

Queensland Competition Authority  
GPO Box 2257  
Brisbane, Qld 4001  
Lodged electronically @ [www.qca.org.au/Submissions](http://www.qca.org.au/Submissions)

## **Sunwater Irrigation Pricing Review Submissions**

### **Summary**

WBBROC has identified water as a key enabler of economic development and has several initiatives currently in progress that are directly related to future water pricing. Our primary interest in the QCA irrigation pricing review is to represent the collective interests of irrigators, other bulk water customers and the wider community by contributing to a discussion of the regional aspects of social welfare, economic and regional development related to the supply of regulated water.

Despite recurrent periods of drought and flood, the Wide Bay Burnett leads the state in the production of many specialised irrigated crops however, some sectors are currently facing particularly difficult terms of trade. Of particular concern are the potential impacts of any additional cost burdens, particularly in accessing and utilising bulk water, which may further contribute to the region's high rate of unemployment and social disadvantage.

WBBROC seeks to balance these challenges by focussing on the opportunities offered by the region's significant water resources to encourage diversification into specialised biopharmaceutical and industrial crops (such as biofuels, duboisia and chickory) and retain our pre-eminent position in high value food crops including mandarins, peanuts, macadamias and avocados. These investments leverage good reliability of affordable water and can significantly improve regional economic and social indices if water costs are maintained at an affordable level.

While unit costs are expected to increase as water resources diminish, WBBROC is of the strong opinion that the rate of increase needs careful consideration to avoid permanent collateral damage to the regional economy. Our submission focusses on the following key themes:

1. Ensuring price increases are reflective of SunWater's cost and consideration of the capacity to pay, risk burden and economic contribution of customers.
2. Advocating for greater rigour in assessment of prudence and benchmarking of costs relative to best practice standards.
3. Better defining the level of service provided by SunWater and applying greater motivations for further improvement in cost efficiency and productivity by SunWater.
4. Greater consideration of the socio-economic contribution of water supply and pricing at both scheme and regional scales.

While our region has a generally positive view of the benefits of transitioning to an even more productive and dynamic 'water economy', this submission raises a range of issues and proposes potential solutions in response to SunWater's submission. We are hopeful that these can be considered in the QCA review to develop a balanced recommendation to the benefit of both water users and Sunwater.

Representing the six local government councils in the Burnett and Mary Basins, the Wide Bay Burnett Regional Organisation of Councils (WBBROC) welcomes this opportunity to provide a submission to the QCA review of irrigation pricing for SunWater supplied schemes.

## **Background**

Recent ABS statistics show that the region (as Burnett-Mary NRM) paid \$18.9m in water charges for 195,000 ML of regulated water at an average price of \$96.90/ML. Significantly, average water consumption per hectare is 20% lower than the state average.

The irrigation industry's productivity estimated from ABS data is \$775m indicating a gross water productivity of \$2039/ML (farm-gate output). At regional level, irrigation productivity is magnified by an estimated economic multiplier of 3.8 to around \$2.95Bn annually or 23% of the regional economy. While irrigation productivity is above the state average due mainly to rainfall and a high water-efficiency, average irrigation enterprise productivity levels are 25% below State average due a combination of factors including high input costs for water, energy and labour costs, and average holdings. Employment in the irrigated agriculture is estimated at 4500 jobs (50% of total agricultural employment) equating to around 16 jobs per gigalitre, significantly greater than the state average.

Given the fundamental importance of water in achieving these outcomes, WBBROC has a strong interest to engage with QCA in the current price review process.

Our understanding of the Treasurer's 2018 '*Referral*' to the QCA is to provide a draft report by 31 August 2019, and recommend final price paths by 31 January 2020 in accordance with Section 26 of the QCA Act 1997 and directions regarding specific consideration of;

1. prudent and efficient costs of bulk water providers
2. social welfare and equity considerations
3. economic and regional development issues
4. balancing SunWater and water customers interests
5. simple transparent pricing outcomes
6. estimate customer water-bill impacts

## **OBSERVATIONS AND RECOMMENDATIONS**

WBBROC welcomes the specific guidance to the referral's scope to consider the effect of water pricing on social, economic and customer interests however we were concerned that the short public consultation and the 22nd February 2019 submission deadline may have limited outcomes in these objectives. WBBROC welcomes the extension of deadline.

WBBROC's interest in water pricing is primarily from perspectives of economic and regional development, social welfare and equity considerations as well as the impact of potential direct cost increases to Councils as SunWater customers. Significant reductions in water demand caused or magnified by water pricing or externalities could lead to structural decline in water intensive industries resulting in a need for greater customer contributions to regulatory compliance and other costs in order to maintain SunWater's viability.



QCA has previously flagged this as a risk in its observation in its Principles of Water Pricing Report 2000, as “customers should not be charged more than the service is worth to them, or **else the market will be distorted by disconnections**,” and “continuity of charging policy is important for public and political goodwill – any changes in charges to different customer groups can create customer discontent.”

Similarly, WBBROC firmly agrees that the efficient operation of bulk water supply is contingent on both scale and efficiency and full consideration of the potential negative effects of mass withdrawals from the water market due to price pressures or reliability impacts needs to be part of QCA’s review.

While SunWater is not responsible for demand management, it has a vested interest in enabling utilisation at rates adequate to support its ongoing viability. WBBROC recognises that the significant cost of bulk water service delivery needs to be covered under the National Water Initiative pricing principles’ (user-pays principle) however, balancing SunWater’s and customer needs is fundamentally important to share both risk and benefit.

This is increasingly important under recurrent drought conditions, persistently low storage levels due to climate change exacerbated by declining terms of trade pressures across almost all irrigation sectors. It is acknowledged that irrigation water is not a profitable part of Sunwater’s operations and that assistive contributions by the State are highly valued.

WBBROC seeks assurance that bulk water price paths are reflective of state and national benchmarks to maintain the region’s productive capacity and economic competitiveness. While pricing should ideally be cost-reflective, it also needs to consider customers’ capacity to pay and contingent public interest at local, regional and state economy perspectives. These public interest tests should be considered with the regional contribution to the Queensland economy as well as the importance of water in contributing to achieving improved local social and environmental outcomes.

While WBBROC recognises the commercial relationship between SunWater and its customers, it is important that both SunWater and QCA recognise the existence (perhaps not yet evident) of an inflexion point in the price-demand relationship for irrigation productivity. While climate change, commercial terms of trade, biosecurity and many other factors also affect productivity, price is the only lever (relatively speaking) within our collective reach.

## **OBSERVATIONS and COMMENTS**

### **1. Review Process**

The QCA Review consultation phase is engaged primarily with the existing customer base of SunWater and as such focusses on the status-quo market rather than potential customers. This focus seems to limit an exploration of objectives 2 and 3 in the ***referral*** which, by necessity, would also involve consideration of prospective water customers, particularly those dependent on an affordable bulk water supply.

Engagement with local and state government departments and private sector organisations responsible for economic development, employment, trade and investment are considered an essential prerequisite to ensure future pricing decisions are made in full consideration of water pricing impacts on social welfare and economic development directed in objectives 2 and 3.

WBBROC understands the Referral timetable and the effect on the consultation process. Given the relatively short deadline, many stakeholders have been unable to make detailed submissions.

#### RECOMMENDATIONS

*R1.1 Consideration of greater involvement peak industry and community organisations in the preparation of the next QCA review process should be invited to ensure a more inclusive, comprehensive and transparent process particularly to incorporate the broader social and economic development regional contexts of the Referral.*

*R1.2 WBBROC believes that the extent of public notification could be improved by making announcements of future reviews more widely and effectively in regional and local media, directly to water consumers through SunWater and to stakeholder groups such as LGAQ, QFF, Agforce, and economic development enablers such as WBBROC's members.*

*R1.3 However, WBBROC believes that the 'optics' of a very short public consultation phase may lead to a less than desirable perception of the roles of QCA and SunWater and the review process. Compromising future reviews by applying arguably unreasonable deadlines should be avoided in the interests of all parties and good governance.*

*R1.4 WBBROC requests QCA's discretionary powers in accepting a late submission further detailing regional social and economic development impacts.*

## 2. Water Valuation and Pricing Considerations

QCA's Statement of Regulatory Pricing Principles for the Water Sector 2000, requires that prices:

- **are cost reflective** - that is, reflect the costs of providing the service and, usually where the demand for water exceeds its supply, potentially incorporate a value for the resource;
- **are forward looking** - in that they represent the least cost which would now be incurred in providing the requisite level of service over the relevant period;
- **ensure revenue adequacy** - the revenue needs of the business must be addressed where possible;
- **promote sustainable investment** - where the services are to be maintained into the future, the investor must be given the opportunity to enjoy an appropriate return on investment;
- **ensure regulatory efficiency** - the pricing method which minimises regulatory intrusion and compliance costs relevant to a particular circumstance should be adopted; and
- **take into account matters relevant to the public interest** (many such matters are identified in the QCA Act).

The context of this process is summarised further as:

*"Operating costs of any regulated business must:*

**Member Councils:** Bundaberg Regional Council, Cherbourg Aboriginal Council, Fraser Coast Regional Council, Gympie Regional Council, North Burnett Regional Council, South Burnett Regional Council



- *(make) an appropriate estimate of the operating costs.*
- *represent efficient service delivery given the scale of operation and nature of the activity being undertaken;*
- *be evaluated on an individual basis, and usually this would include benchmarking against other relevant organisations. For irrigation schemes, operating costs should be based on efficient costs where these can be practically determined, but may need to be 'averaged' to reflect 'normal' year costs. Cost allocations should reflect differences in the specification of products supplied to customer groups, for example, supply reliability."*

While there is general consensus regarding the general intent of these objectives, differing interpretations are likely to reflect contrasting perspectives. For example, the economic utility of water for customers is dependent on reliability of supply and in context with price and relative to the potential productive benefit of water use. As scheme reliability varies from 100% down to 36% real water prices are equivalent to the ticketed price factored by allocation.

Potential impacts of over-valuation are described further in QCA's Pricing Principles-2000, as *"customers should not be charged more than the service is worth to them, or else the market will be distorted by disconnections;"* and *"continuity of charging policy is important for public and political goodwill – any changes in charges to different customer groups can create customer discontent."*

Balancing prices across customer groups is therefore contingent on fully defining the 'level of service' expectations of customers and presents a potential point of contention between SunWater and customers particularly for crops with a high sensitivity to critical water shortage at the end of the water year. (eg tree crops and highly seasonal horticultural crops).

In the longer term, protracted or recurrent periods of drought have a cumulative affect on the utility value of water for economic purposes. Drought has the effect of magnifying the actual cost of water and the opportunity cost of water shortage.

Water trading offers the potential to utilise a greater proportion of available water and measures should be developed to facilitate this option. Water sharing and trading rules are impediments to greater levels of water utilisation which would benefit both Sunwater and customers.

The QCA Statement of Regulatory Pricing Principles for the Water Sector, 2000 states that *"Under certain circumstances, a value for the water resource will need to be established. Usually incentive measures will also be required to promote efficiency over the regulatory period."*

Establishing a value for water ultimately rests with customers in consideration of their marginal rate of return on water expenditure. Incentive measures promoting efficiency of water use at customer level are already widely applied in response to high water prices. including both capital investment and operational strategies. As further user efficiency gains return a diminishing rate of return on capital expenditure and can require significant capital investment, the opportunity for further economies in this respect are limited.

WBBROC believes that the nominal blanket application of a Part A increase of \$2.38/ML (times CPI beyond 2020) to all schemes regardless of the scale of actual charges is

inequitable in its impact. The application of this value applies a range of cost increases ranging from 5 to 20% across the region's 8 schemes.

#### RECOMMENDATIONS

*R2.1 A clearer 'level of service' definition should be developed for each scheme in consultation with customers to better define service contracts between SunWater and customers.*

*R2.2 The reporting of 'level of service' in annual performance reports should include productivity and efficiency metrics (such as rolling average and trend to previous period) including:*

- *total cost (\$/ML available volume) compared to benchmark*
- *total opex (\$/ML available volume) compared to benchmark*
- *Volume of losses (% of available volume) compared to benchmark volumes delivered vs available (%) compared to benchmark*

*R2.3 Opportunities to simplify the process and reduce the transactional costs of water trading, while outside the direct remit of the referral should also be considered in the review.*

*R2.4 WBBROC believes that the prescriptive approach to capping Part A price adjustments described in the referral should be considered as a percentage-based increase rather than a 'global' amount per ML of WAE. Equalisation of the cap should be considered on a percentage of 2019 charges.*

### **3. Regulatory Matters**

Bulk water service delivery providers (including SunWater) are not currently included in the Queensland Productivity Commission's declared list of Significant Business Activities which currently includes other government owned water corporations such as Gladstone Area Water Board and Mount Isa Water Board.

As most bulk water customers have no alternative sources water from other bulk water suppliers, it is considered as a legislated and ethical requirement for SunWater to avoid applying any unreasonable 'monopoly rents' on its customers. A prudence and fairness test of all fees and charges should be consider the essential nature of water for both social and economic viability.

#### RECOMMENDATIONS

*R3.1 WBBROC believes that water SunWater should be added to this list to ensure better compliance with and oversight under the Queensland Productivity Commission Act and the Queensland Competition Authority Act for reasons of fairness and transparency.*

*R3.2 WBBROC believes that the application of termination fees of 11 times the exit price is excessive and could be interpreted as a misuse of market power under competition and consumer law or at least a liquidated damages provision under contract. These fees embed*



*an enduring liability on customers that seems to benefit SunWater and potentially limit the rights of customers. The scale and application of all fees should be assessed for prudence.*

#### **4. Apportionment of Review and Regulatory Costs**

SunWater's monopoly status (and hence requirement for QCA review) is essentially a result of government decision making and as such the State should be principally responsible for bearing the review process costs.

Since the terms of referral suggest recovery of QCA costs from stakeholders, WBBROC believes that allocation of a majority of QCA review costs should be incurred by SunWater on the basis of competitive neutrality in a service monopoly.

Passing the cost of the review to SunWater would in effect pass the cost onto customers unless costs are quarantined from price path considerations. As some benefit to customers may be alternatively inferred, several potential methodologies should be considered in allocating these costs in part to schemes. Under the current user-pays pricing principles, these costs could be allocated on a basis of WAE, utilisation, available volume, priority class and or value, beneficiary (SunWater or Customer).

It is of interest that the recent IPART Review of Rural Water Cost shares recommended a sharing of regulatory costs between regulated service providers (ie Sunwater) and customers.

#### **RECOMMENDATIONS**

*R4.1 SunWater's share of QCA and IGEM costs should be at least 50% and isolated from cost reflectivity as a non-allowable cost.*

*R4.2 Any residual QCA costs borne by customers should be allocated equally in proportion to total water charge value as prescribed.*

#### **5. Dam Safety Upgrades**

WBBROC welcomes QCA's advice that the significant costs expected from the repairs to Paradise Dam have no material impact on water prices. However, it is as yet unclear whether any potential reduction in Paradise Dam's capacity or yield may impact downstream customers in terms of allocation reliability. Allocation reliability has a multiplier effect on the true cost of water to users under medium priority supply contract and as such is relevant to customers in evaluating the future effects of water price increases. Greater clarity of the potential and known impacts of Paradise Dam safety improvement on Bundaberg scheme reliability is needed.

If applied by the Minister, Dam Safety Upgrade (DSU) costs cumulatively totalling \$12.4m should be recovered on a 'beneficiary pays' principle to recover against the indirect benefits from the dams including recreational use, urban and industrial use, and environmental benefits. This balance should be value-weighted to consider the preferential supply of higher priority classes for other users such as Tarong power station and urban users.



Consideration of the role in flood mitigation by dams described as non-flood mitigative dams should be considered. Recent floods in the region have demonstrated flood reduction benefits associated with the passive effects of dams on flood flows.

#### RECOMMENDATIONS

*R5.1 An independent analysis of the DSU program needs to be conducted prior to allocating these costs to determine if there are any legacy costs attributable to the original design and construction of dams. Effective community wide stakeholder consultation should follow the review prior to any cost allocation.*

*R5.2 An appropriate proportion of DSU costs should be capitalised against the asset through the various scheme annuity accounts to minimise its impact on MP customers.*

*R5.3 SunWater's share of DSU costs should also be capitalised as a non-allowable operating cost.*

## 6. Annuity Balances

Total regional non-routine costs (annuities) start at 17.3% of total costs in 2018/19 and double to 38.5% (\$3.961M) of total cost estimates by 2023/24. This equates to an annualised increase at close to double the CPI rate.

Several schemes have significant negative annuity balances as a result of non-routine expenditure. These shortfalls are further exacerbated by high rates of financing cost interest charged against the accounts, typically greater than the current bond rate.

#### RECOMMENDATIONS

*R6.1 Justification of the rationale behind this sharp rate of increase needs to be reviewed through an asset management practice review of SunWater.*

*R6.2 Annuity accounts with a negative balance should be brought into credit over a sufficient period as to not cause prices to be adjusted above a rate beyond customers capacity to pay.*

*R6.3 Financing costs for negative annuity balances should be underwritten by the State and calculated at the Commonwealth Discount Rate of interest or Reserve Bank reference rate under CSO or transparent subsidy.*

*R6.4 SunWater's Asset Management Plan should be independently reviewed to consider the effectiveness and prudence of routine asset management expenditure and the resultant impact on price path.*

## 7. Variable Cost Escalators

Electricity costs are forecasted to increase by between 60 and 140% in 2020 and together with insurance shortfalls, should be recovered progressively through the pricing cycle to smooth out glide path impacts. Electricity costs should be recovered under Part B as a



variable volumetric cost and made transparent in real-time through Sunwater's website so that customers can make informed water usage decisions.

There are three schemes in particular (Bundaberg Distribution, Lower Mary Distribution and Redgate Relift) in which energy costs are a significant proportion of the total water charges proposed by SunWater. Retrofitting meters with time-volume data acquisition could encourage greater efficiency in delivering water at lowest energy tariffs and enabling tariffs for peak-off peak and or seasonal pricing in real-time.

Unauthorised abstraction is an emerging issue in schemes particularly under periods of low allocation. Unauthorised water abstraction points once identified should be fitted with data loggers with significant penalty tariffs applied against unauthorised volumes.

At present, customers disproportionately bear the cost of water theft through effects on future price paths and productivity losses. The installation of smart meters should be progressively introduced in the meter replacement program under a cost sharing arrangement with customers to assist regulators in identifying water theft.

Some other submissions suggest that SunWater has an ongoing meter replacement program but it is believed that the forecast cost of up to \$25,000 per meter installation is patently excessive and contributes to future price escalations.

Defined in QCA's Statement of Regulatory Pricing Principles for the Water Sector 2000, prepared in response to Government referral, *"Operating costs of any regulated business must: ...an appropriate estimate of the operating costs. · represent efficient service delivery given the scale of operation and nature of the activity being undertaken; · be evaluated on an individual basis, and usually this would include benchmarking against other relevant organisations. For irrigation schemes, operating costs should be based on efficient costs where these can be practically determined, but may need to be 'averaged' to reflect 'normal' year costs. Cost allocations should reflect differences in the specification of products supplied to customer groups, for example, supply reliability."*

Benchmarking is seen as an essential element of the QCA review to test the efficiency of SunWater estimates and performance. Since regulation provides for a substantial pass-through of costs under a monopoly service environment, it is essential that some level of objectivity is applied to the review to protect customers from unjustified increases.

An example of benchmarked indices previously cited by Malano and Burton from the Australian Benchmarking Exercise (ANCID 2000) is shown below.

**Table 3: Selection of data collected and analysed in Australian benchmarking exercise (ANCID, 2000)**

Scheme name	Irrigable area ha	Area irrigated 1998/99 ha	Irrigation deliveries 1997/98 ML	Irrigation deliveries 1998/99 ML	Main system water delivery efficiency %	Gross revenues 1998/99 000 A\$	Total number of MOM personnel No.	Average depth to water-table m	Cost recovery ratio	Operating cost/ Revenue %	Maintenance cost/ Revenue %	Total cost of water supply A\$/ML	Average depth delivered to users m	Gross revenue per unit area A\$/ha
Coleambally	97 000	68 604	445 673	457 000	81.2	6 530	46	3.3					0.665	0.10
Jemalong	18 334	14 940	62 795	42 423	70.9	1 522	7	3.3	1.23	52	8	29.14	0.284	0.10
Murray Irrigation	796 764	0	1 045 658	1 167 755	79.5	19 125	124	3.6	1.37	29	28	14.5	0.000	0.00
Murrumbidgee	480 000	180 000	949 935	823 229	79.7	28 225	243	n/a	1.23	24	24	32.3	0.457	0.16
West Conrigan	212 000	21 000	84 372	66 178	87.5	1 926	9	4	1.17	63	5	24.23	0.315	0.09
Barker-Barambah	0	8 650		9 285	100	199	3	n/a		82	73	62.14	0.107	0.02
Boyne River	0	3 265		6 412	63.6	130	4	n/a		5	14	22.77	0.196	0.04
Bundaberg	55 579	59 200	144 352	91 605	100	6 550	37	n/a		26	42	64.4	0.155	0.11



#### RECOMMENDATIONS

*R7.1 An efficiency review of energy costs for distribution schemes should be conducted.*

*R 7.2 Benchmarking should be conducted across all schemes to provide transparent summary of efficiency of service delivery and resource utilisation.*

*R7.3 WBBROC believes that the meter replacement program should be put out to tender to test the commercial efficiency of this program.*

*R7.4 Consideration of smart meters or dataloggers on schemes with a high electrical energy usage should be considered as a priority to facilitate the introduction of additional tariff blocks for demand-energy matching.*

*R7.5 Recommend application of appropriate penalties for unauthorised water abstractions and instruct regulatory authorities to enforce penalties.*

*R7.6 WBBROC proposes a Queensland Productivity Commission review of SunWater costs to enable a comparison of benchmark performance for similar bulk water, GOC and service delivery organisations. Such review should be conducted at both regional and scheme levels to inform the development of level of service statements.*

*R7.7 There should be no automatic pass-through of costs such as electricity charges as this would provide no incentive for Sunwater to minimise charges or increase efficiency.*

## **8. Trigger Values and Other Mechanisms**

The Referral notice includes directions in section B (1.1) (b) to QCA to recommend appropriate trigger points for *'appropriate price review triggers and other mechanisms, to manage the risks associated with material changes in the allowable costs identified in paragraph C (1.2) outside the control of the businesses.'*

WBBROC proposes review triggers should include exceedances of supply and demand performance indicators, significant costs escalations and force-majeur events such as flood and drought.

Part A charges should be allocation-indexed on a rolling quarterly basis to offset the multiplier effect of Part A costs per utilised megalitre. For example, where the allocation is reduced (say) to 50%, a discount of 50% should be applied to the Part A tariff. Reducing the Part A component relative to Part B should reflect a greater value of water on a volumetric basis and encourage greater water use efficiency, water trading and economy of use.

#### RECOMMENDATIONS

*R8.1 Trigger values for each of these criteria should be defined in a level-of-service statement in the supply contracts.*



*R8.2 The current mechanism for Part A charges to be waived during drought declarations should be extended to include relief when scheme allocations fall below a supply trigger defined in the supply contracts.*

*R8.3 Customers and SunWater should be able to request an interim review of significant cost drivers such as electricity prices within the 5-year price path cycle once forecast or actual total costs change by more than (say) +/- 10%.*

## **9. Indirect operational costs**

Indirect operational costs such as head office administration and support charges costs should be fully described and disaggregated in Network Service Plans and Annual Performance Reports.

### RECOMMENDATIONS

*R9.1 WBBROC is concerned about the increase in support costs from 17 to 38% of total costs and suggest that this should be a key focus of the review's efficiency and benchmarking focus.*

## **10. Working Capital Allowance**

Since all irrigation customers are billed 3 months in advance under long term service contracts, all fixed costs there is no need to finance the cost of SunWater's working capital.

### RECOMMENDATIONS

*R10.1 There should be no requirement for a return on working capital charge with quarterly bills paid in advance and the use of renewals annuity. This cost item should be disallowed from price paths.*

## **11. Recreational Cost Allocation**

WBBROC welcomes the allocation of recreational costs of \$97,000 for region to recreational users supporting the argument that the regions dams are not for the sole benefit of irrigators under an 'impactor-pays' determination.

### RECOMMENDATIONS

*R11.1 Recovery of appropriate recreational costs should be on a 'beneficiary pays' principle through the entity responsible for management of recreational activities.*

## **12. Tariff Models**

There are arguments both for and against the proposed apportionment of Part A Part B charges at an average ratio of 86.75% and 13.25% respectively. A higher Part A benefits the cost reflectivity SunWater regardless of demand but increases working capital costs and risks for customers. It disincentivises customer efficiency and reduces water productivity.

Conversely, a higher Part B would reduce cost recoveries by SunWater under periods of low utilisation and impact the revenue opportunity for SunWater through reduced demand, lower Part B revenues and downward pressures on water value.

A consequence of these impacts as irrigators are forced to disconnect, the remaining irrigators bear an increasing burden of costs through each pricing review cycle. As the opportunity value of water falls below the earning capacity of available production systems, increasing numbers of irrigation customers are forced to decrease or cease irrigation demand. The outcome of this scenario is the decline in industry sectors, stranding of state-owned assets and limiting customer's options to transition to other alternatives.

While SunWater is not in the demand management business per se, it ignores its role in maintaining relatively constant demand and hence price efficiency at its peril. Changing tariff structures could benefit the interests of SunWater/State and customers to smooth the effects of climatic and commodity prices on water demand and iteratively, water revenue.

The current 86.75% Part A split proposed by SunWater is high in the Australian irrigation industry and places much of the demand risk on customers. Many other Australian water jurisdictions range from 50:50 to 80:20 for A:B price components.

QCA's Water Pricing Principles 2000 states that '*Where two-part tariffs are employed in overseas jurisdictions, the volumetric component typically makes up at least 75 per cent of the total water bill (OECD 1999a).*'

In Australia, this flexibility has been adopted in the 2006 IPART determination paper on bulk water charges as a 40:60 ratio to consider the following needs:

- *State Water's operating licence requirements;*
- *the conservation signal of ratio;*
- *State Water's revenue variability and financial viability; and*
- *the potential impact on customers.*

Taking this principle as a starting point, it may also be possible to link 'self-selected' price splits to additional priority classes and price premiums to allow a more flexible allocation of costs across a diversity of user requirements.

In 'Pricing Principles 2000', QCA posed the idea of "self-selecting tariff schedules – these allow customers to choose from more than one pricing scheme so as not to discourage connection (or encourage disconnection). In their simplest form, consumers may choose between a low fixed charge/high volumetric charge (exceeding LRMC), or a standard (higher) fixed charge and lower usage charge. Consumers with low demands that otherwise may have been discouraged from connecting because of the fixed charge could then elect to pay a lower fixed fee, but face a higher usage charge. Self-selecting tariff structures are common in the telecommunications sector, particularly for mobile telephony, and could offer advantages for the urban water sector in some cases."

This is an increasingly attractive option under an environment of rapid price escalations and structural transitions in many schemes and crop sectors.

Increased flexibility would allow better matching of water expenditure to suit cash flow, crop phenology, and point of supply impacts. It would also motivate increased use of water trading in dry seasons, monetisation of unused water allocations and rates of utilisation.



Flexibility should consider options for selection of priority class, total price, discount for upfront payment (annual or quarterly for Part A), billing periodicity and start of water year in the context of each scheme, sub-scheme, zone and node.

A theoretical example of an alternate tariff structure is shown below. Figures and percentages are for illustrative purposes only.

Class Component	High Priority	Special Priority		Medium Priority		Non-Allocated Water or Flood Harvest	Drought Trigger
	<i>WASO %</i>	<i>100</i>	<i>90</i>	<i>90</i>	<i>75</i>	<i>75</i>	<i>0</i>
Part A %	96		96		96	20	Waived on Declaration
Part B %	4		4		4	80	Waived on Declaration
Part A %		70		70			
Part B %		30		30			
Indicative Price Factor	5	1.2	1.15	1.1	1	0.3	0

Scarcity premiums (seasonal tariffs) are currently applied in three ways. Firstly, through the allocations process, as reductions in allocation from 100% increase the real price of water/ML through fixed charge component. Secondly, particularly in schemes with low reliability, customers purchase more entitlements than needed thereby reducing scheme utilisation, increasing the cost-reflective burden on Part B charges and increasing WAE capex. Thirdly, by limiting strategic options for customers to expand, diversify or specialise in production systems through reduced reliability, availability and affordability of WAEs.

In capacity constrained distribution schemes (or nodes), off-peak/on-peak demand-sensitive pricing could be beneficial to both SunWater and customers but would require meter upgrades. This would also provide greater transparency of deliveries and billing as well as identify the marginal costs associated with supply at each node.

Regarding nodal pricing in particular, QCA noted that, "A practical compromise, particularly applicable to larger water supply schemes or for large consumers, is nodal pricing, where prices vary for defined separate parts of the supply network based on substantial and identifiable cost differentials. Nodal pricing may involve both the fixed or volumetric components of a two-part tariff varying between areas, depending on the particular cost characteristics of the network."

## RECOMMENDATIONS

*R12.1 WBBROC supports a more flexible tariff schedule to accommodate the diversity of users, and seasons without unduly compromising a general principle of cost reflectivity.*

*R12.2 Recommend a full review of tariff structures with the intention of allowing customers to select more appropriate tariff structures including consideration of intermediate priority classes, differentiation of part A and Part B splits, seasonal pricing or other structural measures apart from the price per ML.*

### **13. Glide Path Cost Adjustments**

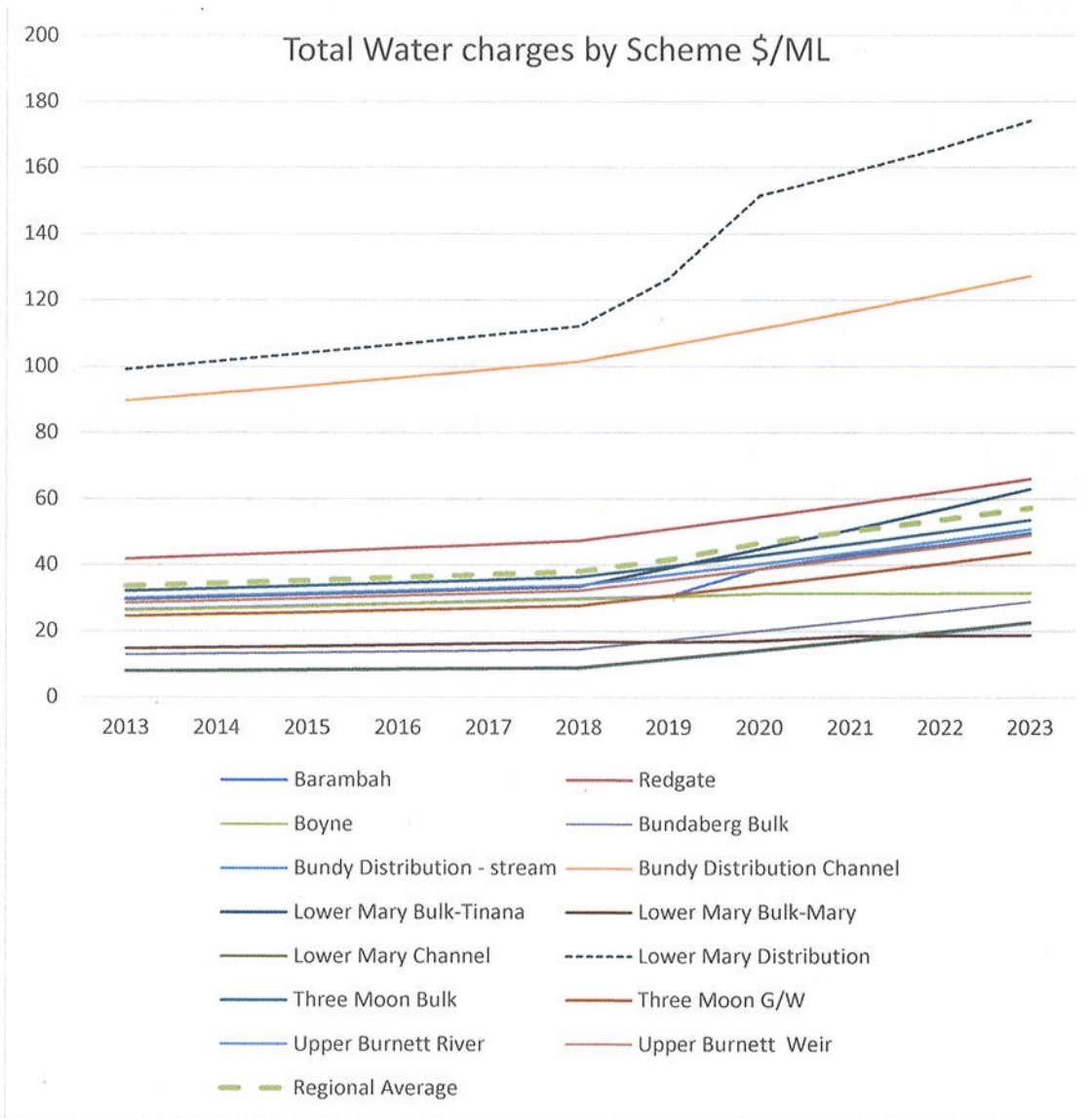
The retrospective recovery of increases in operating costs in subsequent price cycles impacts both SunWater and customers. An irregular glide path (due to the cyclic impacts of 5yr-reviews) retrospectively applying shortfalls in annuities and variable costs such as electricity cost recovery can impose steep adjustments and unforeseen financial consequences on customers.

Proposed irrigation input costs are well in excess of CPI and average up to 16% per year for the sugar dominant distribution schemes resulting in up to a 174% increase over the regulatory period. When increases of this magnitude coincide with other factors, the effects can be magnified well beyond the regulatory period and apply structural impacts on schemes, industries and or communities. A case in point is the significant impacts of retrospective recovery of significant electricity cost escalations under the constrained profitability in the sugar industry.

These impacts could be instrumental in the structural decline of irrigation sectors.

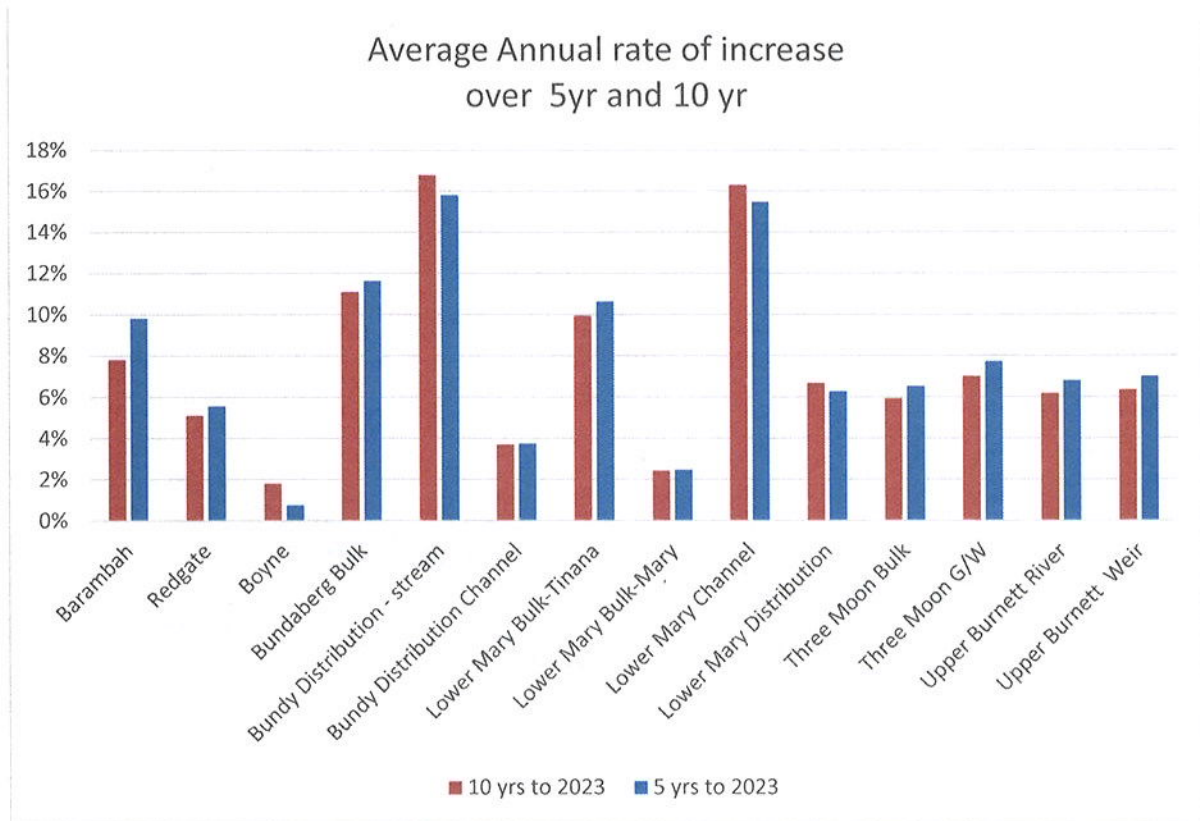
The following graph shows an interpretation of the charges proposed by Sunwater culminating in a regional increase of 38% over the regulatory period.





The principle concern of WBBROC is the steep rate of adjustment of water charges in the 2019/2020 water year. This represents an existential threat for many irrigators already struggling with drought, cost pressures and depressed returns. In addition, this will also coincide with steep increases in electricity tariffs in 2020.

While some schemes already paying cost-reflective prices will see relatively flat rates of increase, the collective and cumulative affects could be a significant watershed in the regions irrigation-based economy.



There are three (main) aspects to SunWater’s modelled prices that are of concern WBBROC.

1. Magnitude of increase
2. Timing of cost reflective true-up
3. Step glide paths for increases

The current system of price review is based on the historic model of relatively stable rates of cost escalation and utilisation that clearly no longer apply. The system needs updating to accommodate changes in the sector.

A more efficient model of recovery of rapidly escalating costs needs to be developed to insulate customers from bill-shock and protect SunWater from the potential of mass disconnections by customers. This could include the inclusion of a second tier of volumetric charges for variable costs indexed against projected cost escalators.

*QCA 2000....'Under a glide path, cost improvements are passed on to consumers either entirely (full glide path) or partially (partial glide path) over time, thereby allowing the regulated business to realise benefits of efficiency gains for a period beyond the next regulatory review. The full glide path approach has been accepted by IPART for revenue regulation for NSW electricity distribution businesses, and supported by NSW Treasury for application to urban water sector regulation.'*

Smoothing price impacts maintains viability of irrigators, allows for orderly transition to other uses and encourages a higher median demand for the benefit of the SunWater.



Bill impacts represent one of the main concerns of customers and organisations such as WBBROC. While the need for SunWater to recover costs in the interest of sustainable service delivery is acknowledged, the capacity of the irrigation industry to underwrite these increases ad infinitum is limited by the 'price-taker' paradigm of agriculture in general. Given the Wide Bay Burnett region's heavy reliance on irrigation productivity to sustain economic viability, this relationship is paramount to achieving a balance between the interests of SunWater and customers.

WBBROC welcomes (in principle) the price cap subject to an acceptable rate of smoothing of glide paths within the customers capacity to pay. However, the size of this cap needs to be considered in context of the overall charges. The price cap should also apply to part B to limit the impact of disproportionate increases in volumetric charges.

The direction of the Referral suggests that all schemes currently below cost reflective pricing should be adjusted by 2020-21. This will require immediate and significant adjustment of prices for some schemes and consideration for amortisation of significant rates of increase over one or more pricing cycles should be considered.

Excessively steep glide-paths may represent a tipping point on whole schemes or industry sectors which could precipitate a feed-back loop of disconnection or a lowering of utilisation rates impacting future price path impacts on remaining customers.

The application of CPI indexing is also considered inappropriate as irrigation customers are not consumers but producers.

Regarding the application of CPI adjustment, consideration should be given to including efficiency-reflective adjustments to encourage a stronger culture of efficiency gains in SunWater.

Applying an efficiency dividend to water price paths – QCA 2000, suggests that *"The most common mechanism associated with incentive regulation is CPI-X price (revenue) revisions, where X is a predetermined index reflecting the perceived capacity of the regulated business to realise cost savings. Where the business is able to deliver real cost savings in excess of X, it is able to retain the additional funds generated for some period."*

With locked-in forward pricing, there is little incentive for SunWater to increase efficiency without the benefit of increased prices, revenue and profit (above the price path) due to a monopoly status and ability to substantively apply cost reflectivity through prices regardless of service delivery consequence.

The Pricing Principles and Tariff Structures for SunWater's Water Supply Schemes Issues Paper prepared for QCA by Price Waterhouse Coopers in September 2010 stated that: *'price indexation is not the same as cost escalation. Costs should be escalated according to the best forecasts available while prices should be indexed such that the present values of revenues and costs are equal over the regulatory period'*

RECOMMENDATIONS

*R13.1 Consideration should be given to smoothing of glide-paths for cost de/escalations in within and where changes are in excess of 10% of total charge, beyond the regulatory period. Glide paths should be considered fully and carefully in light of the public interest as well as potential customer bill impacts.*

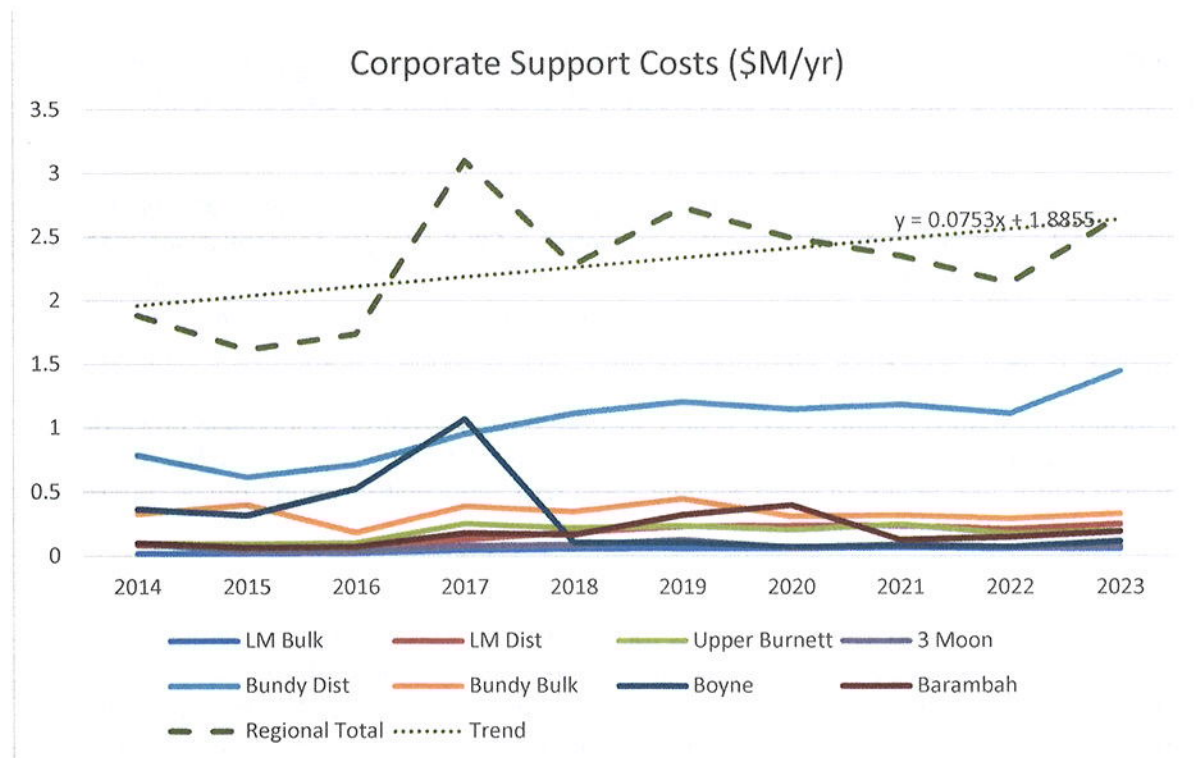
*R13.2 Consideration of efficiency-reflective performance targets and reviews of SunWater at scheme level should be included in the Service contracts.*

*R13.3 Consideration of application of an 'X' index reflecting total cost efficiency gains should be included in the pricing review. This could be as simple as factoring the CPI index against efficiency outcomes relative to target.*

*R13.4 A composite index comprising labour, consumer and producer price indices should be applied instead of CPI alone to recognise that the majority of irrigation use is for productive purposes rather than 'consumption' and balance SunWater and customer needs.*

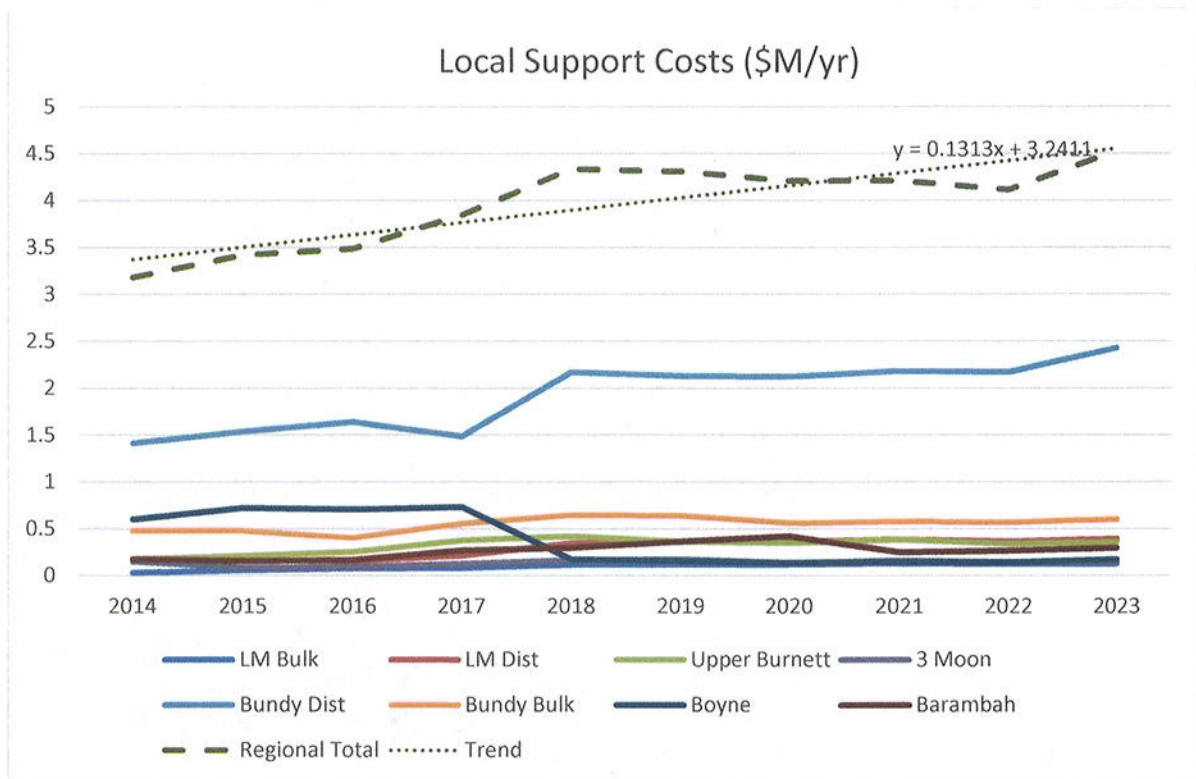
**14. Cost Efficiency - Support costs**

Total support costs are forecast to increase to \$7.2M by 2024 averaging 7.23% per year over the 10 years since 2014. This represents a base rate of increase of 3 times CPI for the same period and is equivalent to \$24/ML relative to an average total medium priority water charge of \$64/ML.





Local support costs are increasing at 13% while corporate support costs are forecasted to increase at 7.5% over the 10-year period to 2024 with CPI indexation applied in addition to these costs.



There have been repeated calls in numerous submissions for a greater level of rigour applied in reviewing SunWater’s costs over several pricing cycles. Some differences in the summarisation of total costs and the cost-reflective revenue requirement are apparent between the SunWater proposal tables.

#### RECOMMENDATIONS

- R14.2 There should be a greater disclosure and disaggregation of support costs consideration of efficiency benchmarking against those of other bulk water businesses and other SunWater regions.*
- R14.3 QCA should be resourced sufficiently to ensure that GOC proposals are adequately validated in a timely and transparent manner.*

### 15. Risk

Risk allocations are overwhelmingly borne by users under the user-pays or impactor pays principle and this fact should be considered in reviewing the scale and scope of charges proposed in SunWater’s submission.

A risk allocation biased in favour of a regulated service provider such as SunWater is undesirable from a number of perspectives. It reinforces existing inefficiencies in regulated



service delivery and suppresses the imperative to strive for continuous productivity improvements particularly with monopoly protection. Customers may react to these inequities by lowering investment in production efficiencies and by suppressing or varying demand.

<b>Risk Element</b>	<b>Sunwater</b>	<b>Customers</b>
Regulatory and Legislative risks	Shared	Shared
Supply Risk	No exposure	Allocation risk borne predominantly by users
Demand risk	Revenue shortfalls protected by regulatory process and Part A charges	Fully exposed to covering the cost of demand shortfalls regardless of need
External Cost escalators	Temporary exposure to escalators offset by eventual recovery through regulated pricing	Users ultimately bear the cost of any external cost escalators
Force majeure	Passed through as insurance costs to Part A charges and shortfalls to annuities balance	Users bear the cost for asset maintenance and renewals. Users bear consequential loss risk of supply interruption
Distribution Losses	Little exposure	Full pass through of distribution losses
Asset Management risks	Cost of routine asset maintenance mostly recovered from users through prospective annuities	Share of asset management costs accrued through annuities
Finance costs	Limited exposure	All interest costs included in annuities
Working capital and fixed costs	Advance payment of fixed costs guaranteed and secured under contract	Pass through of share of fixed costs
Business continuity	Protected through annual contracts	Guaranteed by high termination fees and exit costs
Operating cost and Non-routine costs	Full pass-through to users	Full exposure
Scheme-specific administrative overheads	Mostly recovered through support charges	Substantial exposure
Competitive risk	Monopoly position substantially isolates SunWater from competitive pressures.	Protections offered by legislation limited by options for alternate service providers and 3 <sup>rd</sup> party access to distribution systems.



RECOMMENDATIONS

*R16.1 WBBROC believes that the current risk allocation is too heavily biased toward customers and that the socio-economic contributions of water are not adequately recognised in pricing. There should be a productivity dividend deducted from water charges to reflect the offset of potential costs to governments.*

*R16.2 WBBROC believes that an economic impact risk assessment of price paths should be conducted as part of this review to explore structural economic impacts at regional scale and better advise QCAs review.*

WBBROC requests QCA's consideration of the above submission recommendations and invites further engagement with QCA to assist in the development of the draft report.

Yours Sincerely

  
.....  
Cr Mick Curran BM  
Mayor - Gympie Regional Council  
Chair - WBBROC

  
.....  
Cr Keith Campbell  
Mayor – South Burnett Regional Council

  
.....  
Cr Rachel Chambers  
Mayor – North Burnett Regional Council

  
.....  
Cr Jack Dempsey  
Mayor Bundaberg Regional Council

.....  
Cr George Seymour  
Mayor – Fraser Coast Regional Council

*(absent from meeting)*

Correspondence should be addressed to  
WBBROC ([info@wbbroc.org.au](mailto:info@wbbroc.org.au))  
C/- Gympie Regional Council  
PO Box 155  
Gympie QLD 4570

## REFERENCES

- FAO - Guidelines for Benchmarking Performance in the Irrigation and Drainage Sector by Hector Malano and Martin Burton
- QCA - Pricing Principles and Tariff Structures for SunWater's Water Supply Schemes - Paper by PricewaterhouseCoopers September 2010
- QCA - Competition Policy Review August 2014 - Submission to Commonwealth Competition Policy Review August 2014
- SunWater - Irrigation Price Review Submission 2020-2024 (incl. amendments and attachments)
- QCA - Statement of Regulatory Pricing Principles for the Water Sector- 2000
- QCA- SunWater Irrigation Price Review: 2012-17
- QCA – Consultation Paper on Rural irrigation price review 2020–24: apportionment of dam safety upgrade costs
- IPART - Rural Water Cost Shares, 2019
- IPART -Review of Bulk Water Prices from 2006 to 2010
- WBBROC – Regional Water Strategy -2019
- WBBROC - Economic Development Strategy – 2016
- DNRME – Burnett Basin Resource Operations Plan
- DSDMIP – Marsden Jacobs Scoping Study on Water for Economic Development. Discussion
- QCA - Discussion Paper on Risk and the Form of Regulation November 2012
- Regulatory Risk - A paper prepared for the ACCC Regulation and Investment Conference, Manly, 26-27 March 2001. by Henry Ergas, et al, Network Economics Consulting Group