more efficient and effective outcomes.
- **Transitional arrangements.** This section provides an overview of the proposed transitional arrangements and MJA's assessment of whether these arrangements are appropriate.

2. Types of form of price control – revenue and price caps

Revenue cap

Under a revenue cap approach, prices are set to recover a maximum amount of revenue. The revenue cap could be set for one year or multiple years – it will depend on the length of the regulatory price control period. The maximum revenue allowed to be recovered is set based on a forecast of efficient costs and the demand for water for each year during the price control period.

The maximum revenue allowed to be recovered through charges is a “cap” and, in theory, prices could be set below the cap. However, it is universally the case that regulated monopoly service providers will attempt to set prices so that, for each year in the regulatory price control period, the forecast amount of revenue to be recovered is equal to the cap.

The setting of the revenue cap based on forecast water demand (and supply capacity) means that actual revenue could be more or less than the revenue cap. This is because actual usage of water in a particular year is likely to be different to forecast water demand, depending on whether the assumed supply capacity is achieved. This difference between forecast and actual revenue leads to the need for prices to be adjusted up or down in subsequent years to ensure that actual revenue equals the revenue cap over the price control period. There are three key alternative approaches to achieve this outcome (Table 1).

Table 1: Approaches to ensure actual revenue equals revenue cap

Approach	Details	Example
1. Prices are adjusted within each year of the regulatory price control period	<ul style="list-style-type: none"> The price adjustment reflects the impact on revenue resulting from forecast demand (set at the start of the year) being different to actual usage. 	<ul style="list-style-type: none"> In a particular year, if actual usage is less than forecast demand this leads to actual revenue for the year being less than the revenue cap. Prices are adjusted upwards during the year to ensure that actual revenue equals the revenue cap.
2. Prices are adjusted at the commencement of the following year	<ul style="list-style-type: none"> The price adjustment for the following year reflects the difference between forecast demand (set at the start of the year) and actual usage. 	<ul style="list-style-type: none"> At the end of a particular year, if actual usage was less than forecast demand this will lead to actual revenue for the year being less than the revenue cap. Prices are adjusted upwards at the start of the following year to ensure that the revenue shortfall is recovered.
3. Prices are adjusted at the commencement of the next regulatory price control period	<ul style="list-style-type: none"> This means that prices are not adjusted during the regulatory price control period (for differences in forecast demand and actual usage) and are adjusted at the commencement of the next regulatory price control period. 	<ul style="list-style-type: none"> At the end of the regulatory price control period, if actual usage was less than forecast demand this leads to actual revenue being less than the revenue cap. Prices are adjusted upwards at the commencement of the next regulatory price control period to ensure that the revenue shortfall is recovered.

Notes: the table assumes that prices are always adjusted to ensure that actual revenue equals the revenue cap over the full regulatory period.

Price cap

Under a price cap approach, the maximum prices that can be charged are fixed. They are fixed either with reference to individual price tariff parameters or by reference to a weighted basket of price tariff parameters. Under this approach, prices are typically fixed at the start of the regulatory price control period and increase by a fixed percentage each year.

Additionally, under this approach, the revenue recovered is not “capped” and will vary based on the difference between forecast demand and actual usage. For example, actual revenue will be less than forecast revenue if actual usage is less than forecast demand in a particular year. No price adjustments are made within the price control period as a result of actual usage being less than forecast demand.

3. State Water's proposed form of price control

In the case of State Water's proposals, the regulatory price control period is for the three years from 1 July 2014 to 30 June 2017. The forecasts of demand for each year in the regulatory price control period are based on a rolling 20 year average and are taken into account at each annual reset.

The revenue cap that State Water is proposing has the following components:

- prices will be adjusted in the following year if revenue was higher or lower than the revenue cap (as a result of forecast demand being different to actual water usage).
- prices will be adjusted in the following regulatory price control period if revenue is higher or lower than the revenue cap in the last year of the current regulatory price control period.
- there will be a 15 per cent rebalancing constraint on annual price adjustments.

Additionally, State Water is proposing to change the fixed and variable structure of its charges from a ratio of 40/60 to 80/20 fixed to variable. This means that revenue under the proposed charging structure will be derived largely from the fixed charging component since it will be set equal to 80% of the revenue cap.

The key arguments that State Water has used in its pricing application to justify these changes is as follows:

- the current 40/60 fixed to variable charge ratio means that there is a high risk of revenue volatility for State Water, including a high risk of under-recovery when actual water demand is less than forecast water demand. State Water state that this is because 95% of costs are fixed. Therefore, variations in actual usage have a large impact on their current revenue streams and the ongoing financial viability of State Water;
- a cost reflective tariff design is the most effective mechanism to set prices (since a 80/20 fixed to variable charge ratio means that the proportion of fixed charges is moving closer to 95%) and may facilitate more optimal water trade; and
- charges will be lower overall under this new approach since State Water charges are currently able to incorporate a revenue volatility allowance to allow for under-recovery of costs that might occur over the regulatory price control period.

4. Implication of State Water's proposed price control mechanism

There are a range of implications from State Water's proposed form of price control for risks, efficiency, incentives and costs. These are explained in more detail below.

Allocation of volume risks

Key points:

- **The proposed shifting of volume risk to State Water's customers will result increased price volatility year on year for State Water's customers.**
- **There is potential for large price increases and price shocks with consecutive droughts. This will be difficult for the customers of Murray Irrigation to manage (since Murray Irrigation passes through State Water's charges to its customers) on a year by year basis, and potentially impossible for them to manage long term. The ACCC should consider the potential impact on longer term financial viability of State Water's customers due to shifting volume risk to customers.**
- **The ACCC should consider the full suite of alternative mechanisms that could be used to address price variability and assess which best addresses the extent of risk shifting to State Water's customers.**
- **If a rebalancing constraint is to apply, the ACCC should consider a value less than 10% (and not the 15% proposed by State Water). This is because 10% is what has recently been approved for Victorian rural water businesses and a lower value is appropriate because it is more difficult for State Water's customers to manage this type of risk compared to Victorian irrigators given the relative differences in security of entitlement holdings in each state.**
- **Additionally, the ACCC should carefully consider what occurs at the next regulatory reset period if there is cumulative under-recovery so as to limit the size of price shocks.**
- **The ACCC should also carefully consider whether the rebalancing constraint is applied to individual bills or individual price tariffs.**

The proposed new form of price control impacts who bears volume risks.

Volume risk results from differences between forecast and actual water usage. Under the current price cap and 40/60 fixed to variable charging structure, the revenues of State Water vary based on actual water usage. Moreover, State Water's revenue could fall significantly if actual water usage is a lot less than forecast water demand. This is because variable charges make up 60% of total revenues and no price adjustments within the regulatory price control period are made for under-recovery of revenues.

The proposed revenue cap and new 80/20 fixed to variable charging structure shifts the volume risk to State Water's customers since variable charges under this approach are only 20% of total revenues and prices are adjusted to ensure that a revenue cap is met if actual water usage does not equal forecast water demand.

The implication of this shift in volume risk is that prices will vary up and down for State Water's customers (in the following year) if forecast demand varies from actual usage. Therefore, under State

Water's proposed form of price controls, differences between forecast and actual water usage would be reflected in State Water's prices which would flow through to Murray Irrigation's prices¹ – albeit with a one year lag since State Water is proposing to adjust prices in the following year.

The impact of the price changes for Murray Irrigation (and therefore its customers) could be significant for the following reasons:

- The proposed revenue cap could create significant price rises for State Water's customers particularly if there is a sustained drought over the three year period. For example, prices in the third year will likely have increased by much more than the 15% above year one prices (taking into consideration that rebalancing is limited to 15% change per year). Additionally, any remaining under-recovery could lead to a substantial increase in the first year of prices of the next regulatory price control period.
- There may also be flow-on effects from the increase in prices. Specifically, the increase in prices may impact on the demand for water (if water users are forced out of business by escalating costs they cannot control) and thereby make it necessary to increase prices even further in subsequent regulatory periods to ensure recovery of the revenue within the revenue cap. It is unclear how sensitive water demand is to changes in price in Murray Irrigation's region and we note that State Water has not considered this issue in its Pricing Proposal.
- State Water has stated in its Pricing Proposal that it believes introducing a revenue cap would ensure consistency across Victoria and New South Wales in the form of price control. However, the introduction of a revenue cap is not likely to result in consistency in terms of the ability of customers within these different states to manage and absorb the risk. In particular, from a comparative perspective, the price variability of charges is likely to have a greater impact on New South Wales irrigators (and their customers) than Victorian irrigators. This is because there is a much lower proportion of high security entitlements (and higher proportion of general security entitlements) in New South Wales than in Victorian irrigation regions. Therefore, the ACCC should consider the impact of a revenue cap taking into consideration the relative mix of entitlements and holding sizes in New South Wales relative to Victoria. This could be achieved through an assessment of the relative impact (under different scenarios) of revenue caps on water bills in the two states.

These impacts have been identified based on our understanding of the impacts of State Water's pricing application on its customers. The ACCC should seek to further examine these issues to determine their materiality and validity.

There is a range of alternative ways that could be applied to manage the price variability that results from the proposed new arrangements. State Water has proposed a rebalancing constraint in which prices could vary by no more than 15% across years. One alternative to this is the use of price thresholds (or "deadbands") which could specify how large the increase in price is before there is an adjustment to prices. Some of these alternative mechanisms may better address the extent of risk shifting to State Water's customers and should be explored by the ACCC.

Another comparative issue is that the Essential Service Commission (ESC) in Victoria (June 2013) recently limited the rebalancing constraint for rural water businesses to 10%. This is lower than the 15% that State Water is asking for in its Pricing Proposal. It is also noted that the ESC ruled that the rebalancing constraint is to apply to price tariffs rather than average bills.

¹ Under the current pricing policies of Murray Irrigation, variations in State Water's prices flow through to Murray Irrigation's customers.

Finally, State Water states in its pricing application that it is contemplating a fixed-charge deferral scheme which, subject to technical constraints, would be in place prior to the next drought to provide assistance to customers experiencing financial hardship. This may assist in alleviating the impacts for some customers affected by price changes resulting from the new form of price control. However, it should not detract from establishing an appropriate price variability mechanism, such as a rebalancing constraint, since it is not part of the determination process and does not provide certainty for State Water's customers.

Efficient water usage decisions

Key points:

- **The proposed charging structure may not align with efficient pricing.**
- **The ACCC should further examine the impacts of deviations from efficient pricing and the implications for the ratio of fixed to variable charges.**

The main argument used by State Water to justify the moving to a revenue cap and increasing the fixed charge share of total revenue is that it will better align charges with the nature of its costs.

However, moving to this type of arrangement may have implications for efficient water use by customers of State Water. For example, if water usage increases over time there may be a point at which a major infrastructure augmentation or upgrade is required. The efficiency of price signals can be improved if they reflect the impact of usage on future infrastructure costs. This is reflected in the Council of Australian Government (COAG) Water Resource Pricing Principles:

'Efficient resource pricing' in principle 6 includes the need to use pricing to send the correct economic signals to consumers on the high cost of augmenting water supply systems. Water is often charged for through a two-part tariff arrangement in which there are separate components for access to the infrastructure and for usage. As an augmentation approaches, the usage component will ideally be based on the long-run marginal costs so that the correct pricing signals are sent.

The ACCC pricing principles (July 2011) are consistent with the need to set price efficiently as they state that tariff structures should promote the economically efficient use of water infrastructure assets. The ACCC states that this can be best achieved "where the fixed and variable components of a charge recover the fixed and variable costs of providing services"². This is a well-accepted starting point for the development of economically efficient prices. However, we note that the COAG Pricing Principles provides for the usage charge (or variable charge) to provide for price signals that reflect the impact of usage on future infrastructure costs (that is, long-run marginal costs).

It unclear whether a usage (or variable charging) component comprising 20% of revenue (as proposed by State Water) is aligned with the long-run marginal costs for State Water since no reference is made to this in State Water's pricing proposal. Therefore, it is difficult to evaluate the impact of State Water's proposed approach on water use efficiency. More consideration of this point is warranted so that efficiency implications can be better understood.

² ACCC WCIR pricing principles (2001) page 51.

Impact on risk profile of State Water

Key points:

- **There is less financial risk for State Water under the new proposed form of price control.**
- **The Weighted Average Cost of Capital used to estimate the revenue cap should reflect this shift in risk profile.**

The financial risk for State Water is affected by the shifting of volume risk from State Water to its customers. This means that there is much less financial risk for State Water under a revenue cap approach combined with a higher proportion of fixed charges. In particular, State Water will have greater certainty that it will have revenue to pay ongoing financial obligations.

Given that this is the case, the weighted average cost of capital that is applied in the estimation of the revenue cap is likely to be lower under State Water's proposed pricing model than currently is the case. This is because there has been a noticeable reduction in the financial risk for State Water.

We note that State Water has proposed an equity beta of 0.9 which is higher than the figure of 0.7 proposed by the ACCC (and used by the ESC in their recent decision on rural water businesses in Victoria). Given the new risk profile, the ACCC should carefully consider whether the higher equity beta proposed by State Water is appropriate.

Cost of regulation

Key points:

- **The impact on the costs of regulation should be taken into consideration when assessing the benefits and costs of moving from a price cap to a revenue cap.**

The introduction of a revenue cap will introduce a new layer of administrative burden because processes and systems will need to be established and maintained to ensure that prices are adjusted so that actual revenues do not exceed the revenue cap over time. Therefore, administration costs will rise under proposed arrangements for all parties – the ACCC, State Water and its customers. This should be taken into consideration when assessing the benefits and costs of moving from a price cap to a revenue cap.

5. Transitional arrangements

State Water has proposed the following transitional arrangements in moving from the 40/60 fixed to variable charging ratio to 80/20. According to State Water, this is designed to provide customers with time to adjust to the new higher fixed charges.

	2013-14 (current)	2014-15	2015-16	2016-17
Fixed	40%	50%	65%	80%
Volumetric	60%	50%	35%	20%

Our assessment is that these transitional arrangements appear adequate given they provide time for customers to adjust. However, as stated above, the ACCC should examine the relative impact (under different scenarios) of revenue caps on water bills in New South Wales compared to Victoria. This will assist in examining the ability of Murray Irrigation's customers to manage the risk of price variability and changes to the mix of fixed and variable charges in the pricing structure. This should also consider that the new arrangements may, in time, result in exit by irrigators who become financially unviable due to escalating water prices in periods of sustained drought.