

Response to Queensland Competition Authority Draft Reports Volume 1 and Volume 2 Seqwater Irrigation Price Review 20132017

on behalf of

Members of Mid Brisbane River Irrigators Inc

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Abbreviations and Terms used in this Response

CBRWSS	Central Brisbane River Water Supply Scheme
MBRI	Mid Brisbane River Irrigators Inc ABN 93162568263
Moreton ROP	Moreton Resources Operations Plan 2009
Moreton WRP	Water Resource (Moreton) Plan 2007
QCA	Queensland Competition Authority
Seqwater	in context, includes the predecessor organisations
ROL	Resource Operations License
ROP	Resource Operations Plan
WRP	Water Resource Plan
WSS	Water Supply Scheme

Executive Summary

MBRI is a member-based organisation representing irrigators in the CBRWSS. Members are residents and producers located on or near the Brisbane River below Wivenhoe Dam and above Mt Crosby Weir.

Mid-Brisbane River irrigation has a long history, predating both Somerset and Wivenhoe Dams, and irrigators have historically drawn water independently of any dam infrastructure. Importantly, irrigation water in the MBRI area continues to be independent of the two large dams upstream, there being sufficient natural water from other sources (ie unsupplemented water) to meet demand.

The allocation available to MBRI irrigators is 6771ML. To put this in context, the total allocation is:

- 0.675% of the mean annual flows within the system;
- 0.435% of the full storage capacity in the two dams, and
- 0.158% of the total capacity (including flood compartments) in the two dams.

Mid-Brisbane irrigators have never been charged for the irrigation water they draw, as a matter of history and as a matter of law.

MBRI argues that QCA should not recommend a price for MBRI entitlements, or alternatively recommend a zero price because:

- as a matter of law, the Parliament and the Executive Government have determined that no charge will be levied for this water;
- as a matter of history, MBRI irrigators have not had water charges imposed on them. This situation was integral to ensuring the viability of the local communities at the time Wivenhoe Dam was built, flooding over 100km² of high quality agricultural land and the fact that the water is unsupplemented water (ie it is not dependent on the dams);
- MBRI irrigators' business sustainability, and the value of their properties, depend on continuation of the existing regime;
- in any case, the cost of collecting water charges and the very small scale of water use by MBRI irrigators would make this charge inefficient to collect and possibly even result in a net cost on government, and imposes disproportionate costs on business.

MBRI contends that QCA's assumptions and analysis are flawed. Further the data on which QCA has based its calculations are either irrelevant or irregular.

Accordingly, MBRI calls on QCA to find that no price or a zero price should be set for MBRI irrigators' water entitlements up to the existing 6771ML. Alternatively, without conceding its no-charge argument, MBRI contends that for QCA to undertake its task properly under the Ministerial Direction, it must:

- collect proper and adequate data about MBRI member water usage in normal seasons over the next 3 years;
- engage properly and effectively with MBRI, irrigators and other smaller water users in the CBRWSS;

- develop or adopt methodologies suitable to the proper calculation of apportionment of the cost base of Seqwater relevant to MBRI members' usage and access to water for rural use and irrigation services;
- disaggregate community service obligations of Seqwater from other activities;
- account properly for the non-irrigation assets of Somerset and Wivenhoe Dams and remove those from any price calculations;
- assess properly the value to irrigators of Seqwater services and the offsetting negative impacts of Seqwater's releases flooding the basin;
- assess costs reflected against the infrastructure necessary to supply 6771ML pa to 131 entitlement holders, and not against very large-scale, mixed use infrastructure of which irrigation is a tiny fraction or not relevant.

QCA should not recommend any price (other than a zero-price) for MBRI water allocations, and in any case, should not attempt to calculate what a water price regime might look like until it has at least three normal seasons' data available to it.

MBRI's analysis of QCA's method reveals several flaws, and MBRI submits that the data and assumptions are not appropriate. Without conceding that a price should be placed on the irrigation water, MBRI points out that the water accessed from the mid-Brisbane River is not dependent on Seqwater dams. Nor is it supplied to MBRI irrigators through Seqwater channels, pipes or pumps. That is, there are no irrigation-specific infrastructure and assets.

Further, there is no increased certainty of irrigation water in dry times. MBRI irrigators' access to the 6771ML is able to be met entirely from natural flows and recharging of the river, independently of Somerset and Wivenhoe Dams.

In dry times, the nominal allocation is reduced by announced allocation, even to zero. In wet times the basin below Wivenhoe is used to mitigate flood damage to the major urban areas downstream, resulting in loss and damage to MBRI irrigators.

MBRI irrigators receive no benefit from the headworks.

As MBRI irrigators do not rely on the infrastructure, do not receive services, and do not gain security of access to water, it is simply wrong to include any fixed, or "Part A" tariff or to justify a price predicated on the existence of non-existent "services" from Seqwater to MBRI irrigators. In the event QCA recommends a price (other than zero), that price should be entirely consumption based and not calculated against infrastructure that is not used or available for use by irrigators, or against notional but non-existent "services".

Somerset Dam is contained entirely within the Stanley River WSS and should not form part of this review.

MBRI has long been a cooperative and willing partner with government to build the productive capacity of the mid-Brisbane River area, and the sustainability, wealth and community of those who live in the catchment. MBRI accordingly expresses in the strongest terms its disappointment that QCA appears to have a closed mind to MBRI's primary submission as to no charge.

In MBRI's submission, it is not too late for the State Government, QCA and Seqwater to engage effectively with MBRI and to work together with irrigators for the long term prosperity and sustainability of the mid-Brisbane River.

Features of mid Brisbane River irrigation

Irrigation in the mid Brisbane River reach has some important characteristics that differentiate it from other irrigation water supply schemes.

MBRI is a very small but diverse group of irrigators compared to other schemes, especially those built around irrigation-specific infrastructure, where there are charges agreed between monopoly suppliers (eg Sunwater) and customers.

The CBRWSS supports diverse industries and farming, unlike most schemes that support only one or two industries. Mid Brisbane River water supports activities including:

- public amenity;
- sport and recreation;
- environmental quality;
- water quality control;
- varied farming pursuits such as
 - o cattle production
 - o chicken production
 - o cereal production
 - o vegetable production
 - dairying
 - horse studs
 - citrus and olive orchards
 - o floriculture
 - o nurseries
 - o turf.

No dedicated irrigation infrastructure was constructed or invested in the CBRWSS by Seqwater or the State Government: there are no pumps, pipes, release mechanisms or channels that supply water to irrigators.

The infrastructure that exists is unrelated to rural water supply. For example electrical switching equipment is on a scale (and cost) completely different from that used to operate irrigation-specific facilities. Wivenhoe includes two hydro-electric generating plants, and requires electrical switching sufficient to operate massive outlet works.

There is no service provided and no product dedicated to irrigators by Seqwater or other Government instrumentalities. Flood mitigation often results in significant loss and damage to riparian landholders.

The Moreton ROP and WRP are based on incorrect assumptions that favour charging for water. MBRI irrigation does not require dam infrastructure, and the presence of the dams does not provide security of supply for MBRI irrigators. Over 50 years' irrigation experience shows that even when the Brisbane River did not flow, many irrigators are able to irrigate from renewing sources of water. Neither the ROP nor the WRP were derived from proper and careful consultation with water users who understand the hydrology of this section of the river. MBRI understands that the former Water

Resources Commission declined to implement charges for MBRI irrigation water for this very reason.

Even when instructed to do so by Government, for over 30 years Seqwater (and predecessors) failed to install meters, leaving it to MBRI to introduce logbooks and other measures to ensure sustainability and responsible land and water care.

Seqwater does not communicate in a positive, service-focussed way with water users, especially in relation to contracts, where its monopoly power presents "customers" with Hobson's choice: Seqwater's terms or no water. Seqwater does not even provide irrigators with advance flood water release warnings allowing them to prepare for inundation.

The flood mitigation capacity of the dams seriously affects the safety and efficiency of the homes and the businesses of irrigators. The basin above Savages Crossing is used by Seqwater as a floodwater retention basin. This has saved the State Government and Seqwater the extensive cost of building alternative flood retention infrastructure, and may have greatly assisted downstream residents and businesses. But it has also transferred significant risk to businesses and the local community. The flooding of this basin has been at a massive cost to irrigators over recent years through loss of banks and infrastructure, in some cases loss of significant land area, and after the 2011 floods, significant losses to property values.

About MBRI

MBRI is a community-based, volunteer body representing the interests of 131 irrigators who collectively hold 6771ML of allocated water in the mid Brisbane River, from Wivenhoe Dam to Mt Crosby Weir. Allocations range from 1 ML to 500ML.¹

These water entitlements originated with the building of Wivenhoe Dam in the late 1970s. The lake formed by the dam's construction flooded over 100km², much of it prime agricultural land that was the backbone of the local economy and community.

The Queensland Government, in recognition of the need to sustain the community, and for producers to remain viable, granted water access to mid-Brisbane River riparian landholders at 7ML per ha for 1000ha. No charge was levied, in part because irrigation demand was met from natural flows and recharge and not dependent on the stored water, and in part to build the local community and economy after the huge resumptions for the new dam.

Three decades later, access to this irrigation water remains a centrepiece of the economy and community of the mid Brisbane River. Farmers and residents alike rely on access to this water at no charge for their productive capacity and the value of their land.

This grant to irrigators founds MBRI's legally, factually and ethically-based arguments for retention of the status quo in this pricing review. Somerset and Wivenhoe Dams were never intended to be for irrigation. They are dams built for urban water supply and flood management. However the dams' impact on the mid-Brisbane River, especially Wivenhoe, would have been devastating without the Government's recognition of the need for water to support viable and sustainable agriculture in the area. The purpose of the grant was to ensure the sustainability of the communities and economy of the area. The deliberate choice not to charge for the water was integral to that purpose, and a rational decision given the hydrological fact that irrigation demand was not, and is not, dependent on the infrastructure.

Nothing has changed over the intervening 30 years to make this land more viable without water, nor to change the hydrology. The water prices QCA is suggesting would render industry in the area marginal or unsustainable, destroying the very purpose for which the entitlements were given in the first place, and removing incentives for landholders to take a leadership role in land and water care..

In the 1990's the relevant government department had taken a harsh line on irrigators in the area, taking away water rights on what many irrigators thought to be questionable grounds, such as minor breaches or late payment of administrative levies. The Department also allocated water to non-riparian landholders resulting in pipelines, some many kilometres long, delivering river water to remote lands.

MBRI was formed in 2005 with the intention of providing a united voice for the irrigators at a time when water restrictions loomed as a result of prolonged drought. Prior to that time individual irrigators looked to their own interests.

¹ Moreton ROP 2009, Attachment 8 Table 1

Early meetings with the Queensland Government showed MBRI to be innovative and successful, and working cooperatively with government to deliver outcomes. Two examples stand out:

- <u>Local knowledge</u>. MBRI was able to inform the Government about significant happenings in the mid Brisbane reach that were previously unrecorded or unrecognized, such as the significant leakage from Splityard down Pryde Creek.
- Measuring water use. Despite years of opportunity and authority to do so, the State Government and other regulatory authorities (including Seqwater) have done nothing to install meters that could have provided hard data on water usage. In 2005 the regulatory authorities were concerned that irrigators may have been taking water in excess of their entitlements and accordingly was considering terminating access to water. MBRI initiated a logbook program from 2005 to 2009. The logbooks demonstrated actual usage, and gave the authorities confidence that entitlements were not being abused. As a result, irrigators' access was maintained, albeit reduced to 25% in the drought, to the benefit of the community and to the authorities.

MBRI comments on particular recommendations

Part 1: QCA Draft Report Volume 1

Reference	QCA Recommendation	MBRI Response
Reference QCA Volume 1. Chapter 3. 3.5 Volume risk, Long term. Page 30 - 35	Conclusion Long term volume risks are primarily associated with augmenting current infrastructure or reducing distribution losses to address future water supply needs. Seqwater has no effective means of increasing storage capacity of its own accord, as augmentation of bulk infrastructure is the responsibility of the Queensland Government. However, Seqwater does have some (limited) capacity to manage distribution system infrastructure and losses provided that it maintains the ability to meet its obligations in respect of the delivery of WAEs. At the same time, there are some but limited opportunities for Seqwater to increase saleable WAEs by reducing distribution losses. To provide a clear incentive for	MBRI accepts the recommendation that Seqwater bear the risks, and benefits, from the revenues associated with reducing distribution system (and where relevant, bulk) losses, where WAE may be permanently traded. MBRI considers that the long term risk should also be shared by the supply authority at the time and not by the irrigators whose take is less than 0.16% of the capacity of the infrastructure and is satisfied by water without supplementation.
	Seqwater to reduce distribution losses, the Authority recommends that the proceeds from the sale of new WAEs (i.e. previously distribution loss WAEs) be retained by Seqwater and excluded from estimates of its MAR. This should include, where relevant, distribution and bulk losses where WAE are specified (currently IWA), and become tradeable water allocations. Notwithstanding the above, the Authority notes that Seqwater holds far fewer distribution loss WAE than SunWater and	
	that the beneficial impacts are likely to be less material and may not exist once the ROP is completed. Recommendation: The Authority recommends that Seqwater bear the risks, and benefits, from the revenues associated with reducing distribution system (and where relevant, bulk) losses, where WAE may be	
	permanently traded. Other long term volume risks should not be the responsibility of Seqwater.	
QCA Volume 1. Chapter 3. Cost risk, Regulatory framework. Page 35	Recommendation: The Authority recommends that: (a) end-of-period adjustments, price review triggers or cost pass-through mechanisms be used to manage risks due to market	(a) MBRI disagrees with this recommendation. The allocation to irrigators does not relate to any service provided and is so small that these risks should be carried by the

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conditions for inputs and regulatory imposts;

- (b) prudent and efficient forecast electricity costs should be incorporated in recommended prices and any material variations to forecasts considered as part of an end of period adjustment;
- (c) in relation to off stream storage pumping costs incurred in a manner that does not relate to meeting customer demand (water use), Seqwater should apply for an end of period adjustment for any material variation to the nominated amount which has been incorporated in costs; and
- (d) to support any application for an end of period adjustment (for material variations in fixed electricity pumping costs associated with off-stream storages) Seqwater must retain records of actual pumped volumes and costs over the 2013-17 regulatory period.

supply authority and only adjusted (not paid) at the end of each pricing period and incorporated in the new price path if appropriate

- (b) MBRI irrigators pump from the river at their own expense, including electricity. Seqwater's electricity costs are not directly or indirectly attributable to or beneficial for MBRI irrigators. It is non-irrigator users who benefit from, and on whose behalf, electricity usage by Seqwater
- (c) & (d) are not accepted by MBRI. These costs are not to the benefit of CBRWSS irrigators.

QCA Volume 1. Chapter 4.3

Pricing framework. Page 66

Conclusions

The Authority considered stakeholder submissions on tariff structures and, for the reasons outlined above, concludes that the recommended tariff structure should consist of a volumetric charge which should recover all (and only) variable costs associated with the delivery of water services. The fixed charge should reflect the balance of revenues required to maintain the Authority's estimate of Seqwater's revenue requirement. Variable costs should reflect those costs which are expected to vary with water usage over the four-year regulatory period.

The appropriateness of current legislative and contractual arrangements, insofar as they relate to schemes where water deliveries fall below expectations for a sustained period due to a lack of supply, is a matter for Government.

Recommendations:

- (a) The tariff structure should consist of a volumetric charge which should recover all (and only) variable costs associated with the delivery of water services. The fixed charge should reflect the balance of revenues required to maintain Seqwater's revenue requirement.
- (b) Variable costs should reflect those costs which are expected to vary with water usage over the four-year regulatory period.
- (c) An unbundled tariff structure should apply to distribution systems (that is, Morton Vale Pipeline and Pie Creek tariff groups).
- (d) The appropriateness of current legislative and contractual arrangements, insofar as they relate to schemes where water deliveries fall below expectations

for a sustained period due to a lack of supply, is a matter for Government.

(a) MBRI rejects the Tariff structure based on the current Seqwater NSP.

No service is provided by Seqwater specifically for CBRWSS irrigators.

If volumetric charges are introduced, meters should be installed, maintained and read by Seqwater at Seqwater's expense as an integral capital and operating cost inherent in irrigation services.

- (b) MBRI does not accept Variable costs apply for there is no release service and no change to Seqwater costs should CBRWSS irrigators elect not to take water during any period and increased take over and above the allocation is not allowed.
- (c) and (d) no comment

QCA Volume 1. Chapter 4.4

Distribution and bulk losses. Page 66 - 74

Recommendations:

- (a) DNRM review and determine the efficient level of all bulk and distribution loss WAE to ensure that bulk and distribution system customers do not pay for loss WAEs held by Seqwater in excess of requirements (including for Pie Creek tariff group). The review should be completed by 30 June 2015.
- (b) Prudent and efficient bulk costs associated with necessary (efficient) bulk loss WAE be recovered from Seqwater's bulk customers according to their WAE.
- (c) Prudent and efficient bulk costs associated with necessary (efficient) distribution loss WAE be recovered from Seqwater's distribution system customers according to their WAE.
- (d) The costs of (any) inefficient loss WAE identified by DNRM, should not be borne by customers and should instead be borne by Seqwater. Depending on materiality, the impact of the identified inefficiencies may be considered by the Authority (from 1 July 2015) via a within or end of period adjustment to prices in bulk or distribution tariff groups.

This recommendation has no effect in the case of CBRWSS

MBRI do not have a distribution system affecting their water take for irrigation

QCA Volume 1. Chapter 4.5

Termination (exit) Fees. Page 74 - 79

Conclusion

Consistent with the approach adopted in the SunWater review, the Authority recommends that termination fees are applied as a multiple of up to 11 (incl. GST) times the cost reflective distribution system fixed charges (Part C) in distribution systems such as the Pie Creek tariff group. The recommended termination fees are provided in Chapter 7: Draft Prices.

A lower multiple could be applied at Seqwater's discretion should it be consistent with Seqwater's commercial interests (e.g. in the interests of more efficient system management). Seqwater should not recover the balance of any shortfall from remaining customers, arising from exit by another customer or Seqwater (upon converting loss WAE to saleable bulk WAE).

In addition, the Authority acknowledges that the Morton Vale Pipeline contract specifies a termination fee for exiting customers.

However, it would be possible for Seqwater to renegotiate the Morton Vale Pipeline contract so as to recoup capital charges (which include the fixed costs) but exclude variable costs(which would not be incurred upon exit).

Recommendations:

(a) Seqwater's termination fees should be calculated as a multiple of up to 11 times (including GST) the relevant (Part C) fixed cost-reflective tariff. Such an arrangement could also be negotiated for Morton Vale Pipeline customers.

Irrigation in the CBRWSS is a river supplied system. Users were advised on 30th November 2012 that no termination fees are applicable.

Had proper (or any) negotiations taken place on the Contract the termination clause would have been varied and the fees removed.

	(b) A lower multiple could be applied at Seqwater's discretion should it be consistent with Seqwater's commercial interests (e.g. for example, in the interests of more efficient system management). (c) Seqwater should never recover the balance of any shortfall (in fixed cost revenue) from remaining customers, resulting from the exit of other customers (or from exit of Seqwater held WAE upon conversion from distribution loss WAE to other WAE).	
QCA Volume 1. Chapter 4.6 Free Water Allocations. Page 79 - 84	Conclusion The only free water issue, as raised by stakeholders as part of this review, pertains to the Central Brisbane River WSS. The Authority has a statutory responsibility to recommend irrigation prices to apply for the Central Brisbane River WSS. The Authority has not been asked to determine whether Seqwater is legally entitled to impose and recover irrigation charges in the Central Brisbane River WSS. This is a contractual matter between Seqwater and the irrigators, in the event that the Government determines such charges should apply. QCA MAKES NO RECOMMENDATION	The matter of MBRI irrigators' rights to the draw water at no charge is dealt with in the body of the Response to the Draft Report. MBRI submits it has a pre-existing right to draw water at no charge and this is supported by non-storage system flows (unsupplemented water) in the catchment available to irrigators. MBRI disagrees with the conclusion for reasons stated in detail in the Response
QCA Volume 1. Chapter 5 Renewals Annuity. Page 85 - 100	Recommendation: The Authority recommends opening ARR balances for 2013-17 as per Table 5.9.	The whole matter of ARR and renewals is detailed in the MBRI Response to the Draft Report.
QCA Volume 1. Chapter 5 Renewals Annuity.5.3. Prudency and Efficiency of Forecast Renewals Expenditures Page 100 - 105	Recommendation: The Authority recommends that Seqwater implement the improvements to its renewals planning and processes as outlined in the SKM Final Report by 30 June 2015.	No comment
QCA Volume 1. Chapter 5 Renewals Annuity.5.3. Prudency and Efficiency of Forecast Renewals Expenditures Page 105 - 108	Recommendation: The Authority recommends that by 30 June 2015, Seqwater adopt modern equivalent replacement costs and/or more specific asset class indices, as appropriate, when preparing detailed options analysis of material items forecast for Years 1-5 of the next regulatory period, high-level options analysis for material items forecast for Year 6 onwards and for all other (non-material) forecast renewals expenditures. The Authority also recommends that in response to this Draft Report, Seqwater submit a proposal to the Authority by 22 February 2013 on the assets to which it would be appropriate to apply a	No comment

	modern equivalent replacement costs versus	
	specific asset class indices.	
QCA Volume 1.	Conclusions	MBRI do not accept the sampling
Chapter 5	When considered in conjunction with the	approach used provides a reasonable
Renewals	Authority's decisions on the consultant's specific prudency and efficiency findings for	basis upon which to make assessments for the CBRWSS, given the scale and
Annuity.5.4. Treatment of	forecast renewals items (including meter-	features of that scheme relative to the
Unsampled Forecast	replacements) and in calculating forecast renewals expenditure, the Authority has:	other schemes investigated. The cost
Renewal	(a) excluded from meter-replacement	savings are not representative and are considered low given that a significant
Expenditure Page 108 - 121	renewals expenditure the \$0.98 million	proportion of renewals do not relate to
	identified by SKM as not prudent and \$0.18 million of metering costs withdrawn by	water storage but to other activities like hydro, flood mitigation and other
	Sequater in November 2012. This totals	non-flood expenditure. The renewals
	approximately \$1.16 million (Real 2012-13); (b) excluded from (non-metering) renewals	as presented do not represent a
	expenditure the item identified by SKM as	genuine cost reflective component for water storage and irrigators in the
	not prudent. This totals approximately \$0.34 million (Real 2012-13); c) incorporated all	CBRWSS. A complete review of
	identified specific efficiency savings. This	renewal costs needs to be undertaken
	totals approximately \$0.23 million (Real 2012-13);	to remove renewal costs not associated with water storage. This
	(d) incorporated the extrapolated asset class	matter is dealt with in the body of the
	specific efficiency saving of 25% to other air	MBRI Response to the Draft Report
	valve replacements. This totals \$14,000 (Real 2012-13); and (e) reduced by 13% all	
	unsampled direct forecast renewals	
	expenditure within the planning period. These savings total	
	approximately \$5.6 million (Real 2012-13).	
	Summary of Past and Forecast Renewals Cost Savings	
	The Authority, therefore, recommends a reduction of \$7.34 million of Seqwater's	
	submitted total all sectors forecast renewals	
	expenditure of \$55.84 million (real values), that is, about 13.2%.	
	The Authority also recommends a reduction	
	of \$0.84 million of Seqwater's submitted all sectors past renewals expenditure of \$4.6	
	million (real values), that is, about 18.2%.	
	Thus, for 2006-36, the Authority	
	recommends a reduction of approximately \$8.14 million of Seqwater's submitted total	
	all sectors past and forecast renewals expenditure of \$60.4	
	million (Real \$2012-13), that is, about 13.5%.	
	This represents the cost saving identified by	
	the Authority when reviewing Seqwater's initially submitted past and forecast	
	renewals expenditure. Should there be	
	material differences between efficient actual expenditures and the costs implied under	
	this approach, Seqwater can apply for a within or end of period adjustment to prices.	
	Recommendation:	
	The Authority recommends that:	
	(a) cost savings identified by the Authority	
	(see Volume 2) be incorporated in cost-	

	reflective prices; and	
	(b) for unsampled forecast renewals expenditure items, a cost saving of 13% be applied to Seqwater's proposed costs.	
QCA Volume 1. Chapter 5 Renewals Annuity.5.5. Asset Management Planning Methodology Page 121 -123	Recommendation: The Authority recommends that, in forecasting renewals expenditure, Seqwater undertake: (a) high-level options analysis for all material renewals expenditures expected to occur over the Authority's recommended planning period, with a material renewal expenditure being defined as one which accounts for 10% or more in present value terms of total forecast renewals expenditure; and (b) detailed options analysis (which also take into account trade-offs and impacts on operational expenditures) for all material renewals expenditures expected to occur within the subsequent five-year regulatory period, with a material renewal expenditure being defined as one which accounts for 10% or more in present value terms of total forecast renewals expenditure over that period.	This recommendation is a matter between QCA and Seqwater. MBRI seek a schedule of those renewal items directly involved in the provision of water to irrigators and water storage, and exclude all items e.g. flood storage/flood mitigation/ community service obligations/power generation.
QCA Volume 1. Chapter 5 Renewals Annuity.5.6. Planning Period Page 123 - 130	Recommendation: The Authority recommends that a 20-year planning period be adopted, as proposed by Seqwater. The Authority also recommends that the length of the planning period be revisited in subsequent price reviews (or as a result of a price trigger) should problems of intergenerational equity arise as a result of significant capital expenditure proposals.	Accepted by MBRI once the list of renewals is agreed
QCA Volume 1. Chapter 5 Renewals Annuity.5.7. Consultation with Customers and Reporting Page 130 - 135	Authority's Analysis The Authority recognises that Seqwater, like SunWater, has substantial technical and financial data and a wealth of experience on which to plan its activities. Seqwater also has a statutory responsibility to deliver WAEs and thus, as a minimum, maintain the capacity of its bulk assets. While Seqwater has the final statutory responsibility for WSSs, the Authority values the inputs of customers into asset management planning as an indicator of its prudence and efficiency. The Authority also noted that, in other jurisdictions, the involvement of irrigators in asset management planning is structured, purposeful and, in some instances (such as in Victoria), required by legislation. Furthermore, regulated utilities in the ACT are legally required to report on their compliance against statutory obligations and performance functions. In response to QFF and other stakeholders, the Authority recommends that Seqwater strengthen its direct consultation with irrigators in regards to actual (past) and proposed renewals	MBRI is aware that asset management planning undertaken by Seqwater relates to Water Storage and Flood Mitigation primarily for the cities of Ipswich and Brisbane. MBRI allocations are unfairly reduced to give high priority users preference to river system flows. MBRI cannot see how it can contribute to renewals expenditure not related to irrigators. In addition, consultation carries a cost. As with any other expenditure there should be a cost-value consideration. The irrigators' component of Seqwater costs has not been adequately identified and any consultation requirement we may have should not become a cost burden to either MBRI, irrigators or Seqwater out of proportion to its value. This being the first price path negotiation, it is very important to

expenditure. In response to QFF's submission that further consultation (including its costs) should be considered, the Authority notes that support (by irrigators for consultation with Segwater regarding expenditure) varies between WSS, with cost implications being the major concern. Accordingly, the Authority considers that Segwater, in response to the Authority's Draft Report, should submit cost estimates regarding the options identified (above) by QFF and any other options Segwater consider to be appropriate. The Authority does not propose to prescribe a particular form of customer consultation (for example, quarterly meetings) to be adopted in each scheme or for all schemes. Instead, consistent with its recommendations for SunWater, the Authority considers the recommended information requirements are a minimum. This minimum may be exceeded if, on a tariff group basis, irrigators seek increased consultation (and are willing to pay the additional associated costs), however, this would need to be agreed by Segwater as ultimately the Authority recognises Segwater's right to make operational business decisions in this context. To ensure adequate information and transparency as a basis for future consultation, however, the Authority is not proposing to allow irrigators to negotiate a standard of consultation that is lower than the recommended minimum (annual information) requirements as such information is also relevant to Government policy making and economic and technical regulation. Consistent with the initiatives in other states, the Authority recommended that Segwater be required to consult with its customers about any changes to its service standards and in regards to its actual (past) and proposed renewals expenditures. Specifically, as part of the Authority's (minimum) consultation requirements, Segwater should be required to publish on its website, as a basis for consultation and reporting:

commence with the right base. From that point transparency is important. These recommendations may incur a cost that exceeds any benefit to MBRI or Seqwater

- (a) enhanced scheme NSPs prior to each price review, which present the high-level options analysis for all material renewals expenditures expected to occur over the Authority's recommended planning period and detailed options analysis for all material renewals expenditures expected to occur within the subsequent regulatory period; and
- (b) annual updates to its NSPs detailing Seqwater's proposed renewals expenditure items and accounting for significant variances between previously forecast and actual material renewals expenditure items. Customers' written responses to the above and Seqwater's response to those comments, and its related decisions, should also be published on Seqwater's website.

	While the Authority is not required under the QCA Act to directly monitor Seqwater's compliance with the conditions of its license/s (as is the case for the ICRC on ActewAGL), the Authority considers that, as a minimum, the above requirements should be incorporated into Seqwater's SOPs and relevant legislation should be amended to enshrine such requirements. Recommendation: The Authority recommends that Seqwater's Strategic and Operational Plans and relevant legislation be amended to require Seqwater to consult with customers in relation to, and publish annually on its website, updated NSPs commencing prior to 30 June 2014. The NSPs should be enhanced to present: (a) high level options analysis for all material renewals expenditures expected to occur over the Authority's recommended planning period; (b) detailed options analysis for all material renewals expenditures expected to occur within the subsequent five-year regulatory period; and (c) details of Seqwater's proposed renewals expenditure items and accounting for significant variances between previously forecast and actual material renewals expenditure items. Customers' submissions in response to the	
	NSPs and annual updates should also be published on Seqwater's website alongside Seqwater's responses and related decisions.	
QCA Volume 1. Chapter 5 Renewals Annuity.5.8. Allocation of Headworks Renewals Costs	Summary Table 5.23 outlines the Authority's recommended (non-metering) bulk renewal cost allocation method and results for each of the bulk WSSs. Table 5.23 The Authority's further detailed	MBRI does not accept the recommendation by the QCA or Seqwater. An attempt to apply the HUF methodology to irrigators resulted in an about outcome. Some rest Dome
Page 135 to 150	considerations are outlined in the Volume 2 scheme reports. Recommendation: The Authority recommends that, consistent with Table 5.23, for the allocation of fixed bulk (non-metering) renewals costs: (a) Seqwater's HUF methodology be adopted for Logan, Mary Valley and Warrill Valley WSSs; (b) the Authority's estimate of adjusted nominal WAE, in Central Brisbane River WSS; and (c) nominal medium priority WAE be adopted in Cedar Pocket Dam, Central	an absurd outcome. Somerset Dam should not have been included as it is not part of the CBRWSS. Irrigators do not consider Wivenhoe Dam should also be included and for reasons outlined in the Response, MBRI considers that either there are no renewal costs that relate to providing a service to irrigators under the Moreton ROP. The matter is dealt with in the body of the Response to the Draft report.
	Lockyer Valley and Lower Lockyer Valley WSSs. The Authority also recommends that the prudent and efficient irrigation metering	

	costs forecast for each tariff areas (area 1)	
	costs forecast for each tariff group (over the Authority's recommended renewals	
	planning period) be recovered exclusively from irrigation customers in that tariff group via the renewals annuity. Such costs should be allocated on the basis of nominal irrigation customer WAE.	
QCA Volume 1.	Conclusions	There is no irrigation distribution
Chapter 5 Renewals Annuity.5.9. Allocation of Distribution System Renewals Costs Page 150 to 153	The Authority recognises that Seqwater's distribution systems only have medium priority customers. Therefore, costs do not need to be allocated between customer priority groups. In principle, the Authority considers that current (nominal) WAE is the only measurable estimate of customers' share of distribution system capacity. Establishing the most appropriate means for allocating such costs requires substantial further consideration and development and can be expected to require considerable resourcing and consultation if it is to be effectively defined and implemented. The Authority recommended that SunWater conduct such a review by 30 June 2014, for its distribution systems. The Authority considers that fixed	system in the CBRWSS. MBRI has no view on this recommendation
	distribution system charges should remain with customers if they convert to high priority. To remove a potentially perverse incentive for such conversions, the Authority recommends that the quantum of fixed costs (allocated on the basis of current WAEs) should remain with a customer if they convert to high priority.	
	Similarly, the same should apply if a customer converted from high to medium priority. However, the Authority recommends that, at the conclusion of the review recommended by the Authority for SunWater, Seqwater should, for subsequent regulatory periods, adopt the relevant outcomes.	
	Recommendation: The Authority recommends that nominal WAEs be used for the allocation of fixed distribution system costs between priority groups. Fixed distribution system charges should remain with customers if they convert to between priority groups.	
	The Authority recommends that, at the conclusion of the review recommended by the Authority for SunWater, Seqwater should, for subsequent regulatory periods, adopt the relevant outcomes.	
QCA Volume 1.	Recommendation:	Subject to agreeing a renewals list that
Chapter 5	The Authority recommends that Seqwater	applicable to the CBRWSS then (a) and
Renewals	calculates its renewals annuities indexed annually by the general rate of inflation.	(b) appear reasonable.
Annuity.5.10. Calculating the	The Authority also recommends that for the	Note the alternative method suggested by MBRI in the body of this Response
Calculating the	purpose of calculating renewals annuities,	by MDM in the body of this Response

Renewals Annuity Page 153 to 155	prudent and efficient renewals expenditure be escalated by:	
	(a) 4% per annum over the regulatory period (2013-17); and	
	(b) 2.5% per annum thereafter for the recommended renewals planning period.	
QCA Volume 1. Chapter 5 Renewals Annuity.5.10.2. Frequency of Recalculation Page 155 to 156	Authority's Analysis The Authority noted that Seqwater proposed a rolling annuity that is recalculated each year of the 2013-17 regulatory period, rather than being recalculated every three or five years. Adoption of a four year rolling annuity (that is, recalculate the annuity only every four years) would be administratively simpler and more transparent to customers and hence easier to review. Nevertheless, on the basis of the greater smoothing (that is, lower price volatility) offered by annual recalculation, and the experiences of other jurisdictions, the Authority recommended that Seqwater's proposed approach be adopted. Recommendation: The Authority recommends that Seqwater's annual rolling annuity calculation be applied.	MBRI does not accept the Recommendation for annual rolling annuity calculations. On its own admission QCA indicates a four year rolling annuity is more transparent. A small, voluntary, community-based irrigation association does not have the resources to be constantly reviewing tables of annuities and prefer transparency
QCA Volume 1. Chapter 5 Renewals Annuity.5.10.3. Frequency of Recalculation for 2013-17 Page 156 to 157	Recommendation: The Authority recommends the adoption of the proposed all sectors (including urban, industrial and irrigation) renewals annuities presented in Table 5.25. Page 157	MBRI is seeking more detail as to those annuities actually directly involved in irrigation and water storage. MBRI does not accept Table 5.25 as validly identifying renewals for water storage or irrigation.
QCA Volume 1.	Recommendations:	MBRI agrees with this
Chapter 6	The Authority recommends that Seqwater:	recommendation as a significant aid to transparency.
Operating Expenditures. 6.1 Page 158 to 172	(a) upgrade its policies, procedures, and information systems for the budgeting, incurrence and management of operating costs in its irrigation sector. In particular, the gathering, recording, documentation and analysis of operating cost information relevant to Seqwater's irrigation sector needs to be improved; (b) publish on its website annually updated NSPs containing operating (and renewals) information along with stakeholder submissions and Seqwater's responses. The	transparency.
	NSPs should also be enhanced to present details of Seqwater's proposed operating expenditure for the next year, and to account for significant variances between previously forecast and actual operating expenditure; and	

	(c) should submit its proposals, in relation to the above matters, for consideration by the Authority by 30 June 2014 and implement the agreed improvements by 30 June 2015. As for renewals costs, the Authority also recommends that Seqwater's Strategic and Operational Plans (and relevant legislation) be amended to require Seqwater to consult with customers in relation to forecast and actual operating expenditure.	
QCA Volume 1. Chapter 6 Operating Expenditures. 6.2 to 6.4 Prudency and Efficiency of Direct Operating Expenditure Page 172 to 183	Recommendation: The Authority recommends that: (a) Seqwater's prudent and efficient direct operating costs for 2012-13 should be reduced to \$11.2 million; and (b) Seqwater's forecast direct operating costs for 2013-17 (excluding rates and fixed electricity) should be further reduced by a general productivity gain of 1.5% per annum, for each of the four years of the regulatory period, applied cumulatively.	MBRI is aware that Seqwater is to achieve further productivity improvements from amalgamations by 30 June 2013. QCA has advised these savings would be taken into consideration in its final report. While any reduction is attractive, MBRI remains concerned about the extent to which costs not only reflect water storage cost but also other costs that relate to other Seqwater activities. MBRI is concerned that the sampling methodology used does not provide a proper representation of costs assessed for the CBRWSS given its scale relative to other WSS reviewed and the inclusion of some cost categories that are significantly larger than for other WSS. Accordingly, QCA is taking irrelevant matters into consideration and failing to take relevant matters into account in this regard. These issues are addressed in detail in the body of the Response to the Draft Report
QCA Volume 1. Chapter 6 Operating Expenditures. 6.5 Prudency and Efficiency of Non- Direct Operating Expenditure Page 183 to 189	Recommendation: The Authority recommends that Seqwater's: (a) forecast prudent and efficient non-direct operating costs for 2012-13 should be reduced to \$ 9.1 million; and (b) non-direct operating costs be reduced by 1.5% per annum for each year of the 2013-17 regulatory period, applied cumulatively.	MBRI does not accept the non-direct operating costs. These costs are disproportionately high as a percentage of the total costs, indicating a lack of due diligence by QCA in proper identification of costs. Further MBRI is of the view that such a high proportion of indirect costs indicates issues with Seqwater's accounting.
QCA Volume 1. Chapter 6 Operating Expenditures. 6.6 Allocation of Non- Direct Costs Page 189 to 193	Recommendation: The Authority recommends that Seqwater should allocate non-direct operating costs (excluding insurance) to irrigation tariff groups on the basis of total direct costs (TDC). Insurance costs should be allocated on the basis of the replacement value of the insured assets (as recommended by Seqwater).	MBRI does not accept this allocation of non-direct costs and is seeking to have non-direct costs relating to water storage and to services delivered to irrigators completely re-analysed.

QCA Volume 1. Chapter 6 Operating Expenditures. 6.6.2 Stage 2 Allocation of Costs between Priority Groups Page 193 to 195	Recommendation: The Authority recommends, that for the Logan River, Mary Valley and Warrill Valley tariff groups: (a) fixed repairs and maintenance costs be allocated to medium and high priority customers using HUFs; and (b) all other fixed operating costs (including insurance premium costs) be allocated 50% using HUFs and 50% using current nominal WAEs. The Authority also recommends that for Central Lockyer Valley, Lower Lockyer Valley, Morton Vale Pipeline, Pie Creek, and Cedar Pocket Dam tariff groups, fixed operating costs should be allocated on the basis of current nominal WAEs as recommended in Chapter 5: Renewals Annuity. The Authority further recommends adoption of the approach outlined for the Central	MBRI does not accept the approach outlined for the CBRWSS This matter is dealt with in the body of the Response to the Draft Report
QCA Volume 1. Chapter 6 Operating	Brisbane River WSS (outlined in its scheme specific report). Recommendation: The Authority recommends that for the regulatory period 2013-17:	MBRI is realistic enough to understand escalation in cost occurs. MBRI irrigators are business price takers and must seek efficiencies to meet
Expenditures. 6.7 Cost Escalation Page 195 to 201	(a) the costs of direct labour and contractors should be escalated by 3.6% per annum in nominal terms;(b) the costs of materials should be escalated by 4% per annum in nominal terms;	these escalating costs. Irrigators do not have the luxury of declaring an escalation factor in nominal (or any other) terms.
	(c) other direct costs and non-direct costs should be escalated by 2.5% per annum in nominal terms; and	MBRI submits that electricity costs can be the subject of an end of period adjustment, avoiding a moral hazard.
	(d) electricity should be escalated by 2.5% per annum in nominal terms. However, should Seqwater sustain material electricity cost changes above the escalated level, consideration should be given to an application by Seqwater to the Authority for an end-of-period adjustment.	MBRI therefore seeks a position where real efficiencies are sought by Seqwater without the protection of some other party paying the bill
QCA Volume 1.	Recommendation:	Accepted
Chapter 6 Operating Expenditures. 6.8 Working Capital Page 201 to 204	The Authority recommends that a working capital allowance not be allowed for Seqwater's irrigation activities.	
QCA Volume 1.	Recommendation:	MBRI seeks information on the sources
Chapter 7 Draft Prices. 7.0 to 7.2 Page 211 to 217	The Authority recommends that Seqwater's (November) estimates of revenue offsets be accepted.	of revenue. The Draft Report fails to take into account revenues relating to non-CBRWSS users such as Kilcoy and Esk, the Coominya abattoir and Splityard creek hydro.
QCA Volume 1. Chapter 7 Operating Expenditures. 7.3 Costs Page 217 to 225	Recommendation: The Authority recommends the application of fixed and variable tariff structures as presented in Table 7.9.	MBRI do not accept the tariff structures in Table 7.9. This matter is dealt with at length in the body of this Response

QCA Volume 1. Chapter 7 Appendix B WACC Draft Report Page 225 to 248 QCA Volume 1. Chapter 7. Appendix B WACC Risk Free Rate Page 248 to 250 QCA Volume 1.	Recommendation: The Authority recommends that a single discount rate (WACC) determined for Seqwater's irrigation business (separately) be applied consistently to each of Seqwater's irrigation WSSs. Recommendation: The Authority recommends that the risk-free rate be based on the four-year Commonwealth Government bond averaged over 20 trading days. An indicative estimate using the 20 days trading up to and including 2 October 2012 is 2.55% per annum. Recommendation:	
Chapter 7 Appendix B WACC Market Risk Premium Page 250 to 251	The Authority recommends a market-risk premium of 6.0% per annum.	
QCA Volume 1. Chapter 7 Appendix B WACC Capital Structure Page 251 to 252	Recommendation: The Authority recommends a capital structure of 60% debt and 40% equity for Seqwater's irrigation activities.	MBRI as a small, volunteer community organisation is not able to undertake the detailed analysis to respond to these recommendations
QCA Volume 1. Chapter 7 Appendix B WACC Asset and Equity Betas Page 252 to 254	Recommendation: The Authority recommends an asset beta of 0.3 corresponding to an equity beta of 0.55 at 60% debt-to-value ratio.	
QCA Volume 1. Chapter 7 Appendix B WACC Cost of Debt Page 254 to 257	Recommendation: The Authority recommends that the cost of debt be based on the BBB+ margin above the riskfree rate for four-year corporate bonds. As at 2 October 2012, the indicative cost of debt is 5.861% per annum. This is comprised of a corporate spread of 2.78% on the four-year riskfree rate of 2.55% and transactions costs relating to credit default swaps of 0.25%, interest rate swaps of 0.15%, and debt issuing costs of 0.125%.	
QCA Volume 1. Chapter 7 Appendix B WACC Gamma Page 257 to 258	Recommendation: The Authority recommends a gamma value of 0.5.	MBRI as a small, volunteer community organisation is not able to undertake the detailed analysis to respond to these recommendations

Part 2: QCA Draft Report Volume 2: CBRWSS

Reference	QCA Recommendation	MBRI Response
QCA Volume 2. Chapter 2 Regulatory Framework Page 5 - 7	As noted in Volume 1, the Authority recommends that short term volume risk should be assigned to customers through a tariff structure that recovers fixed costs through fixed charges and any and all variable costs through volumetric charges. In response to QFF, the Authority accepts that irrigators' supply reliability is lower than for urban users, and this is reflected in the allocation of costs between user groups (see Authority's analysis in Chapter 5).In response to stakeholders (J. Craigie, J.B. & B.L. Keller and S. & H. Sinclair, 2012), the Authority notes that tributary flows downstream of storages are typically part of the assessed system supply and are, in effect, taken into account in defining WAE. The Authority considers that the risk implications of low flow periods will be reflected in the allocation of fixed costs such as renewals costs and fixed operating costs between medium and high priority users. The Authority accepts that there is volume-related risk borne by irrigators and that revenues can be cyclic. As noted above, the Authority considers that irrigators are best placed to manage this risk, particularly given that trading of water allocations is an option. Charges for water take into account the supply reliability in the scheme, and it is accepted that groundwater options are generally not available. However, the scheme has a high inherent level of supply reliability when compared to other schemes. The introduction of a water charge including a fixed component could be expected to lead to an increase in trading activity. While some WAE holders may choose to trade their allocation to other users, this could be expected to lead to more productive use of available supplies over time. The combined asset value of land and water allocation should not be affected – irrigators can gain by trading water to better match their needs. Any change to the total value will likely reflect market factors rather than the separation of water and land assets.	MBRI does not accept that a fixed charge is appropriate in the CBRWSS because no infrastructure is irrigation specific and the proportion of the cost of water storage infrastructure that applies to irrigation is dwarfed by other users and is insignificant. MBRI has received no increase in water supply reliability. We are led to believe that a hydrological study was undertaken which resolved that MBRI members were not dependant on the Dams for their 6771ML per annum water allocation. Seqwater was cooperative when asked for this report, apparently prepared for the QWC but at the time of writing had not located it. Hydrological reports apparently were located for the Mary, Warrill, and Logan rivers. MBRI does not accept that an artificially escalated price per ML will increase water trading in the CBRWSS. See discussion of sleepers and dozers in the body of this Response.
QCA Volume 2. Chapter 3. 3.0 to 3.2 Pricing Framework Page 7 - 14	Authority's Analysis The Authority has, in Volume 1, analysed the tariff structure and the efficiency implications of the tariff structure, to apply to Seqwater's schemes. The Authority considers that, in general, aligning the tariff structure with fixed and variable costs will manage volume risk over the regulatory period and send efficient price signals. To signal the efficient level of water use, the Authority recommends that all, and only, variable costs be recovered through a volumetric charge, with fixed charges covering	MBRI disagrees with the majority of QCA's analysis. See body of this Response.

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	the balance of costs. While noting stakeholders concerns regarding a high fixed charge, particularly in periods of low water availability, under current legislative and contractual arrangements (and the Ministerial Direction), customers must bear all the costs of water supply incurred by Seqwater, irrespective of whether it is made available (provided the costs of supply are efficient and prudent).	
	In response to stakeholder concerns that DNRM levies an annual water licence fee, the Authority has confirmed that no such fees apply for water allocations.	
	The Authority also recognises that tariff structures are only part of a mix of institutional arrangements in Queensland designed to direct water to its highest and best use from the overall community perspective. In addition to these institutional arrangements, normal commercial profit motives and water trading are relevant to ensuring water is directed to its highest and best use.	
QCA Volume 2. Chapter 3. 3.3 Water Use Forecasts Page 9 - 10	However, unlike other Seqwater WSSs, the Central Brisbane River WSS does not have a recorded history of irrigation water use and associated revenues that can be used for determining a baseline revenue amount.	Seqwater have published figures on water use and both Seqwater and DEWS (and predecessors) have log book records
QCA Volume 2. Chapter 3. 3.4 Free Allocations Page 10 - 14	Authority's Analysis In Volume 1, the Authority recommends that pre-existing rights to free water should be maintained where they continue as part of an existing agreement or as a part of current legislation or Government policy. Neither Seqwater nor customers with a pre-existing right to free water should bear these costs. With respect to Seqwater's proposed treatment of water currently being provided free of charge, the Authority considers that, as a general principle, were such arrangements to exist, Seqwater should: (a) continue to meet legacy arrangements as these represent commercially agreed	MBRI submits it has a pre-existing right to draw water at no charge and this is supported by non-storage system flows in the catchment available to irrigators established in 1981 and recognized by the Government and evidenced in Cabinet minutes, explanatory memorandum, regulations and legislation that state clearly a continuation of a requirement to provide water at no charge to irrigators for a period in excess of three decades. QCA was wrong in its assessment
	arrangements. In these circumstances, the costs are to be borne by Seqwater in the form of a diminished revenues; and (b) for compensation arrangements maintain the pre-existing rights to free water where they are the result of an existing agreement or as part of a current legislative or Government policy. However, in the context of Seqwater irrigation WSSs, the Authority notes that neither of the	about pre-existing rights to water and in its claim that MBRI water is supplemented from the dam infrastructure Nothing has changed since the establishment of the Moreton ROP (except that reliability of access to natural system flows has been reduced because of the more onerous water
	circumstances outlined in (a) or (b) above are currently known to apply. With respect to claims that Seqwater cannot levy charges, the Authority notes that, under the Ministerial Direction issued under section 23 of the Queensland Competition Authority Act 1997 (the QCA Act), the Authority has	sharing rules). Seqwater has not undertaken any structural changes to water storages or done anything to improve the reliability of water to irrigators. Under the Moreton ROP, irrigator's

been directed to recommend irrigation prices to apply for the Central Brisbane River WSS.

The Authority has not been asked to determine whether Seqwater is legally entitled to impose and recover irrigation charges on the Central Brisbane River WSS. This is a contractual matter between Seqwater and the irrigators, in the event that the Government determines such charges should apply.

That said, the Authority's understanding of the relevant issues is outlined below:

- (a) the provisions of the Legislative Standards Act 1992 requiring any intention to adversely affect certain rights to be mentioned in explanatory notes do not invalidate any legislation if this requirement is not observed;
- (b) the saving provision in the Acts Interpretation Act 1954 that provides for the maintenance of rights or privileges that existed under legislation on the repeal or expiry of that legislation does not preserve the requirement on Seqwater to provide free water allocations the rights of irrigators were limited to a one year duration;
- (c) the 2005 letter from DNRM confirms the continuance of the practice of providing free water allocations at the time it was written. The views in that letter do not establish a legal basis for continuing free water allocations;
- (d) the generic nature of the standard supply contract does not mean that the supply contract is invalid;
- (e) the failure (if such failure occurred) of the parties to review the standard supply contract is an issue of non-compliance with the Water Act 2000 and does not invalidate the standard supply contract; and
- (f) as the Moreton ROP associates the reliability of the 6,771 ML of WAE with Somerset Dam, Wivenhoe Dam and related infrastructure (not natural flows), the irrigation WAE in the Central Brisbane River WSS is supplemented (that is, benefits from the water storage infrastructure).

Costs are therefore incurred by Segwater in maintaining the capacity and operational services to deliver the required level of reliability associated with that WAE (see further discussion of cost issues in chapters 4 and 5). In the absence of detailed levels of service, Segwater's proposed costs are assessed against currently available information. The Authority understands that Segwater intends to consult with irrigators to establish levels of service for this WSS. In response to stakeholder concerns that DNRM levies an annual water licence fee, the Authority has confirmed that no such fees apply for water allocations. However, past (and current unsupplemented) water licences may incur charges.

rights to access water is measured against storage levels at the dams independently of natural system flows. This is detrimental rather than a benefit to irrigators as it seeks to restrict access to natural system flows during periods when dam storage is below 50%. The objective appears to be to conserve water storages by permitting High priority holders an increased share of natural system flows at the expense of irrigators. The association of announced allocations to lake levels is even more detrimental than that which was agreed to with government in the mid 2000's.

It is inappropriate to include costs associated with Somerset Dam as it is not part of the CBRWSS but rather part of the Stanley River WSS and the Brisbane Area under the ROP for water supply to High Priority users.

See response to this particular section in the recommendations in Volume 1.

MBRI submits that the free allocation to GVWB is relevant to irrigators as it also recognises the principles adopted by Government including that the dams were not constructed for the purposes of water supply to GVWB and the water historically taken by that board was very small when compared to natural system flows at that time.

The 6771 ML is labelled "supplemented" water but in substance, in practice and historically, is from natural system flows. It is not supplemented except as a label in the ROP, a device that is used to allow the water use to be regulated in a particular way.

QCA has not correctly identified costs that relate to water storage as opposed to other costs included in Seawater submissions, for example, flood mitigation costs.

These matters are referred to in more detail in the body of this Response.

MBRI reiterates that if QCA has advice that MBRI irrigators have no legal entitlements as they assert, that advice should be shared immediately with MBRI. dams were not constructed for the purposes of water supply to GVWB and the water historically taken by that board was very small when compared

The suggestion by J.B. & B.L. Keller (2012a) for the Government to absorb the foregone revenue pending further review of water usage, timings of peak demand and losses in the delivery system of the Brisbane River is a matter for Seqwater and Government. The Authority proposes to proceed as directed on the basis of currently available information.

The Authority also notes comment about the ROP process. This is beyond the scope of the Authority's Ministerial Direction.

The Authority notes and supports S. & H. Sinclair's submission that should irrigation water charges be applied, they should transition to [lower bound] full cost recovery over time to promote water trading and its benefits, including directing water to viable commercial enterprises and higher value uses, resulting in greater local (and regional) economic activity.

The lack of a current market should not preclude its future development.

The Authority's recommended charges, including the proposed price path, from which the financial impact on individual irrigators can be discerned, are detailed in Chapter 6 below

In response to the GVWB submission, the Authority notes that the 250ML per annum of historically free water is classified in the Moreton ROP as High Priority Class A. Given the nature of the customer base (reticulation to rural residential blocks) and the high reliability of this water, the Authority considers it is not relevant to irrigation water charges. That is, the Authority's price recommendations do not apply to this group.

In conclusion, the Authority has a statutory responsibility to recommend irrigation water charges, with any dispute over the legal right for Seqwater to impose and recover those

charges being a matter for Government not the Authority.

The 6,771 ML of medium priority WAE in this WSS is supplemented by scheme infrastructure. Certain costs not related to these irrigation services have been excluded from

the cost base by the Authority before the remaining costs have been allocated according to reliability of services provided. These matters are addressed in subsequent chapters.

However, it is stressed that, even if the Authority's understanding of the legal issues as to Seqwater's contractual entitlement to recover irrigation water charges is not correct, the Authority has a statutory responsibility to recommend irrigation water charges for the Central Brisbane River WSS as required by the Ministerial Direction and the preceding issues do not alter that obligation.

to natural system flows at that time.

The 6771 ML is labelled "supplemented" water but in substance, in practice and historically, is from natural system flows. It is not supplemented except as a label in the ROP, a device that is used to allow the water use to be regulated in a particular way.

QCA has not correctly identified costs that relate to water storage as opposed to other costs included in Seawater submissions, for example, flood mitigation costs.

These matters are referred to in more detail in the body of this Response.

MBRI reiterates that if QCA has advice that MBRI irrigators have no legal entitlements as they assert, that advice should be shared immediately with MBRI.

QCA Volume 2. Chapter 4. Renewals Annuity Page 15 - 17	Authority's Analysis The Authority concludes that because there is no historical renewals expenditure, a comparison of forecast and actual direct renewals expenditure is not applicable for the Central Brisbane River WSS. The Authority notes that there is currently no renewals account for Central Brisbane River WSS. Accordingly, the Authority concludes that the balance as at 1 July 2013 will, therefore, be zero as proposed by Seqwater.	Accepted
QCA Volume 2. Chapter 4. Renewals Annuity Page 17 - 29	Conclusion Sampled Items In summary, one item was sampled for detailed review (that is, the inlet and outlet works at Somerset Dam) and found to be prudent and efficient. Three other reviews undertaken by SKM in other schemes were considered for application to the Central Brisbane River WSS. While proposed expenditure on telemetry at Cedar Pocket Dam (of the Cedar Pocket Dam WSS) and at Bromelton Weir (of the Logan River WSS) were found by SKM to be prudent and efficient, SKM's conclusions could not be translated to Central Brisbane WSS. In addition, while proposed expenditure on refurbishment of corrosion protection on the Clarendon Diversion trash screens (of the Central Lockyer WSS) was found by SKM to be prudent and efficient, SKM's conclusions could not be translated to Central Brisbane WSS. These two items, therefore, are categorised as non-sampled items and subject to the appropriate implied cost saving (see below). Non-Sampled Forecast Renewals Expenditure As discussion in Volume 1, due to time limitations, the Authority was unable to comprehensively review all past or forecast renewals expenditure for prudency and efficiency. Accordingly, the Authority drew on the results of consultant reviews, as detailed below. The direct (non-metering) forecast renewals cost savings identified by SKM are summarised in Table 4.3. The 11 forecast renewals items reviewed account for an average across the schemes of some 21% of the total forecast irrigation renewals expenditure being directly reviewed with SKM's findings also applying to similar asset, taking the sample size to in excess of 50%. The reviews identified systematic errors in Seqwater's renewals expenditure forecasting approach. Hence, the Authority considers it likely that the non-sampled renewals expenditure proposed by Seqwater	MBRI does not accept the methodology adopted by QCA. Proper stratified sampling was not undertaken and the correct population of renewal costs was not identified for assessment. For example, it includes renewal costs relating to hydroelectricity, flood mitigation and other non-storage related expenditure. The scant level of detail provided may have resulted in the inlet and outlet works being wholly or partially misclassified. If such works relate in whole or part to a dam safety upgrade that has been previously disclosed in technical reports then those costs are not to be assessed under the Ministerial Referral Notice. The savings discount is substantially underestimated as a result of inclusion of flood mitigation renewals and other non-allowable items. MBRI's position is that SKM are not independent and their advice should not be turned into QCA findings.

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	will be similarly overstated.	
	In summary, the net variance between Seqwater's initially submitted (non-metering) forecast renewals costs and the efficient SKM cost estimate of \$0.65 million is the appropriate basis for the Authority's cost savings to be applied to non-sampled items.	
	The net variance of \$0.65 million, expressed as a portion of Seqwater's initially submitted sampled forecast irrigation renewal expenditure of \$5.08 million, results in a 12.8% (or	
	13%) implied cost saving that the Authority will apply to non-sampled items.	
	In total, the Authority recommends the direct renewals expenditure be adjusted as shown in Table 4.4.	
QCA Volume 2.	Authority's Analysis	See comments by MBRI in responses to
Chapter 4. 4.4 SEQWater consultation with customers and reporting Page 30	In Volume 1, the Authority noted customers' concerns about the lack of involvement in the planning of future renewals expenditure and that this has been raised by irrigators and their representatives. These concerns were generally expressed throughout Seqwater's WSSs.	Authority recommendations in Volume 1, above.
	The Authority recommended that there be a legislative requirement for SunWater to consult with its customers about any changes to its service standards and proposed renewals expenditure program. The Authority considers that this pproach also be adopted by Seqwater.	
	In addition, Seqwater should also be required to submit renewals expenditure programs to irrigators for comment whenever they are amended and that irrigators' comments be documented and published on Seqwater's website and provided to the Authority.	
QCA Volume 2.	Authority's Analysis	MBRI does not accept Seqwater's or
Chapter 4.	The Authority notes Seqwater's submission that the initial HUF calculated by PB has resulted in a perverse outcome for the Central Brisbane River WSS.	the Authority's HUF methodology.
4.5 Allocation of Head works Renewables Costs Page 30 - 34		QCA has taken the water sharing rules as a basis of determining an allocation of costs that relate to irrigators
	The Authority has also reviewed Seqwater's alternative "adjusted HUF" methodology provided by PB which is based on the single trigger of 14.9% of useable volume corresponding with MP allocations being reduced to zero. The Authority notes, however, that the Moreton ROP prescribes a range of triggers which represent a progressive reduction in MP allocations once the useable volumes in Somerset and Wivenhoe Dams reach less than 50% (Table 4.6 refers).	without reading the Moreton ROP as a whole and understanding the conditions under which water releases from the dam can be made. Such releases can only be made if it is considered they are necessary to meet downstream demand. If downstream demand can be met in whole or part by natural system flows then no releases are necessary for that demand purpose. Similarly releases may be reduced if
	The Authority notes that, as outlined in Table 4.6, announced allocations associated with\ MP are reduced progressively over a range of useable volume scenarios and not just when	natural system flows can provide a substitution. This reflects on the purpose of water storages, namely, to store water for times when natural

the less than 15% trigger is met.

Accordingly, the Authority considers that a more appropriate approach would be to include reference in the HUF calculation to this range of scenarios (i.e. the announced allocations for irrigation users can be reduced progressively once storage levels fall below 50%).

Therefore, the Authority has adopted an amended factor of 35% which represents the median restrictions category between the 50% (which triggers the commencement of

reducing MP announced allocations) and the 14.9% (which triggers zero MP announced allocations). Applying PB's "adjusted HUF" methodology with the Authority's median, the following is proposed:

 $(7,041/279,000) \times (1.00 - 0.35) = 1.6$

Accordingly, the Authority considers that if the more detailed water sharing rules outlined in the Moreton ROP are taken into account, the allocation to irrigators would be 1.6%.

The Authority notes submissions by stakeholders:

- (a) seeking peer review of the HUF methodology (including the application of WASOs) being proposed by Seqwater; and
- (b) questioning whether Seqwater has a genuine methodology that identifies costs incurred by irrigators.

In response, the Authority has reviewed the results of Seqwater's initial HUF and "adjusted HUF" approaches and has concluded that both of these approaches are deficient. The Authority considers that its recommended approach is sound (from theoretical and practical perspectives) and takes into account announced allocation reductions and cut-offs detailed in the ROP.

flows are insufficient to meet downstream demands.

QCA's approach is not sound in that it overestimates the extent to which irrigators are provided with releases from the dam. Since the enactment of the Moreton ROP, there has been sufficient natural system flows available for irrigation.

MBRI submits that the proper allocation to irrigators accordingly is zero per cent: headworks are not utilised.

QCA Volume 2. Chapter 5.

Operating Costs Page 35 - 43 Authority's Analysis

In Volume 1, the Authority concluded that given the changes that have occurred in recent years, it is reasonable for Seqwater to adopt zero-based budgeting for 2012-13 as the base year for 2013-17 forecast costs.

The Authority recommends that Seqwater upgrade its policies, procedures, and information systems for the budgeting, incurrence and management of operating costs in its irrigation sector. In particular, the gathering, recording, documentation and analysis of operating cost information relevant to Seqwater's irrigation sector needs to be improved.

The Authority also recommended that Seqwater improve its consultation and communication processes with irrigation customers in relation to the forecasting and incurrence of operating costs.

The key issue in reviewing irrigator's costs in

MBRI rejects QCA's opinion in regard to the contribution to savings by irrigators and refers to the body of this Response.

QCA wrongly assesses benefits to MBRI irrigators from the infrastructure.

Not only is there no increased reliability, but there is a cost burden shared by irrigators in the CBRWSS because of the release strategies employed by Seqwater

Seqwater and its predecessors have been instructed to have meters installed for at least 30 years and we are still unmetered.

MBRI reminds QCA that while transparency is essential consultation is not always effective where there is an imbalance in resources.

the Central Brisbane River WSS is the method of cost allocation between irrigation and other sectors. Given the dominance of the non-irrigation sector, the cost sharing is very sensitive to changes in cost allocation methods.

This is further reviewed below.

In response to concerns raised by other irrigators, the Authority:

(a) recognises the contribution of irrigators in reducing the operating costs that would otherwise be incurred in operating and maintaining irrigation schemes, particularly in regard to stream bank management. However, such activities are generally performed by irrigators as part of their on-farm management in any case, and it is not feasible to

quantify this as a cost offset;

(b) does not agree that the infrastructure provided by Seqwater is of no benefit to irrigators. As noted previously, the Moreton ROP describes announced allocations for the Central Brisbane River irrigation (that is, MP WAE) being conditional on the combined useable volumes of Somerset and Wivenhoe Dams. This provision confirms

that the head works of Somerset and Wivenhoe Dams are required in supplementing water for the purpose of irrigation;

- (c) the cost to irrigators is related to the priority of supply which in some cases results in a relatively small share of the total costs involved;
- (d) notes that Seqwater is required by regulation to carry out meter reading. Moreover, the costs associated with any proposed national metering standard is excluded from

this review by the Ministerial Direction; and

(e) recognises that a number of data issues have arisen during the investigation. The Authority notes that while separate irrigation cost data are not easily available for the

2006-11 period (the equivalent of the previous price path), irrigators have not been charged for their use of water in this period. The Authority has proceeded on the basis of readily available information and water use assumptions as detailed further below.

The Authority agrees that a more effective consultation process between Seqwater and irrigators should be established, and has recommended accordingly.

For the purposes of the analysis of the prudency of operating costs, the Authority has reviewed Seqwater's November revised NSP data.

QCA Volume 2.
Chapter 5.

5.4 Operating Costs Page 44 - 47 Authority's Analysis

The Authority engaged SKM to review the prudency and efficiency of Seqwater's proposed direct operating expenditure for this scheme. Operations materials costs were selected for review based on QFF concerns. The Authority's responses to other stakeholder submissions are as follows:

- (a) in response to the view that as irrigators do not need to order water in the scheme operating costs should be lower, operating costs already take into account the absence of such services;
- (b) in regard to comments that irrigators do not benefit from the infrastructure, the Moreton ROP indicates that irrigators (and all users) benefit from the improved reliability offered by infrastructure and should contribute to an appropriate share of

costs. Catchment management and water quality activities specific to urban users have been excluded from irrigation costs; and

(c) consistent with (b), costs should not be limited to metering and minimal book-keeping costs. The allocation of operating costs between different priority holders is a relevant issue and is reviewed below.

In response to stakeholders who have submitted that irrigators provide benefit to riparian areas, the Authority acknowledges that irrigators can assist with stream-bank management and maintenance of water-ways. Such management is in the best interests of irrigators themselves and is normal practice in comparable schemes around the State. While there is no specific operating cost offset proposed for this contribution, it is noted that irrigators are not required to meet full recovery of a share of capital costs - that is, irrigation prices are targeted to lower bound levels.

SKM reviewed a sample of items, taking account of comments received from stakeholders in regard to specific costs. SKM also reviewed the relevance of certain costs to irrigators and made adjustments SKM considered appropriate.

MBRI considers that the sampling process adopted is flawed as the CBRWSS is so much larger in scale compared to the other schemes being assessed. All classes of costs should be reviewed and assessed and checked to ensure non storage related costs, for example, flood mitigation are removed and that other safeguards be implemented to ensure costs do not reflect levels higher than what would be expected.

QCA is wrong in its assessment that Segwater provides a release service to irrigators and that irrigators benefit from improved reliability by the infrastructure of both Somerset and Wivenhoe. A proper reading of the Moreton ROP shows that irrigators are now worse off than previously because announced allocations linked to lake levels are more stringent than those previously agreed with Government during the drought in the mid 2000's. In addition, the conditions under which Segwater may release water mean that there have been no occasions since the ROP came into operation where Segwater would have found it necessary to release water to meet irrigation demand.

Refer to the Body of the Response to the Draft Report.

QCA Volume 2. Chapter 5.

Item 1. Operations. Materials and other costs Page 48 - 61

Conclusion

The operating expenditure item is assessed as prudent as the need for the expenditure has been demonstrated.

The operating expenditure is assessed efficient as the scope is appropriate, the operating expenditure in support of regulated service delivery is consistent with industry practice and the costs are consistent with prevailing market conditions.

However, SKM queried the inclusion of a number of items to the materials and other the cost group as they were considered as potentially belonging to alternative cost SKM and QCA have not attempted to verify the accuracy or completeness of the cost information provided. The cost data include flood mitigation costs; these costs do not form part of the CBRWSS but SKM was not asked to address this aspect. QCA has not correctly identified water storage costs and has allowed flood storage costs to be considered which are clearly outside of the infrastructure needed for water storage and managed under the Moreton ROP.

groups of direct labour and contractor in addition to repairs and maintenance. These items were identified above.

In response, Seqwater stated that "the groups of costs reported in the NSP are Labour, Contractors and Materials and Other, with security contractors being classed under 'other' in the NSP". This is different to the classification adopted by the Authority in its Terms of Reference, where it has separated expenditure under materials and other and expenditure under labour and contractors. SKM considered that it may be appropriate for further reviews for Seqwater and the Authority to discuss and agree upon appropriate budget categories for allocating expenditure items.

Nevertheless, SKM considers the costs detailed in Table 5.13 to be necessary for the operation of the Central Brisbane River WSS, and therefore are assessed as reasonable.

MBRI repeats its concerns regarding SKM's independence.

SKM fail to identify the savings in operations costs should MBRI members decide not to use their allocations for one year.

This demonstrates that operating costs have little or nothing to do with MBRI irrigators' use of the water

QCA Volume 2. Chapter 5.

Item 2. Direct Labour costs Page 61 - 70

Conclusion

The operating expenditure item is assessed as prudent as the need for the expenditure has been demonstrated.

The operating expenditure is assessed as not efficient as the operating expenditure in support of regulated service delivery is not consistent with industry practice and the costs do not represent the least-cost means of providing the requisite level of service within the relevant regulatory framework. In particular, SKM considers that the budgeting for 1 FTE dam operator equivalent of overtime for dam operations is excessive and that a budget for overtime equivalent to 0.5 FTE is more reasonable.

SKM suggested that Seqwater will need to address the following information shortfall to further clarify dam operations labour costs:

- (a) reasons for the high rate of overtime at Somerset Dam for Dam Operations and Wivenhoe for Catchment Services; and
- (b) information regarding any efficiency targets set for productivity improvements.

In SKM's view, forecast 2013-14 labour costs in the Central Brisbane River WSS costs may be reduced by setting overtime at a lower level to reflect the current low utilisation of dam operating staff. No reasons have been provided for such a high rate of overtime and unless adequate justification is provided, SKM recommended adjusting the allocation of overtime to reduce the labour costs allocated to Central Brisbane River WSS in 2012-13 to \$2.967 million.

Authority Analysis

The Authority notes that SKM's recommendation is for a 3.7% reduction to Seqwater's 2012-13 budgeted amount. SKM's revised estimate corresponds with

MBRI repeats its concerns about the level of operating cost and again draws QCA's attention to the lack of any tangible service.

The expenditure assessed contains many items that are not prudent and efficient. The basis of sampling is not representative of the costs having regard to the failure to adopt stratified random sampling across all cost categories. The inclusion of costs that do not specifically relate to water storage means that the saving identified are substantially underestimated.

MBRI considers the sampling used is not sufficient to draw the conclusions that QCA reaches. MBRI acknowledges the budget restrictions that apply to QCA, but it should be remembered that some of the high costs that attach to reporting in this matter would be better attached to seeking efficiencies in the process and establishing factual bases for the charges before time and resources are spent on analysis and reports (eg the extent to which community service obligations and flood control equipment have been included in this pricing path).

As to other matters see MBRI's response to the recommendations in Volume 1.

Seqwater's revised (November 2012) submission in regard to this cost item.

The Authority recommends that SKM's conclusion be accepted and the revised forecast be included for pricing purposes.

Conclusion

Sampled Operating Cost Items

For the Central Brisbane River WSS, the Authority sampled two direct operating cost items.

The Authority proposes to accept the recommended efficient cost estimates developed by SKM.

Compared to Seqwater's revised estimates, SKM found materials and other costs to be prudent and efficient, but identified savings in direct labour costs. These are shown in Table 5.16 for 2012-13.

Unsampled Operating Costs

For unsampled items, as outlined in Volume 1 the Authority reviewed in detail approximately 55% of proposed direct operating expenditure for prudency and efficiency.

At issue is how to address scheme specific direct operating expenditure not reviewed in detail. Accordingly, the Authority drew upon the results of the SKM review which identified an average saving across all sampled operating cost items.

As outlined in Volume 1, the Authority considered there was merit in applying an average, uniform saving to unsampled direct operating expenditure (excluding electricity and rates) of 4.9%5 (or 5% rounded).

Based on this methodology, the Authority's recommended direct operating expenditure is outlined below (Table 5.16 refers). In addition to the efficiency adjustments for the 2012-13 year, the Authority also considers it appropriate to reduce forecast direct operating costs by a further 1.5% per annum in real terms as a general productivity gain, applied cumulatively for each of the 4 years of the regulatory period (2013-14 to 2016-17). Details are provided in Volume 1.

Cost Escalation

Seqwater

Seqwater proposed that where its costs rise in line with inflation, it has adopted the midpoint of the Reserve Bank of Australia's (RBA's) target range for consumer price inflation at the time of its submission, being 2.5% per annum.

For direct labour costs, Seqwater proposed an annual increase of 4% over the 2013-17 period. This aligned with the Authority's SunWater recommendations and was in line with historic growth in labour cost indices

over the past 5 to 10 years.

Similarly, Seqwater proposed a 4% escalation for materials and contractors costs, also consistent with the SunWater report and growth in relevant ABS construction cost indices

over the last 10 years.

Seqwater submitted that electricity costs comprise only a small proportion of total operating costs of the irrigation water supply schemes and are difficult to forecast.

Seqwater proposed that electricity costs associated with the assumed pumping in the 2012-13 budget be escalated by inflation (2.5%) for the regulatory period (from 2013-14) with a proposed settlement at the end of the regulatory period to reflect the actual electricity costs incurred.

Seqwater has proposed that other direct operating cost categories (that is, other than direct labour and contractors & materials) and all non-direct costs, be escalated from the 2012-13 base year in line with inflation.

Authority's Analysis

The Authority's analysis of cost escalation is detailed in Volume 1.

The Authority recommends that for the regulatory period 2013-17: (a) the costs of direct and non-direct labour and contractors should be escalated by 3.6% per annum, rather than 4% as proposed by Seqwater;

- (b) the costs of direct materials should be escalated by 4% per annum;
- (c) other direct and non-direct costs should be escalated by 2.5% per annum; and
- (d) electricity should be escalated by 2.5% per annum. However, should Seqwater sustain material electricity cost changes above the escalated level, consideration should be

given to an application by Seqwater to the Authority for an end-of-period adjustment.

QCA Volume 2. Chapter 5.

5.5 Prudency and Efficiency of Nondirect Operating costs Page 70 - 76 Authority's Analysis

The Authority (QCA 2012b) assessed Seqwater's non-direct operating costs as part of its 2012-13 GSC Review. That review concluded that Seqwater's operating costs (including non-direct costs) should be reduced by 2.5% to reflect a general efficiency gain.

The Government subsequently increased the general efficiency gain to 3.0% and removed Seqwater's proposed recruitment of 62.5 Full Time Equivalents (FTEs) for vacant and new positions, both to apply to the 2012-13 year.

Seqwater (2012aj) has taken these adjustments into account in its revised submission to the Authority. As these costs have been imposed by Government, the Authority does not propose a further reduction for 2012-13. However, as the

MBRI considers the non-direct costs are not representative of any service provided to irrigators.

MBRI disagrees with QCA's interpretation of the Ministers' Direction. That document does not direct to whom costs should be allocated and in many cases the allocation of those costs is totally inappropriate. See detailed discussion in the body of the Response.

implications of the merger are currently being considered by Government, further adjustments to the Authority's estimates of non-direct costs may be necessary for the Final Report.

The Authority notes that Segwater adjusted its aggregate non-direct costs to exclude those costs not relevant to the provision of irrigation services, including costs associated with technical warranty and development, water treatment operations including catchment and water quality management, and costs associated with planning and policy for major nonirrigation capital projects. The Authority accepts these adjustments, noting that specific cost attribution may remain problematic in some cases. In addition to the above adjustments for the 2012-13 year, the Authority also considers it appropriate to apply a productivity adjustment to the established efficient cost base for 2012-13 for anticipated future efficiency gains brought about by technological, organisational, and operational improvements in service delivery. The Authority recommends a reduction in forecast non-direct operating costs by a further 1.5% per annum in real terms as a general productivity gain, applied cumulatively for each of the 4 years of the regulatory period (2013-14 to 2016-17).

In regard to working capital, the largest portion of irrigators' payments to Seqwater arises from fixed Part A and C charges paid in advance, whereas GSC charges are paid in arrears.

This means that, for irrigation activities, Seqwater would not suffer an economic cost resulting from the timing difference between receivables and payables. Seqwater was requested to provide further substantiation of its proposal. However, as further evidence was not forthcoming, the Authority has not incorporated a working capital allowance is justified in this instance.

The Authority accepts Seqwater's proposed escalation of 2.5% per year for 2013-17 for nondirect costs (other than labour and contractors which are escalated at 3.6%).

In response to other stakeholders, the Authority notes that non-direct costs do not exceed direct costs in irrigation schemes. Further, the Authority has reduced non-direct costs when direct costs are reduced.

As noted above, the Authority proposes that catchment management and water quality activities that are conducted for the sole benefit of urban water supply be removed from forecast costs.

In regard to flood enquiry costs, Seqwater has advised the Authority that the cost of participation in the flood enquiry is not relevant to irrigators. However, it is possible that some costs related to enquiry

recommendations may be relevant at some future date. At this stage, no provision for these costs was made in the 2012-13 budget and consequently, no costs were carried forward into the 2013-17 period for irrigation In response to the stakeholders who commented that recreation costs should not be passed on to irrigators, the Authority notes that the Ministerial Direction explicitly requires that Segwater be allowed to recover efficient recreation costs. The Authority's recommended level of nondirect costs to be recoved. Authority's Analysis. Stage 1. QCA Volume 2. Chapter 5. In the Authority's SunWater review, analysis MBRI disagrees with QCA's analysis by Deloitte was largely ambivalent on which of 5.6 Prudency and and sets out an alternative position in these two measures DLC or TDC (out of the Efficiency of Nonits Response to the Draft Report several considered and rejected) would be direct Operating most suitable to allocate non-direct costs. Both costs Stage 1 ans 2. were relatively highly ranked. Page 76 - 80 Although the DLC approach was adopted for SunWater, the Authority concluded that this did not necessarily apply for other entities. The Authority considered the approach proposed by Seqwater was fair and reasonable, having regard to Segwater's particular cost accounting systems and procedures. Authority's Analysis. Stage 2. The Authority notes Segwater's submission that the initial HUF calculated by PB has resulted in a perverse outcome for the Central Brisbane River WSS. In Chapter 4 (Renewals) the Authority reviewed Segwater's alternative "adjusted HUF" methodology provided by PB which is based on the single trigger of 14.9% of useable volume corresponding with MP allocations being reduced to zero. The Authority noted, however, that the Moreton ROP prescribes a range of triggers which represent a progressive reduction in MP allocations once the useable volumes in Somerset and Wivenhoe Dams reach less than 50%. The Authority notes that announced allocations associated with MP are reduced progressively over a range of useable volume scenarios and not just when the less than 15% trigger is met (see Table 4.6 in Chapter 4). Accordingly, the Authority considered that a more appropriate approach would be to include reference in the HUF calculation to this range of scenarios. On this basis, the Authority arrived at an allocation to irrigation of 1.6% rather than the 2.1% proposed by Segwater.

For the Central Brisbane River WSS, the Authority, therefore, recommends that:
(a) fixed repairs and maintenance costs be allocated to medium priority customers using

	adjusted nominal WAE (1.6% of costs to medium priority WAE); and (b) all other fixed operating costs (including insurance premiums) be allocated 50% using adjusted nominal WAE (1.6% of costs to medium priority as above) and 50% using current nominal WAE (2.46% of costs to medium priority). In response to Riverside Farming (2012), the Authority agrees that water should be valued to reflect different supply reliabilities and has recommended accordingly. The costs of meeting compliance obligations (including environmental management) are a legitimate cost of supplying water for irrigation purposes, and are required to be included in Seqwater's costs under the Referral Notice. In response to S. & H. Sinclair (2012b), the Authority has taken into account adjusted	
	volumetric capacities as measured by HUFs so that cost allocation reflects different supply reliabilities where appropriate. WAEs are used to allocate costs only where users of water face the same reliability of supply. In response to J Craigie, the Authority	
	considers that: (a) as noted above, costs not related to irrigation services have been excluded from the cost base, while those that are common to both irrigation and non-irrigation customers are allocated in the manner recommended;	
	(a) the Authority's alternative approach to the HUF methodology is considered to provide a fair and reasonable allocation between high and medium priority but the WRP process defines nominal allocations taking into account both supplemented and unsupplemented sources; and	
	(b) flood mitigation benefits could be expected to accrue to all users downstream of the dams, including riparian irrigation users. It could be expected that flood impacts on irrigators would be less than if the dams did	
QCA Volume 2. Chapter 6. Draft Prices Total Costs Page 82 - 85	Authority's Analysis The Authority notes that the proposed amount for the revenue offset is slightly higher than the recent average of \$457,300 (over the 2009-10 to 2011-12 period). However, the Authority proposes to accept the amount of \$510,900 as a revenue offset for the Central Brisbane River WSS (\$2012-13).	MBRI seeks production of a schedule which would indicate all of the beneficiaries from the dam storage with the revenue collected or projected to be collected during the pricing period
QCA Volume 2. Chapter 6. Fixed and Variable Costs Total Costs Page 85 - 86	Authority's Analysis The Authority's review of SunWater irrigation pricing considered the issue of tariff structures, with a detailed review by Indec Consulting of the proportion of costs that could reduce when water demand is low. Details are in Volume 1. The Authority noted that SunWater and Seqwater schemes share similar	MBRI reserves judgement on the proportion of costs that could reduce when water demand is low. In the context of the CBRWSS the volumes are so low as to have no effect on the costs and since no charges are applied would have little effect on the revenue. The fact that for over 50% of the time the actual costs are not recorded gives us

	characteristics. Most of the costs associated with operating a bulk WSS are fixed and do not vary with water use. The Authority therefore sought to, where	little confidence that the "findings" have any relevance to the CBRWSS at this point
	appropriate, apply the Indec findings to Seqwater schemes. Volume 1 provides further details on this analysis.	
	In summary, the Authority considers that some costs in both bulk schemes and distribution systems will vary with water use. Accordingly, the Authority will apply the findings determined for the SunWater Review to Seqwater schemes (Table 6.2 refers).	
QCA Volume 2. Chapter 6. Variable charges and Costs Total Costs Page 86 - 91	Authority's Analysis The Authority notes that because charges currently do not apply for Central Brisbane River irrigators, there is no current revenue amount for comparison. The Authority's revenue analysis therefore depends on the approach taken to setting initial water prices. Authority's Analysis	MBRI submits that MBRI irrigators should not face any Part A tariff because infrastructure fixed costs are irrelevant to irrigators whose demand is able to be fully met from unsupplemented water.
	On the analysis provided above, the Authority's cost-reflective Part A tariff is \$38.34/ML and the Part B volumetric tariff is \$12.31/ML.	MBRI's main submission is that for reasons outlined in detail in this Response, no charge should be levied
	Given that irrigation tariffs have not previously applied, it is not possible to calculate current irrigation revenues, in the same manner as for other Seqwater schemes. Further, the Ministerial Direction does not specify a rate of increase to apply over a price path to the Central Brisbane River WSS. In considering this matter, the Authority has considered a price path that 'moderates the price impacts on irrigators' and has 'regard for Seqwater's legitimate commercial interests'.	on the 6771ML water. MBRI in the Body of the Response draws QCA's attention to a range of anomalies and items that should not be appropriately counted in regard to irrigation.
	For reasons specified above, the Authority recommends that the cost-reflective volumetric charge of \$12.31/ML apply from 1 July 2013.	MBRI disputes the conclusion that water trading would be facilitated by tariffs.
	The cost-reflective Part A charge is \$38.34/ML in 2013-14. The Authority, however, does not consider it appropriate for prices to start at this level, as the Ministerial Direction requires a moderation of price impacts.	
	Applying the Authority's general approach to setting fixed charges would result in an opening Part A charge of \$2/ML. However, such an approach does not have sufficient regard for Seqwater's legitimate commercial interests and is unlikely to promote trading. As no charge has previously applied, the Authority expects that introduction of charges to result in increased water trading as some irrigators who do not use their WAE will seek to avoid the fixed charge.	
	The Authority considers that water should move to its best and highest value use, and the trading from an unproductive owner, to a productive owner will increase agricultural output and economic activity. Accordingly, the	

Authority considers that the fixed charge should promote trading.

The starting Part A charge should balance Seqwater's commercial interest and the promotion of trading with the need to allow irrigators the time to adjust.

Therefore, the Authority has given consideration to charges faced by (competing) irrigators in neighbouring WSSs. Under such an approach, the initial Part A tariff for the Central Brisbane River WSS is the simple numerical average of recommended Part A tariffs in the Logan River, Lower Lockyer Valley and Warrill Valley WSSs.

Central Lockyer WSS is also relevant geographically but no Part A charge applies until 1 July 2015. The average of these recommended Part A tariffs is \$22.66/ML. This starting price in the Central Brisbane River WSS moderates the price impact on irrigators and accommodates Seqwater's legitimate commercial interests (compared to a starting Part A of \$2/ML).

Moreover, a Part A of \$22.66/ML would better promote permanent and temporary water trading in the scheme than a starting Part A of \$2/ML. That is, with a higher (Part A) holding cost associated with WAE, water trading will likely increase, moving WAE to higher value uses.

The Authority considers that the increase of \$2/ML real per annum that the Authority has applied to other tariff groups is appropriate to apply to the Central Brisbane River WSS.

In conclusion, therefore, the Authority recommends a starting price that is the average of the 2013-14 recommended Part A tariffs for Logan River, Lower Lockyer Valley and Warrill Valley WSSs. The Part A tariff would increase by \$2/ML in subsequent years. This approach is likely to achieve cost-reflective pricing over two regulatory periods (assuming no change in costs).

On the basis of the previously described analysis and principles, the Authority recommends prices as outlined below (Table 6.6 refers).

•••

The Authority's recommended prices are presented in nominal terms for 2013-17.

However, it is anticipated that actual prices will be established each year (March quarter) by Seqwater on the basis of changes in the Brisbane All Groups CPI.

The Authority notes that the starting price suggested by S & H Sinclair (2012) is largely comparable with the Authority's recommended Part A charge. However, the Authority proposes the price be increased at \$2/ML per year rather than \$5/ML per year as suggested by Sinclair.

OCA Volume 2	The impact of any change in prices on the total	MBRI submits that the conclusion that
QCA Volume 2.		
Chapter 6. 6.9	cost of water to a particular irrigator, can only	affordability is beyond scope is wrong
Impact of	be accurately assessed by taking into account	and perverse for reasons outlined in
Recommended	the individual irrigator's water usage and	the body of this Response.
	nominal WAE (see Volume 1).	1
Prices Page 91	The Authority also notes that the capacity of	
	irrigators to pay cost-reflective charges is	
	beyond the scope of the Ministerial Direction.	
	In the Authority's SunWater review, the	
	original Ministerial Direction was amended to	
	exclude consideration of capacity to pay from	
	the Authority's brief. The same approach is	
	considered to apply to the Seqwater irrigation	
	review.	
	Teview.	

Comment on terms of reference

MBRI has argued from the outset of this review that legal issues and affordability are critical questions to be addressed in water pricing. QCA has indicated that the terms of reference do not include such matters, but QCA has not produced to MBRI any of the material that supports a view that it is precluded from considering these key matters.

The terms of reference are contained in the Ministers' referral notice forming Appendix A to the Draft Report, Volume 1.

Generally, in MBRI's submission, the terms of reference do not preclude QCA determining that the appropriate price for MBRI irrigators' water is no charge, or that no price recommendation should be made for MBRI irrigators.

QCA appears to have asserted that it is obliged to impose a price on MBRI irrigators under the terms of reference. This is simply wrong and fundamentally misconstrues the requirements of the terms of reference, and indicates a pre-judgement of the outcome or a closed mind.

The terms of reference do not require the imposition of prices on each and every user, merely the calculation of price related to the Seqwater's costs. The calculation of price for each irrigator or class of irrigator is a methodological and accounting question, not a mandated matter under the terms of reference.

A fair reading of the terms of reference includes the possibility of QCA determining that, in particular circumstances, no charge should be levied. It is a perverse construction of the terms of reference to say that, QCA must recommend a price (other than zero) where, for example, imposing a price would be:

- (a) unfair;
- (b) unreasonable;
- (c) inefficient; or
- (d) unsustainable.

It is even more perverse to assert that a price should be recommended if there were existing legal obligations that no charge can be imposed. To do so means that QCA would be recommending that the State, and Seqwater, should breach their legal obligations.

QCA has informally told MBRI that it has advice from as many as five lawyers, prepared for the purpose of QCA's report (and therefore not privileged). This advice should, in the interests of transparency and in the public interest, be provided to MBRI immediately.

In MBRI's submission, QCA has a duty, consistently with the terms of reference and good policy, in circumstances where a price recommendation would be unfair, unreasonable, inefficient, unsustainable or unlawful not to recommend a price at all, or to recommend no charge (a zero price).

The terms of reference allow QCA to make price recommendations including that:

- (a) the appropriate price for MBRI irrigation water is zero; or
- (b) no price recommendation should be made to Government.

The substantive arguments about the legal and other factors mentioned above are addressed elsewhere in this Response.

Paragraph 1.5 of the terms of reference requires QCA to have regard to the level of service provided by Seqwater to its customers of the various schemes.

First, MBRI irrigators are not "customers" of Seqwater in any commercial sense of the word. The relationship with Seqwater was statutorily imposed on MBRI's members with no consultation and no mutuality of bargaining. Access to irrigation water within the 6771ML is quite independent of any assets operated by Seqwater and is able to be supplied entirely from natural flows and recharge, as demonstrated elsewhere in this Response. However, allocation holders are said by Seqwater and QCA to be subject to "deemed" contracts, the deeming being under the *Water Act 2000* and various instruments made pursuant to that Act.²

Second, the level of service provided by Seqwater to MBRI irrigators is functionally zero, or even resulting in negative impacts. There is no irrigation specific infrastructure, such as one might find in the channel irrigation schemes, and Seqwater has no programs that are designed to meet the needs of MBRI irrigators.

The deemed contract by clause 2 suggests that Seqwater (the ROL Holder) "will release water from the ROL Holder Works [Somerset and Wivenhoe Dams] and the Customer agrees to accept the release of water ..." Clause 3 provides that Seqwater "must release water from the [dams] as ROL Holder reasonably estimates will satisfy demand of the Customer from time to time".3

As discussed elsewhere in this Response, this release of water and its acceptance (as supplemented - i.e. dam - water) is a fiction. To base water pricing on this fiction is not necessary under the Terms of Reference. Nor is it rational or probably even consistent with QCA's duties at law.

Since the 2011 floods, Seqwater has stopped alerting irrigators in advance of its intention to release water, resulting in irrigators suffering loss and damage to land, plant and equipment, crops and animals. An email alert of pending flooding from releases was a "service" previously provided that allowed irrigators to remove pumps above flood levels and to prepare for inundation. Seqwater now only provides a general notice service available by text message or email to any member of the community, and only after releases have been initiated. MBRI is of the view that such alerts are not a service for value but a legal and community service obligation that Seqwater owes landholders and the community downstream from the dams.

If QCA is to take into account service, as Clause 1.5 in the terms of reference requires, it is logical that it should discount for lack of service and for the costs and damages that arise from a failure to provide service.

In regard to paragraph 1.7 of the terms of reference, MBRI points out that <u>any</u> non-zero price will exceed inflation because the price is currently zero. Accordingly any recommendation for any price must consider price path issues. MBRI's main argument

² "Standard supply contract Central Brisbane River Water Supply Scheme" dated 27 November 2009 over the signature of Debra-Lee Best as delegate of the chief executive, purportedly made under s.122A of the *Water Act 2000* and notified *Gazette* Vol 352, No.93, 4 December 2009 p.1047

³ 6771ML over a year is satisfied by releasing 214.71 litres/second, a risible suggestion. It is improbable that such a miniscule amount could even register telemetrically. Release rates were as high as 12,000m3/s in the 2011 floods: Houghton D. (2011) "Wivenhoe Dam to release 12,000 cubic metres of water every second". *Courier-Mail* 11 Jan 2011 (http://www.couriermail.com.au/news/wivenhoe-damgates-opened-wider-to-increase-flows-into-brisbane-river/story-e6freon6-1225985753811 accessed 7 March 2013). 6771ML would at that rate pass into the river in 9m24s

is that the current zero price should continue for legal, economic, efficiency and ethical reasons. However if QCA determines a non-zero price, MBRI argues that:

- (a) a long price path is required to moderate price impacts on irrigators. As argued in this Response, prices of the scale envisaged by the draft report will make much of the farming undertaken in the MBRI area uneconomic;
- (b) any price path logically would have to be longer than one price path period given the lack of relevant data on which this current review is based;
- (c) should QCA decide to maintain the status quo and not recommend a price, or determine the proper price to be zero, then the complexity, inefficiency and administrative burden of price paths is avoided for MBRI irrigators and government parties alike;
- (d) alternatively, because MBRI irrigators do not benefit from and cannot utilize Somerset or Wivenhoe Dams for access to irrigation water, no asset related charge should logically be included. Any price should be consumption based and reflect the fact that no headworks are utilized. That would result in no Part A charge for MBRI irrigators, and any charges being consumption based only.

MBRI submits:

That any non-zero price for water:

- (a) be subject to a price path over at least 10 years;
- (b) not include a component for infrastructure that is not dedicated for irrigation;
- (c) be based solely on consumption (ie the Part B tariff only).

The terms of reference require QCA to undertake open consultation.

While MBRI was disappointed at the level of engagement between QCA and irrigators early in the process, QCA has, late in the process been more open. MBRI thanks QCA and its officers for that.

MBRI is a very small player in this pricing inquiry, and being heard has been a challenge. Draft Report Vol.1 makes only one references to MBRI (on page 168). Even more notably, Vol.2 that is entirely CBRWSS-specific makes only passing reference to MBRI.⁴ In both cases, this is despite MBRI having made comprehensive submissions and sought multiple meetings with QCA officials. QCA chose to schedule its main open meeting with MBRI members mid-afternoon on a Thursday, which presents obvious problems for farmers and small business operators. Unsurprisingly, few members were able to attend the QCA briefing session, diminishing the voice of MBRI, and raising concerns whether MBRI and its members were given a fair hearing.

Despite these difficulties, MBRI has been able to meet with QCA and the initial concerns were somewhat alleviated.

MBRI submits:

That QCA continue open and frank consultation with MBRI, its members, and water users in the MBRI area before recommending a price.

⁴ pp 18, 42 and 46

Legal position

Riparian owners' rights in the MBRI area

The old common law right to use of water of a riparian owner was reasonably open:

His rights incidental to ownership are limited by corresponding rights of other riparian owners. They include the right to use and consume the water for domestic purposes and for his cattle, and further, to use a reasonable amount for the irrigation of, or for manufacturing purposes on, his land, provided that he returns the water so used substantially undiminished in volume and unaltered in character; but he may not use such water for the purposes of supplying persons outside his land. He may, however, acquire by purchase or otherwise the rights of other owners, and so become entitled to divert the whole or part of the water in a stream for the purpose of general water supply.⁵

Those old rights were supplanted in Queensland by the *Rights in Water and Water Conservation and Utilisation Act 1910* (Qld). The Act vested rights in natural water in the Crown (s.5), deemed beds and banks of watercourses and lakes to be the property of the Crown (s.6), prohibited the diversion or appropriation of water from watercourses, lakes and springs except in the exercise of rights for domestic and stock watering purposes (s.7) annulled any right of use by riparian owners (s.9), and preserved the rights of existing irrigation works' owners subject to future regulation (s.10). The "ordinary rights of riparian owners" and the right to apply for licenses were set out in s.11 and 12 respectively.

These legal precepts were preserved by the *Water Act 1926* (Qld). That Act in s.9 set out the "ordinary riparian rights" as follows:

Every owner or occupier of land abutting on the bank of a watercourse, lake, or spring shall, in respect of such ownership or occupation, have the right to use the water then being in such watercourse, lake, or spring, for domestic purposes and for watering stock or for watering any horticultural or agricultural garden not exceeding three acres in extent provided such garden is used solely in connection with the dwelling-house and not for marketing purposes, and it shall not be necessary for such owner or occupier to apply for or obtain a licence in the exercise of that right. The owner or occupier shall not be entitled to construct or use any work under the aforesaid right unless and until he is given the Commissioner notice and specifying particulars of such work, and has obtained QCA of the Commissioner to construct or use such work. Any occupier constructing or using the work under the provisions of this section without first giving the said notice to the Commissioner or about QCA of the Commissioner as aforesaid, as the case may be, shall, on conviction, be liable to a penalty not exceeding [twenty dollars] and to a further daily penalty not exceeding [one dollar].6

Irrigation works were subject to the *Water Act 1923* (s.10), and by s.11, riparian owners could, under license issued by the Commissioner, construct and use works for water conservation, irrigation, water supply, drainage or flood prevention.

The right to divert water (except for domestic and stock purposes) was subject to rights granted under the Act.⁷

⁵ Halsbury's Laws of England 3rd edition, 1962, Vol 39 page 214

⁶ decimilisation substituted by *Decimal Currency Act* 1965 (Old)

⁷ rights and limits thereon in s.6, 9, 10; licensing scheme established by s.12. As to which see also *Australian Capital Territory v Queanbeyan City Council* [2010] FCAFC 124, per Keane CJ at par 80, and

The *Water Act 2000* (Qld) is the current legislation governing rights to access and use water. S.19 continues the vesting of water in the State. A riparian owner has limited rights to take water from the watercourse for domestic purposes and stock purposes.⁸ Those rights are subject to limits or prohibition that may be imposed by the chief executive of the administering department on taking water for watering a garden: s.24.

Access to water for irrigation purposes is now complex, cascading down from high-level WRPs to ROPs that specify, for example, supply management rules, environmental flow rules, and trading in entitlements; and Resource Operations Licences (ROLs). ROPs implement WRPs in the plan area. An allocation to an end user may be made as an unsupplemented allocation or a supplemented allocation.

By the Water Regulation 2002 (Qld):

supplemented water means water supplied under an interim resource operations licence, resource operations licence or other authority to operate infrastructure.

The *Water Resource (Moreton) Plan 2007* in the dictionary provides as follows:

supplemented water means surface water supplied under an interim resource operations licence, resource operations licence or other authority to operate water infrastructure ... **unsupplemented water** means surface water that is not supplemented water.

In short, unsupplemented water is natural overland flow or rainfall and naturally recharged water in the watercourse such as holes when the river is not flowing.

MBRI's members take water under allocations now provided for by the *Water Resource* (*Moreton*) *Plan 2007* ("Plan"). Section 36 of the Plan provides that water allocations for the Scheme area are to be managed under ROLs. Access to water is subject to "announced allocations", being a percentage of the nominal allocation calculated by reference to the dam levels (Moreton ROP 2009, s.77 and Att.5 Table 5). The result is that in dry times, MBRI irrigators' entitlements are reduced even if there is sufficient water to satisfy full entitlement from overland flows and natural recharge of holes (that is, unsupplemented water).

Infrastructure

(a) Somerset

Somerset Dam was constructed by the Bureau of Industry Stanley River Works Board on the Stanley River between 1939 and 1959.

Construction of the Stanley was authorised under the *Bureau of Industry Act Amendment Act 1934* (Qld) in s.6C, as follows:

6C(1) For the purpose of ensuring an adequate storage for the supply of water to the City of Brisbane and the City of Ipswich, and for the further purpose of preventing as far as may be destruction by flood waters in or about said cities, the carrying-out by the Bureau or delegated Crown corporation or instrumentality as prescribed in section six of this Act, of the works, namely, the construction of the dam across the Stanley River and all necessary appurtenances thereto at the site and in accordance with the plans and specifications to be hereafter approved by the Governor in Council, including all necessary preliminary acts

Perram J at par 199, each referencing and quoting from the High Court in *ICM Agriculture Pty Ltd v Commonwealth* [2009] HCA 51 per French CJ and Gummow and Crennan JJ at [50]ff. 8 s.20(3)

⁹ WWII disrupted construction and works did not resume until 1948

and matters in relation thereto, is hereby approved and authorised, and such works shall be and be deemed to be an authorised construction of works pursuant to the provisions of section six of this Act.

(2) For the purpose of the construction of such works the Governor in Council may by Order in Council invest the construction and the general supervision of construction of such works and all preliminary acts and matters relating thereto (including the preparation of designs, plans, and specifications) in a Works Board to be called "The Stanley River Works Board" consisting of such persons as shall from time to time been named in the Order in Council, but including the Engineer of the City of Brisbane for the time being in charge of Water Supply, and the Engineer of the City of Ipswich for the time being... (underlining added)

Thus the legislated purpose of the Stanley Dam was twofold:

- (a) the supply of water to Brisbane and Ipswich; and
- (b) flood prevention.

Irrigation was not a matter in contemplation of the legislature in the construction of what was to be Queensland's first major dam.

Water from Somerset Dam was released into the Stanley River, which in turn supplemented the natural flows from the Upper Brisbane River catchment and other downstream catchments into the Brisbane River. As the flow passed downstream, local authorities including Esk, Lowood and the Glamorgan Vale Water Board drew water for domestic water supply. Farmers also drew water for domestic, stock and irrigation purposes. These users were neither charged for the water nor called upon to make any contribution to the capital and operating costs of Somerset Dam. The mean average natural flows into the Brisbane River system below Somerset Dam were substantial and the Dam provided no improved reliability or benefit to them.

The area below Somerset Dam to Mt Crosby Weir that could be irrigated at no charge was limited, apparently by the Brisbane City Council and the former Irrigation and Water Supply Commissioner to 1,600ha. That limit was reached in 1969. No charge was levied for the water used by irrigators and despite an attempt to do so by the Brisbane City Council in 1973, Cabinet determined that no such charge should apply. 11

(b) Wivenhoe

The large dam at Wivenhoe was constructed after the 1974 floods, although the site had been under consideration for development in the 1890s and 1930s, but not progressed for cost reasons. Construction commenced in October 1976 and was completed in February 1984. The dam was upgraded between February 2003 and September 2005.

Leading up to the construction of the Dam, the Coordinator-General was authorised in 1972 to acquire land for Wivenhoe Dam. 14 It was estimated that 31,000 ha of land would have to be acquired because the land is directly affected by inundation and/or

 $^{^{\}rm 10}$ Cabinet Submission, Irrigation from Brisbane River Below Wivenhoe Dam, Submission No. 29918 , dated 22 August 1980, at page 1.

¹¹ Submission to the Hon. Minister for Water Resources, Aboriginal and Island Affairs, dated 24 February 1981, at page 3.

¹² http://www.thiess.com/capabilities/projects/wivenhoe-dam-stages-i-ii-iii

¹³ http://www.leightoncontractors.com.au/projects/wivenhoe-alliance/

¹⁴ Cabinet Decision No. 17523, dated 28 August 1972,

the area for the flood storage compartment up to 75m and possibly an additional 20,000 ha would eventually be acquired as a result of the indirect effects of the dam.¹⁵

The scale of the land acquisitions and construction resulted in considerable economic and social disruption to local communities including:

- loss of critical mass in some surrounding agricultural industries due to loss of irrigated lands within the footprint of the lake and loss of good dairy farming land and other pastoral lands surrounding the proposed lake and flood storage areas;
- land use restrictions on residual lands within the catchment of Wivenhoe Dam, eg prohibition of intensive agriculture;
- prohibition¹⁶ and then restrictions on irrigation out of Wivenhoe Lake¹⁷;
- population shifts and associated impacts on social amenity and other services;
- impact on local communities and businesses due to lower economic activity as a result of acquisitions.
- severance of communities and associated costs. 18

Following the Government's decision to construct Wivenhoe Dam, the *Brisbane and Area Water Board Act 1979* was passed. The Act by s.43 divested certain local Authorities of their entitlement to take water from such headworks or downstream of such headworks and vested those entitlements with the Board. The Act nevertheless recognised the pre-existing rights of certain Local Authorities to continue to draw water passing downstream from Somerset Dam at no charge up to a capped quantity. The "Notes on Brisbane and Area Water Board – Summary of Draft Bill" prepared by Raleigh Gipps dated 12 July 1978 to Commissioner Mr D Beattie stated "The Division safeguards Local Authorities existing rights to water".

The Act provided that unless this new Board assumes control over particular Local Authority headworks then those Local Authorities would continue to not be charged for water that passed downstream from the dam provided that quantity did not exceed specified volumes as follows:

- 220ML a year for Esk (section 45(2))
- 270 ML a year for Lowood (section 46(2))
- 250ML a year for Glamorgan Vale (section 47(2))

When the water taken exceeded, or was expected to exceed, the quantities specified, the additional supply was subject to agreement between the boards under s.61, which 61 provided, inter alia, that the agreement was to provide the basis on which the price of that water is to be established and varied from time to time.

These free water allocations to Esk, Lowood and Glamorgan Vale continued be recognised in subsequent government policy settings and set the groundwork for recognition that MBRI irrigators' rights to water at no charge should also be recognised.

¹⁵ Cabinet Submission, Wivenhoe Dam Project – Assistance for District Landholders, Submission No. 22896, dated 17 December 1976, at page 3.

¹⁶ Cabinet Decision No. 18071, dated 9 January 1973.

¹⁷ Cabinet Decision No. 33584, dated 25 August 1980.

¹⁸ See for example, Cabinet submission No. 22896.

This Act made no provision for Brisbane River irrigators. It was an Act specifically dealing with the control of bulk supply of water to Local Authorities. Accordingly irrigators continued to be entitled to draw water from the Brisbane River at no charge.

As a result of land acquisitions, by 1980 only 66 licenses over an authorised area of 783ha for irrigation remained below the proposed Wivenhoe Dam. Licences were being progressively cancelled within the reservoir and more resumptions were to occur with the completion of the Dam. Ten applications for new water licenses were refused. Only one applicant exercised a right to appeal to the Land Court but the appeal was dismissed. The then Minister, N E Hewitt, in supporting an increase in irrigation area to 1,000ha and 7,000ML in volume stated:

With the reduction in licenced area since 1969 and further decrease which will occur with the completion of the dam, it is considered the commissioner of Water Resources could find it difficult to withstand appeals against his refusal to grant new licenses on the Brisbane River downstream of Wivenhoe Dam

It is now expected that the full commitment of the dam will not be reached until at least the year 2010 and it would be reasonable to allow the licenced area below Wivenhoe Dam to be increased to a maximum of 1000 hectares either by granting new licenses or by increasing areas authorised by existing licenses. ²⁰

Surprisingly, no consultation occurred with the irrigators in the development of this submission and recommendations that also included charging irrigators for the first time. Consultations did take place with the Brisbane and Area Water Board who supported the proposal.

In August 1980 Cabinet decided as follows:

- That the Commissioner of Water Resource be authorised to issue licences, under the provision of the Water Act, to allow irrigation up to 1,000ha (7,000ML) from the Brisbane River between Wivenhoe Dam and Mt. Crosby Weir...
- That a charge be imposed on water taken for irrigation from the Brisbane River downstream from Wivenhoe Dam, the initial charge to be \$4.00 per megalitre per annum of which the Commissioner of Water resources will retain 75 cents and remit the balance of \$3.25 to the Brisbane and Area Water Board.
- That the charging for water commence from 1st July 1981.
- That the Annual Charge for water be reviewed annually on the basis of variation in the Consumer Price Index...²¹

In early 1981, irrigators on the Brisbane River between Wivenhoe Dam and Mt. Crosby Weir were advised that irrigation charges would be implemented from 1 July 1981 for the water taken from the river for irrigation. This caused considerable concern amongst irrigators and numerous meetings and representations occurred. The content of a Submission made by Mr T Matthews, barrister-at-law is attached to the submission previously made by MBRI and was canvassed in previous submissions by Mr JM Craigie.

As a consequence of these representations, the then Minister for Water Resources and Aboriginal and Islander Affairs, the Hon. KB Tomkins, was requested by Cabinet to review the situation and report back to Cabinet. The Minister made a submission

¹⁹ Cabinet Submission No. 29918, dated 22 August 1980, at page 2.

²⁰ Ibid, at pages 2 and 3.

²¹ Cabinet Decision No. 33534, dated 25 August 1980.

proposing that Cabinet reaffirm its decision of 1980. In the submission, the Minister advised of a deputation lead by the Hon. Bill Gunn objecting to the imposition of the irrigation charge. It was submitted to Cabinet that:

- supplies from this section of the river had never been in doubt and that they gained no benefit from releases from upstream storages and as a result charges should not be imposed;
- as neither Somerset nor Wivenhoe Dam were built for irrigation, no charge could be made
- there had been no prior advice about the charge being imposed.

The Minister further advised that the landholders found it difficult to accept that charges should now apply whereas they did not previously apply. However, there was no doubt that the irrigators below Wivenhoe Dam enjoyed fully regulated conditions and when compared to other streams it was unreasonable not to charge for diversion for irrigation.

Cabinet considered that submission and following discussion, the Minister withdrew the submission²² and was requested to prepare a new submission for consideration by Cabinet.

On 4 September 1981 Mr T Matthews wrote to the Hon. LR Edwards, Deputy Premier and Treasurer, following previous discussions on 2 September. The letter outlined two matters that emerged out of discussions at a meeting attended by the Commissioner for Water Resources and the Deputy Commissioner:

"Firstly, the Commissioner was asked whether there was any other area in Queensland where irrigators were charged for water other than those areas in which the water supply had either been established by or was substantially dependent upon storages which had been constructed with irrigation as one of the reasons for the construction. The Commissioner's answer was yes, the area upstream from the Rockhampton barrage. With respect that example is not supportive of the Commissioner's case. The water upstream from the Rockhampton barrage was naturally either salt or brackish and useless for irrigation. The barrage converted it into fresh water and so is the sole reason why it can be used for irrigation. The other matter concerned the amount of water which would naturally be in those reaches of the Brisbane River which are relevant without the Somerset and Wivenhoe storages. There was argument during the meeting about this, and obviously it cannot be established with any degree of accuracy now. However, after the meeting the Deputy Commissioner admitted to me that 100,000 megalitres would be a reasonable estimate. The Commissioner's proposals are that the irrigators should be allowed to use 7,000 megalitres a year so it is quite clear that the amount used by them would not impose any strain upon the water available and would not require the construction of a storage to permit irrigation."23

Besides all the representations and submissions made, it is believed these two matters were persuasive in Cabinet's deliberations and the decision to reverse its 1980 Cabinet decision to impose charges on irrigators in the following way:

1. Irrigators were only ever charged for water in areas in which the water supply had either been established by or was substantially dependent upon storages which had been constructed with irrigation as one of the reasons for the construction;

²² See Cabinet Minute dated 31 August 1981 No. 35914.

²³ Matthews, T, Letter to the Deputy Premier and Treasurer of Queensland, the Hon. LR Edwards, dated 4 September 1981.

2. A reasonable estimate of the natural flows in the mid Brisbane River was about 100,000ML and as the proposal was to allow irrigators to use 7,000ML a year it would not place any strain on the natural water available and would not require the construction of storage in order to permit irrigation.

On 11 September 1981, the Deputy Premier and Treasurer, Dr LR Edwards, acknowledged receipt of the submission and advised this matter has been raised in Cabinet and the Hon. Mr KB Tomkins, Minister for Water Resources and Aboriginal Affairs, will be presenting the paper to Cabinet. It is believed that Cabinet considered this new submission on Monday 14 September²⁴ but has not been found at State Archives within the time period.

The Minister presented a submission to Cabinet on 18 September 1981.²⁵ The submission merely states "Following the conclusions reached by Cabinet on that submission, it now becomes necessary to rescind Clauses 3, 4, and 5 of Cabinet Decision No.33534 on 25th August 1980." The Minister recommended and Cabinet decided to rescind the relevant paragraphs of the 1980 decision²⁶, namely:

- that a charge be imposed on water taken for irrigation;
- that the charging commence on 1 July 1981;
- that the annual charge be reviewed annually on the basis of variation in the consumer price index.

The 1980 Cabinet decision to increase the area under irrigation to 1,000ha and 7,000ML of water remained.

Continuation of pre-existing rights to water

The Government's decision not to charge irrigators, it is submitted, was based upon a sound legal basis, namely, there was a pre-existing right to take the water at no charge because it was never dependent upon the construction of infrastructure to supply it. There were sufficient natural flows available in the river system and therefore no delivery service by an infrastructure provider was necessary. A similar situation applied to the extraction of water for domestic supply to the towns of Esk and Lowood and Glamorgan Vale Water Board. Government policy setting subsequently for over 30 years continued to recognise this pre-existing right to water as evidenced in discussion papers, Explanatory Memoranda to Bills and Regulations. (Domestic supply for Esk and Lowood is now undertaken by Seqwater.)

A letter dated 9 July 1999 was sent to every irrigator attaching a paper "Converting the South East Queensland Water Board into a Joint State/Local Government Owned Company" and advising:

The allocation of 7000ML per annum exists for a number of irrigators downstream of Wivenhoe Dam. The incorporation proposal should have no material impact on existing irrigators, as the allocation will continue as a condition of the license to be granted to the new company.

The Consultation Paper at page 11 stated:

²⁴ This date was disclosed in a letter from the Deputy Premier and Treasurer of Queensland, the Hon. LR Edwards in a letter to Mr T Matthews dated 11 September. MBRI has been unable to find the submission at State Achieves.

²⁵ Cabinet Submission No. 32220, Irrigation from Brisbane River Below Wivenhoe Dam, dated 18 September 1981.

²⁶ Cabinet Decision No. 36061, dated 21 September 1981.

3.4 Existing Contracts and Arrangements...

There are currently a number of irrigators in the Brisbane River system who receive approximately 7,000ML of water on the basis that these arrangements existed prior to the construction of Wivenhoe Dam. That is, it formed part of their riparian rights. It is envisaged riparian rights will continue under the new SEQWCo structure, as with any other water industry company. It is anticipated the allocation of 7,000ML of water will continue as a condition of the license to be granted to SEQWCo.

Division 4 of the *South East Queensland Water Board (Reform Facilitation) Bill 1999* provided for the protection of existing water allocations:

Existing entitlements to water continue

Clause 215L provides that an entitlement to water under the Water Resources Act 1989 (for example, a licence to take water issued under that Act) or the South East Queensland Water Board Act 1979 (for example, the provisions for water supply for Esk, Lowood and Glamorgan Vale Water Supply Area appearing in sections 45, 46 and 47 of that Act) which was in existence immediately prior to the settlement day, is unaffected by a transfer of the board's undertaking to the company. These allocations will be specified in a regulation to be made under clause 14.

Amendment of s 250A (Regulation-making power)

Clause 14 provides for the insertion of a new subsection (4) into section 250A of the Water Resources Act 1989. The new subsection (4) provides that a regulation may fix a water allocation for an entity and impose conditions on that water allocation. Such conditions may include volumes and the term of the allocation. This will enable a regulation to be made under the Water Resources Act 1989 to give the company, the entitlement holders referred to in clause 215L and other persons a water allocation.²⁷

The Water Resources Legislation Amendment Regulation (No.1) of 2000 provided for the allocation of water to the South East Queensland Water Corporation and the conditions of the company allocation. It provided in s.15B for water to be made available free of charge for town water supply to Esk (220ML), Lowood (270ML) and to the Glamorgan Vale Water Board (250ML). The regulation also provided for water, at no charge to MBRI irrigators and other in the CBRWSS including for the exercise of riparian rights:

- (5) The company must make available from the company allocation, free of charge—
 - (a) a sufficient volume of water, but not more than an aggregate of 7000ML a year, to meet the rights to water of licensees authorised under licences issued under part 4 of the Act to take water for irrigation purposes from the Brisbane River between the Wivenhoe Dam and Mt Crosby Weir ...

The new company was the South East Queensland Water Corporation Limited trading as SEQ Water.

Following the enactment of the *Water Act 2000*, the Government subsequently made the *Water (Transitional) Amendment Regulation (No.1) 2002*. This regulation provided for the continuing allocation for the South East Queensland Water Corporation and the conditions for company allocation. The conditions, stated in s.4 of the Regulation, included continuing allocation free of charge to Esk and Lowood and the Glamorgan Vale Water Board and repeated the earlier condition of water at no charge to MBRI irrigators:

²⁷ Explanatory Memorandum, South East Queensland Water Board (Reform Facilitation) Bill 1999.

- (5) The company must make available from the company allocation, free of charge—
 - (a) a sufficient volume of water, but not more than an aggregate of 7 000 ML a year, to meet the rights to water of licensees authorised under licences issued under part 4 of the Act to take water for irrigation purposes from the Brisbane River between the Wivenhoe Dam and Mt Crosby Weir ...

The transitional regulation expired one year after commencement, as is common practice for such instruments. The rights thereby stated remained on foot. The regulation's purpose was to clarify and remove doubt that the company allocation and conditions on the company allocation continue under the *Water Act 2000*. The expiration of the regulation neither nullified the company allocation nor the conditions of its grant.

QCA is wrong in its analysis that the rights of irrigators to water at no charge were limited to one year. The regulation stated the law, and having done so had no more work to do and could be removed from the statute book. The law continued and continues still.

This continuation of the condition imposed on Seqwater surfaced again in October 2005 when the Water Act was amended to bring irrigators under the management of Seqwater as part of measures to be put in place to manage water supply during the drought.

Clause 7 of the *Water Amendment Bill 2005* inserted a new chapter 3, part 2, division 2A. The explanatory memorandum states:

Clause 7 of the Bill inserts a new chapter 3, part 2, division 2A about the authority <u>held by SEQ Water</u>. SEQ Water is developing a drought management plan to manage the current critical water supply levels in the water supply infrastructure it owns and manages. The accurate measuring of water taken by customers or other persons entitled to take water supplied by SEQ Water is an essential component of the drought management plan. <u>SEQ Water currently supplies water</u>, 'free of charge' to a certain group of water users, who themselves hold an authority to take water under the Act. SEQ Water does not currently have, or require, a supply contract with this group of water users in order to supply water. However this group of water users are not 'metered' and consequently their water use cannot be monitored effectively. This division establishes a framework for the metering of these water users by SEQ Water by requiring there to be a supply contract between SEQ Water and the water user. In addition, it is necessary to ensure that SEQ Water can impose water restrictions on all persons who are supplied water by SEQ Water. (Emphasis added)

Section 387A provides that division 2A applies to the authority held by SEQ Water to take water, continued under section 1037A of the Act (that is, the ROL). Section 387B identifies the specific groups of water users that must have a supply contract with SEQ Water.

Section 387C allows the chief executive to approve a standard supply contract for the storage and delivery of water that applies to the identified water users. The approved standard supply contract must be gazetted. The chief executive approved standard supply contract will apply to the identified water users unless SEQ Water and the water user have already entered into a supply contract, however, the standard supply contract must be reviewed by the parties to it within 1 year after it takes effect.

Section 387D states the holder of an authority to take water mentioned in Section 387B "is a customer of a service provider for this Act". This amendment was necessary to allow SEQ Water to use the powers under section 388 of the Act that allow a water

service provider to impose restrictions on its "customers". This is the artifice in the use of the word "customer": it is a legal term of art, not a commercial relationship.

Section 387E allows SEQ Water to recover from customers the reasonable cost of installing, reading and maintaining a water meter. The Explanatory Memorandum is clear that no charges are to be imposed for the water: ²⁸

Section 387E allows SEQ Water to, despite the current condition on its authorisation to supply water free of charge, recover the reasonable cost of installing, reading and maintaining a water meter from its customers. SEQ Water is still subject to the statutory condition to supply the water free of charge.

There were numerous references during debate on the Bill, some of which are extracted below from *Hansard* (November 2005).

Mr Palaszczuk (the Minister), at page 3421, said

"SEQWater is currently developing a drought management plan that will also apply to a number of water users, who, historically, are authorised to be supplied water–free of charge–without needing a supply contract with SEQWater. The amendments establish a means to allow SEQWater to install water meters for this group of water users."

Mrs Attwood, at page 3955, said

"The amendments will establish a supply contract between SEQWater and the water users, bringing the users and SEQWater into a customer relationship for the purposes of metering and water restrictions."

Mr Rickuss, at page 3971, stated

"As a shareholding minister, I am sure that he will make sure that SEQWater does do the right thing. I was curious whether other people pay for their own meters under SEQWater's supply arrangements. I know most irrigators do, but this is a little different from that."

Mr Palaszczuk, at page 3995 stated

"Metering is the most effective way to measure the taking of water for resource management and compliance. This new framework does not alter the current supply arrangements at all. The water licence holders will continue to be supplied water by South East Queensland Water under the current arrangements."

On 16 December 2005, Mr Scott Smith, Regional Manager, Water Services, South East Queensland, wrote to Mid Brisbane River Irrigators and advised the following:

- the recent amendments to the *Water Act 2000* provide that mid-Brisbane Irrigators will become a customer of Seqwater;
- the Chief Executive will approve the supply contract and the approval notified in the Queensland Government Gazette;
- the supply contract will essentially deal with the requirements for the installation, reading and maintenance of meters and payment of associated costs;
- the amendments do not affect SEQ Water's current obligation to supply, free of charge, up to 7 000 ML out of the company's allocation, the volume of water authorized to be taken under your water license;
- the Department and SEQWater propose to meet with irrigators to provide further information and clarification on the amendments and the form of the supply contract. A meeting date is proposed early in 2006.

²⁸ See Water Amendment Bill 2005, Explanatory Memorandum at page 19

No such meeting ever took place with irrigators and no supply contract was agreed between the parties. It was not until December 2009 that a standard supply contract was gazetted.

In 2007 the Queensland Government announced a new structural model for the southeast Queensland urban water supply industry. In July the Premier wrote to the Esk Shire advising that under the new model it was not the intention of the Queensland Government that the current arrangements for a number of operations with Esk Shire Council would change. This prompted the Chief Executive Officer of Esk Shire Council to issue a press release wherein he stated:

We have a historical right to water because prior to building Somerset and Wivenhoe Dams we had a water allocation out of the river. Just because the State Government wants to change ownership of the dam, we still have a legal right to our free water allocation.²⁹

The South East Queensland Water (Restructuring) Bill was introduced into Parliament on 30 October 2007.

The Explanatory Memorandum states under the heading "Consistency with Fundamental Legislative Principles" that:

the Bill does not override the substance of third parties' rights or enhance any rights being conferred on the new statutory bodies. The purpose of the Bill is to ensure that the status quo is maintained and that there is a smooth business transition from the existing businesses to the new statutory bodies. In so far as this Bill affects local governments and other water entities, those organisations will be fairly compensated.³⁰

That statement can only mean that the supply at no charge is not affected by the restructuring of the government instrumentalities affected by the Bill.

Clause 77 provided that where an authority held by SEQ Water which is continued under section 1037A of the *Water Act* and mentioned in section 387A of the *Water Act*, is transferred to another water entity, references to SEQ Water in chapter 3, Part 2, division 2A of the Water Act (SEQ Water), and in any supply contract in force under that division, are taken to be a reference to the entity that received the transferred authority.

A transfer notice was Gazetted in June 2008. The notice identified that QCA continued under section 1037A(5) of the *Water Act* as detailed in the *Water (Transitional) Amendment Regulation (No.1) of 2002* is transferred to the replacement entity, Seqwater:

(a) a sufficient volume of water but not more than 7000ML a year, to meet the rights to water of licences issued under part 4 of the repealed Act to take water for irrigation purposes from the Brisbane River between Wivenhoe Dam and Mt. Crosby Weir.³¹

²⁹ The Gatton, Lockyer and Brisbane Valley STAR, 15 August 2007 at page 3.

³⁰ Explanatory Memorandum, South East Queensland Water (Restructuring) Bill 2007 at p.5

³¹ See Queensland Government Gazette No. 59, 27 June 2008 at page 1253.

Moreton ROP 2009 and the ROL

Seqwater's authority to take water was replaced, by force of s. 1037A(5) of the *Water Act 2000*, by the granting of a ROL on 7 December 2009. That authority to take water included conditions on Seqwater to make available to irrigators without charge. The replacement of QCA does not mean that the legal relations established under earlier enactments ceased. Those legal relations were not disrupted by any plain words in the Act, regulation, ROP or ROL. MBRI submits that as a matter of law, and of common sense, those conditions continued under the ROL.

MBRI allocations are for medium priority water to a total of 6771ML. The total medium priority water allocation in the CBRWSS is 7041ML, the balance being in the hands of a couple of other water users.

The 6771ML is the nominal allocation. The actual volume of water allowed to be taken may be less than that figure, depending on environmental conditions. This is called the announced allocation. The Moreton ROP prescribes the announced allocation as a percentage of the nominal allocation, by reference to the dam levels detailed in Att.5, Table 5:

Combined Percentage of Useable	Announced allocation for medium
Volume in Storage of Wivenhoe and	priority water allocations (AAMP) (%
Somerset Dams (CPUVS) (%)	of nominal volume)
0 to 14.9	0
15 to 24.9	15
25 to 29.9	25
30 to 34.9	40
35 to 39.9	55
40 to 44.9	70
45 to 49.9	85
50 to 100	100

Table 5 Medium priority announced allocations for CBRWSS

In addition to medium priority water, 279,000ML (nominal) of high priority water is allocated, according to Att.8 Table 1 as follows:

Queensland Bulk Water Supply Authority	25ML
SEQ Water Grid Manager	278,725ML
Glamorgan Vale Water Board	250ML

The announced allocations for high priority water prescribed in s.78 of the ROP as 100% when the combined usable storage in Somerset and Wivenhoe Dams is at least 25%, and otherwise, a reduced allocation on a formula stated in s.78(1)(b).

The ROP prescribes operating levels for dam infrastructure as follows:

72 Operating levels for infrastructure

(1) The operating levels for the infrastructure in the Central Brisbane River and Stanley River water supply schemes are specified in Attachment 5, Table 1, Table 2 and Table 3.

- (2) The resource operations licence holder must not release or supply water from any infrastructure when the water level in that infrastructure is at or below its minimum operating level.
- (3) The resource operations licence holder must not release water from any infrastructure unless the release is necessary to—
 - (a) meet minimum flow rates in section 75; or
 - (b) supply downstream demand.

It follows that if demand can be met from unsupplemented water, release is not authorised to meet irrigation demand.

MBRI argues that demand for the 6771ML allocated to MBRI irrigators is all met by unsupplemented water, and that Seqwater is not permitted to release water from the dams in order to meet that demand. That is not to say it will not release water to meet other demand, whether 279000ML high priority water (predominantly required for urban water), or for environmental purposes under the WRP.³²

From the foregoing it is apparent that MBRI entitlements remain, under law, not subject to charge. Further, the water accessed from the river is not dependent on, or benefitting from any Seqwater infrastructure or services that would justify a charge.

 $^{^{32}}$ see Sch.7 of the WRP. The mid Brisbane node is the confluence of the Brisbane River and Lockyer Creek, node G

Methodology and assumptions

MBRI submits that the methodology employed by QCA in the Draft Reports is flawed and many of its assumptions simply wrong as they relate to MBRI irrigators. The result is distorted outcomes that disadvantage irrigators and advantage Government entities.

The late consultation mentioned above has resulted in QCA acknowledging, as MBRI submits, that there are serious methodological issues and incorrect assumptions, and MBRI looks forward to these matters being taken properly into account by QCA in its final report. The details are dealt with throughout this Response.

MBRI cannot do QCA's job for it

It is not possible for a small community group of volunteers such as MBRI to collect the proper data and undertake the highly technical, and costly, analysis that is properly the job of QCA. Given the methodological problems and the flawed assumptions, MBRI submits that QCA should not make any determination at this point (other than of no charge or zero charge), and instead recommend to the Minister that issues about CBRWSS irrigation charges the subject of a separate investigation when QCA is able to undertake proper analysis based on accurate and representative data.

Weather patterns since the prolonged dry spell in the 2000s and the extended wet seasons from 2010 have been abnormal. QCA does not have available to it any meaningful and representative data about water use patterns in normal seasons. Proper analysis will require, in MBRI's view, at least three normal seasons' data.

MBRI makes the following submission:

That QCA not progress further any recommendation for water pricing (other than that there be no price or a zero price) until it:

- (a) corrects the methodological issues and biases;
- (b) collects accurate hard data about water use in at least three normal seasons; and
- (c) undertakes robust analysis based on correct, timely and representative data collected over 3 normal seasons.

Summary of MBRI concerns

MBRI submits the methodologies used, and assumptions made, are flawed, in summary, as follows.

<u>Source of irrigation water</u>. QCA assumes that MBRI irrigators utilise water stored in, and released from, Seqwater storage facilities when in fact irrigation water demand in the mid-Brisbane river is fully met from natural water flows and natural recharge independently of Somerset and Wivenhoe Dams.

<u>Multi-use facilities</u>. QCA fails to account properly for the purposes and uses of the Seqwater storage facilities, and appropriates improperly to MBRI irrigators a disproportionate share of Seqwater's costs for those purposes unrelated to irrigation.

Related to this matter, QCA bases its method in part on an assumption that MBRI irrigators receive services from Sequater when in fact no service is received.

<u>Community service obligations</u>. Several of the uses of Somerset and Wivenhoe Dams are properly treated as community service obligations, to be funded by the State from its own sources and not sheeted home to other water users. These include flood and environmental purposes.

<u>Flood storage infrastructure</u>. QCA assumes wrongly that mid-Brisbane riparian land holders benefit from Seqwater's flood management when in fact Seqwater's flood management has caused considerable damage to both land and plant and equipment and consequential remediation outlays.

<u>Methodology to assess prudency and efficiency.</u> The methodology used is flawed and biased against MBRI irrigators.

<u>Renewals annuities</u>. MBRI submits the calculation for the renewals annuity for the CBRWSS is not only flawed but the outcome grossly in error and overstated.

<u>Direct and Indirect Costs and Offsets.</u> Operating cost sampling is flawed, and due to the methodologies and approaches used, the cost outcomes appear to be in error and overstated and offsets may be understated.

Details

Source of irrigation water

The justification for charging CBRWSS Irrigators for infrastructure and costs of SEQWater associated with the Somerset Dam and Wivenhoe Dam is based upon linkages identified by QCA in the Moreton ROP that was approved on 3 December 2009 and the ROL granted to Queensland Bulk Water Supply Authority (ABN 75450239876) that took effect on 7 December 2009.

Extracts of QCA's analysis justifying the inclusion of dam infrastructure and costs include:

As the Moreton ROP associates the reliability of the 6,771 ML of WAE with Somerset Dam, Wivenhoe Dam and related infrastructure (not natural flows), the irrigation WAE in the Central Brisbane River WSS is supplemented (that is, benefits from the water storage infrastructure.)

Costs are therefore incurred by SEQWater in maintaining the capacity and operational services to deliver the required level of reliability associated with that WAE (see further discussion of cost issues in chapters 4 and 5). In the absence of detailed levels of service, SEQWater's proposed costs are assessed against currently available information.³³

The Authority does not agree that the infrastructure provided by SEQWater is of no benefit to irrigators. As noted previously, the Moreton ROP describes announced allocations for the Central Brisbane River irrigation (that is, MP WAE) being conditional on the combined useable volumes of Somerset and Wivenhoe Dams. The provision confirms that the headworks of Somerset and Wivenhoe Dams are required in supplementing water for the purpose of irrigation. 34

³³ See QCA Draft Report SEQWater Irrigation Price Review: 2013-17, Vol 2, Central Brisbane River Water Supply Scheme at page 13.

³⁴ See QCA Draft Report SEQWater Irrigation Price Review: 2013-17, Vol 2, Central Brisbane River Water Supply Scheme at page 43.

The Moreton ROP indicates that irrigators (and all users) benefit from the improved reliability offered by infrastructure and should contribute to an appropriate share of costs.³⁵

QCA appears to consider that under the Moreton ROP, MBRI irrigators have improved reliability of supply of their 6771ML because its reliability of supply is linked to releases of supplemented water. This is wrong. The link is to natural flows.

In accordance with section 44 of the Moreton ROP the Chief Executive granted supplemented water allocations for existing water authorizations converted under section 43 of the Plan. Section 43 converted existing water authorizations to supplemented water allocations. In accordance with section 45 of the Moreton Water Resources Plan the purpose of the water allocations to be stated changed to "any". Previously, water licences stated "Domestic supply, Stockwatering and/or Irrigation". As a consequence of this conversion, some holders of tradable water allocations hold allocations now that solely or partially relate to riparian rights. If a charge is to be made then QCA should take this into consideration, otherwise some irrigators would now be charged for riparian rights.

The use of the phrase "supplemented allocation" so far as it relates to MBR irrigators is just a label intended to bring irrigators into a deemed "customer" relationship with Seqwater under the Moreton ROP for the purposes of managing water allocation use within the mid Brisbane River area. Irrigators recognize the need to conserve water during periods of significant droughts and during the drought in the mid 2000's worked closely with government to reduce and manage water use. In late 2005 amendments were made to the Water Act 2005 to create a new part in the Act entitled "SEQWater" " to provide assistance to Seqwater in dealing with the drought by bringing MBR irrigators under the control of Seqwater by –

- Conversion of water licences to water entitlements;³⁶
- Creating a customer relationship between water entitlement holders and Segwater;³⁷
- Deeming a standard supply contract applies from commencement of the section unless the parties already have a supply contract;³⁸
- Authorising Seqwater to recover the cost of installing and maintaining meters from each holder to whom a standard supply contract applies;³⁹
- Authorising water restrictions imposed by water providers to extend to water taken by customers;
- Providing that no compensation is payable to any person in relation to water restrictions imposed.⁴⁰

³⁵ See QCA Draft Report SEQWater Irrigation Price Review: 2013-17, Vol 2, Central Brisbane River Water Supply Scheme at page 47.

³⁶ See section 992C of Water Act 2000.

³⁷ See section 992E of Water Act 2000.

³⁸ See section 992D of Water Act 2000.

³⁹ See section 992F of Water Act 2000.

⁴⁰ See section 25S of Water Act 2000.

The Explanatory Memorandum explains it this way:

Clause 7 of the Bill inserts a new chapter 3, part 2, division 2A about the authority held by SEQ Water. SEQ Water is developing a drought management plan to manage the current critical water supply levels in the water supply infrastructure it owns and manages. The accurate measuring of water taken by customers or other persons entitled to take water supplied by SEQ Water is an essential component of the drought management plan. SEQ Water currently supplies water, 'free of charge' to a certain group of water users, who themselves hold an authority to take water under the Act. SEQ Water does not currently have, or require, a supply contract with this group of water users in order to supply water. However this group of water users are not 'metered' and consequently their water use cannot be monitored effectively. This division establishes a framework for the metering of these water users by SEQ Water by requiring there to be a supply contract between SEQ Water and the water user. In addition, it is necessary to ensure that SEQ Water can impose water restrictions on all persons who are supplied water by SEQ Water.......SEQWater is still subject to the statutory condition to supply the water free of charge.

While MBRI irrigators accept the need for management within the CBRWSS, it would be misleading to suggest that the reliability of supply has been improved by the ROP. In fact it has decreased. A careful reading of the rules for announced allocations and critical water sharing arrangements under the Moreton ROP demonstrate that that irrigators reliability of supply has diminished relative to high priority users and relative to past practice. It is only when the combined storages of Wivenhoe and Somerset Dams is 50% or more that the announced allocations reach 100% for irrigators. High priority water users, on the other hand can continue to enjoy 100% allocation when the combined water storages at the dams is greater than or equal to 25%.

It is noted that the medium priority announced allocations for the CBRWSS under Table 5 of the Moreton ROP are more detrimental to irrigators than the restrictions agreed with Government in the mid 2000's. As High Priority water users are treated more favourably than irrigators it confirms the headworks for Wivenhoe and Somerset Dams are for domestic water supply.

Combined Dam Levels %	Govt. Irrigation Restrictions Allocations %	CBRWSS Irrigation Restrictions Allocations %	CBRWSS High Priority Restrictions Allocations %
0 to 14.9	0	0	<100
15 to 24.9	25	15	<100
25 to 29.9	25	25	100
30 to 34.9	50	40	100
35 to 39.0	50	55	100
40 to 44.9	100	70	100
45 to 49.9	100	85	100
50 to 100	100	100	100

⁴¹ Water Amendment Bill 2005, Explanatory Notes, at pages 16 and 17.

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As noted in the Moreton Draft Water Resource Plan – Information Report:

"The purpose of building water storages is to provide a reliable source of water in times when demand exceeds the natural stream flow".42

It is during drought times that irrigators need to irrigate or irrigate more than what would generally be required during "normal" times. In periods of high rainfall they may not need to irrigate at all. Under the water sharing rules, the water storages are not available to provide a reliable source of water for irrigators. Irrigation water is able to to be sourced from natural flows but access to those flows is restricted by the water sharing rules to help conserve storage levels in the dams for high priority users.

MBRI submits that the CBRWSS has detrimentally impacted upon the reliability of supply of water for irrigation purposes. It seeks to restrict allocations to a greater degree than past Government policy. Further, it is incorrect to suggest that relating announced allocations to the combined storage levels of Wivenhoe and Somerset Dams confirms that the headworks of Somerset and Wivenhoe Dams are required in supplementing water for the purpose of irrigation. This is merely an artifice to justify scaling back announced allocations to apply to CBRWSS irrigators.

The impact of this scaling back is shown in the table below.

Allocation	Irrigation Allocation							
Reduction %	ML pa	m³/s	litres/second					
15	1,015.65	0.03	32.21					
25	1,692.75	0.05	53.68					
40	2,708.40	0.09	85.88					
55	3,724.05	0.12	118.09					
70	4,739.70	0.15	150.29					
85	5,755.35	0.18	182.50					
100	6,771.00	0.21	214.71					

The allocations to irrigators are insignificant given the average flows in the river system below Wivenhoe. The annual average flow at Savages Crossing is 890,000ML according to 89 years of full records.⁴³ This is equivalent to filling an empty Wivenhoe Dam to three quarters full (76.38% of FSL) in a single year. It represents an average flow rate at Savages Crossing of $28 \text{ m}^3/\text{s}$ (28,222 litres per second). The irrigators' scaled back allocation is an insignificant share of downstream flows.

Lockyer Creek enters the Brisbane River below Wivenhoe Dam but above Savages Crossing. The annual average flow of the Lockyer at O'Reilly's Weir based upon 23 years of full records 148,000ML.⁴⁴ As O'Reilly's Weir is within about one kilometre or so from the junction with the Brisbane River it is safe to assume that this natural flow of water is available within the mid Brisbane River reach for both irrigation and domestic water demands as is the 700,000 ML or so passing through or being released from Wivenhoe Dam. The annual flows from Lockyer and surrounding creek catchments to the Brisbane

⁴² Dept. of Natural Resources and Mines. Moreton Draft Water Resource Plan – Information Report, p.13

⁴³ Dept. of Natural Resources and Mines, Moreton Draft Water Resource Plan – Information Report, p.11

⁴⁴ Dept. of Natural Resources and Mines, Moreton Draft Water Resource Plan – Information Report, p.11

River are more than ample to meet irrigator needs, even during periods of lower flow rates as shown in the table below:

	Adjusted	% of Lockyer Average Flows						
Allocation	Allocation	@ 100%	@ 50% 74,000ML	@ 30% 44,400ML				
Reduction %	ML pa	148,000ML pa	pa	pa				
15	1,015.65	0.69	1.37	2.29				
25	1,692.75	1.14	2.29	3.81				
40	2,708.40	1.83	3.66	6.10				
55	3,724.05	2.52	5.03	8.39				
70	4,739.70	3.20	6.41	10.68				
85	5,755.35	3.89	7.78	12.96				
100	6,771.00	4.58	9.15	15.25				

The statements by QCA infer that irrigators benefit from increased reliability of supply because supply is not linked to natural flows but is linked to releases of supplemented water. That is patently incorrect. Calling an entitlement "supplemented" does not change hydrological facts. The water required to meed irrigation demand at 6771ML pa and less is not in substance or practice, supplemented water.

The Moreton WRP 2007 and the Moreton ROP 2009 both recognise and purport to cover all water in a watercourse or lake in the plan area. So all water that enters the mid-Brisbane River from supplemented water (Wivenhoe) or unsupplemented (Lockyer and other major creeks) is captured.

MBRI irrigators' entitlements, totalling 6771ML, are historically drawn from the Brisbane River catchment's natural flows. That is to say, no MBRI irrigator is dependent on releases from the dams, and none can demand that flows be supplemented in order to draw water. This fact has important implications for how one calculates the contribution (if any) irrigators should make to the maintenance, renewal and development of the infrastructure. It is a fact independent of whatever labels are used in the ROP, and QCA should base its analysis on the facts not the labels.

Somerset Dam and Wivenhoe Dam were neither built for irrigators nor for local communities' domestic water supply. They were built specifically for supply of domestic water to the cities of Ipswich and Brisbane and for flood mitigation for those cities. The dams' capacities are shown below.

	Full Supply Capacity ML		
Wivenhoe	1,165,000	1,980,000	3,145,000
Somerset	379,800	750,000	1,129,800
Total	1,544,800	2,730,000	4,274,800

The catchments that are available to provide water for irrigation exist above and below each of these dams. The Upper Brisbane River catchment is the largest catchment, which together with the catchment on and around Lake Wivenhoe, plus excess water from Somerset Dam, supplies water to Wivenhoe Dam. The Lockyer catchment is the second largest catchment, which together with excess water from Wivenhoe Dam and

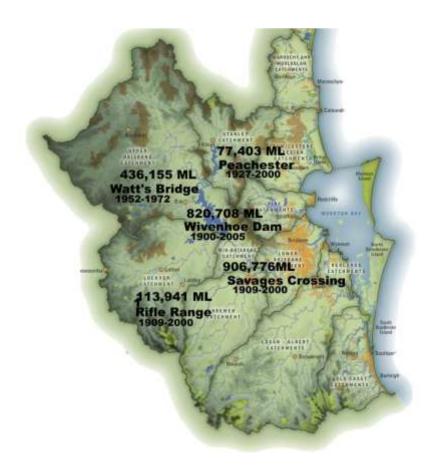
other stream flows below Wivenhoe Dam in the mid-Brisbane River catchment supply MBRI irrigators, Mt Crosby Weir for urban water, environmental flows and other riparian water uses. The Stanley River catchment is the second smallest catchment and supplies water to Somerset Dam.

The table below shows the area and stream network length in each of the catchments around Wivenhoe.

Catchment	Area km2	Stream network length kms	% of Area	% Stream network
Stanley	1535	3281	14.54	15.02
Upper	F.402	11260	F2.0F	52.05
Brisbane	5493	11368	52.05	52.05
Lockyer	2974	6056	28.18	27.73
Mid Brisbane	552	1135	5.23	5.20
Total	10554	21840	100	100

(Source: SEQ Catchments)

MBRI also has data on mean average flows other than as detailed above from the Information Report on the Draft Moreton Water Resource Plan. The mean annual flows from historical records published by Seqwater is shown in the catchment map below.



The mean annual flow at Wivenhoe is 820,708ML per annum based upon records from 1900 to 2005.45

Below Wivenhoe, mean average flows are 113,941ML at Rifle Range gauge (1909 to 2000). These waters flow down Lockyer Creek past O'Reilley's Weir and enter the Brisbane River. In addition, flows enter the Brisbane River below Wivenhoe Dam from within the mid-Brisbane River catchment. These additional flows are about 36,000ML based on an average rainfall of 870mm per annum and a transmission loss of 25%. At a transmission loss of 50% these inflows are about 24,000ML. Base flows also augment river flows.

In the absence of the dams and the water stored and extracted for domestic supply, there is more than enough water in the system upon which irrigators could draw. This was one of the main reasons irrigators have never been called upon to contribute to the operational and capital costs of these dams. There is no service provided by Seqwater. Irrigators do not, and cannot contractually, make any arrangements with Seqwater to increase releases for irrigation purposes.⁴⁶

Climate variability makes statistical generalisations difficult, but Seqwater in a keynote presentation to Irrigation Australia's 2008 Conference, noted that Wivenhoe rainfall is drought dominated prior to 1950 and flood dominated after 1950.⁴⁷

QCA is incorrect in its assessment that Seqwater under the Moreton ROP provides a release irrigation service to MBRI irrigators.

The Moreton ROP instructs the ROP licence holder about releases from Wivenhoe Dam. Section 72(3) which provides -

The resource operations licence holder must not release water from any infrastructure unless the release is necessary to—

- (a) meet minimum flow rates in section 75; or
- (b) supply downstream demand.

The use of phrase "unless the release is necessary" implies that if downstream demand (irrigation and domestic water supply) can be met from natural flows then the release must not be made. This view is consistent with the whole reason why storages are constructed, namely, to provide a reliable source during periods when natural flows are insufficient.

Irrigation daily demand represents just $0.21~\text{m}^3/\text{s}$ and cannot be precisely measured or provided for out of Wivehoe's regulator which delivers at 36 cubic meters per second at a FSL of EL 67m AHD. In accordance with section 72(3) this downstream irrigation demand can be easily met from natural flows from the Lockyer and surrounding creek catchments and therefore no release service needs to be made and none is allowed due to the operation of section 72(3).

By relating announced allocations to the storage levels in the Somerset and Wivenhoe Dams, the Moreton ROP has further penalized irrigators because their access to the significant natural flows that enter the Central Brisbane WSS below Wivenhoe Dam are

⁴⁵ Thorsten, C., Watt, A., Mohand, A. (2008) Redefining South East Queensland's Water Supply Options, Irrigation Australia Conference at page 3.

⁴⁶ despite the fiction of supply and demand matching in the deemed contract

⁴⁷ Ibid, slide presentation.

scaled back to allow High Priority users increased access to natural flows.⁴⁸ This enables SEQWater to better conserve water storages through lower releases to meet downstream demand. This can be justified on the basis that it can only make releases for downstream demand when it is considered necessary that the demand for a water release exists. This scheme operates to reduce security and water reliability for irrigators and occurs at a time when irrigation access becomes even more important for farm viability.

The Governor in Council approved the Moreton ROP on 3 December 2009.⁴⁹ Since its approval, there has been significant precipitation in the catchments and sufficient water flowing in the Brisbane River for irrigation purposes without Seqwater providing any services or flows to irrigators. Indeed there has been many occasions over that time when flood mitigation operations have resulted in release of floodwaters into the river. Mobilisation of the Flood Operations Centre and flood operations at the dams occurred at least four times in 2010, five times in 2011, three times in 2012, and at least three times so far in 2013 to the time of writing.

According to the Bureau of Meteorology the outflows from the Brisbane River are as follows: 50

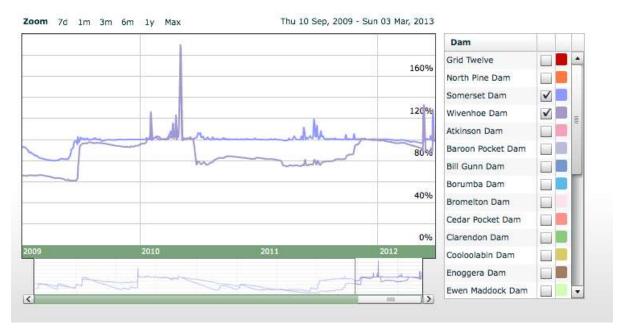
Year	Outflow	% of MBRI
		allocations
2009-2010	1,576,606ML	0.429%
2010-2011	7,887,419ML	0.086%

Dam levels as a percentage of full supply level are shown in the graph below. Full supply levels in Wivenhoe Dam post the January 2011 flood were temporarily adjusted down to 75% and in 2013, adjusted down to 88% to provide additional flood storage capacity during the wet season.

⁴⁸ Under section 72 of the Moreton ROP SEQWater must not release any water from any infrastructure unless it is necessary to, inter alia, supply downstream demand. If natural flows are available to meet downstream demand then it is not necessary to make any release or if there is unfilled demand from natural flows then a smaller release may be necessary.

⁴⁹ see *Gazette*, Col.352 No. 93, page 1047, 4 December 2009

 $^{^{50}}$ SEE BOM, South East Queensland 17.2 River outflow from the region, $http://www.bom.gov.au/water/nwa/2011/seq/statement/notes_s17_2.shtml$



(Source: Seqwater)

Rainfall statistics are shown below:

					RAI	NFALL	STATIS	ΓICS						
						Ma								
Station		Jan	Feb	Mar	Apr	y	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
	201	156.	521.	435.		39.				100.	450.		566.	2597.
Peachester	0	7	2	9	98	7	12.4	55.6	82.5	4	7	77.5	8	4
	201	926.	155.	233.	193.	88.					119.		286.	2223.
	1	4	5	1	1	6	32.2	26.5	93.7	21.6	3	47.1	1	2
	201	583.	396.	485.	139.									2080.
	2	6	3	2	5	72	230	55.5	0	12.4	24.5	58.3	23	3
	201	637.	620.											1257.
	3	1	6											7
Somerset	201		126.	233.					109.	142.	334.		359.	
Dam	0	45	6	6	49.2	na	16.3	40.6	2	3	8	38.6	3	na
	201	580.	50.4	174.	0.7.6	0.6	4.5	00.0		40.6		400	450	4000
	1	4	72.1	5	87.6	96	16.5	23.2	74.4	13.6	75.5	10.2	159	1383
	201	26.2	149.	105.	746	20.	139.	78.2	1	11.0	20.7	02.6	71.0	799.4
	2	26.2	1	4	74.6	4	2	1	1	11.8	29.7	92.6	71.2	1
	201	77	111. 2											
	3 201	//		212.		21.			107.	121.	231.		373.	1330.
Linville	201	35.2	127	212. 7	49.8		11.8	22.5	107.	121.	231. 6	16.4	3/3. 6	1330.
Linville	201	436.	127	125.	49.8	85.	11.8	22.5	4	3		16.4		5
	201	436.	74	125.	90.3	65. 4	20.6	20.6	80.4	14.6	92.2	na	na	na
	201	3	74	184.	90.3	31.	20.0	20.0	104.	191.	220.	IIa	315.	1371.
Toogoolawah	0	76.6	130	4	72	2	8.6	28.2	4	191.	220. 4	8.8	6	6
Toogoolawali	201	424.	130	208.	12	75.	0.0	20.2	4	4	4	0.0	124.	1095.
	1	4	55	6	38.4	4	6.8	16	48.6	14.4	76.8	6.8	4	6
	201	156.	103.	U	30.1	1	107.	10	10.0	11.1	7 0.0	0.0		0
	2	8	6	93.4	41.8	17	8	73.8	0.4	3.8	24	67.8	74	764.2
	201	258.	255.	70.1	11.0			7 0.0	0.1	0.0		07.0		70112
	3	2	2											513.4
	201		184.	212.		31.				129.	201.		279.	1350.
Esk	0	70.4	4	2	57.8	2	12.1	57	91.6	4	8	23.6	2	7
	201	478.		215.		78.							119.	1198.
	1	8	48	8	38.8	2	8.2	17.4	80.6	15.8	75.8	21.8	4	6
	201	139.		114.		16.	114.							
	2	8	167	4	59	4	6	78.8	1.2	18.8	45.6	87.4	55.9	898.9
	201	329.	224.											
	3	6	4											554
	201		148.	137.		33.					281.		287.	1213.
Fernvale	0	41.6	8	8	43.2	2	16.2	40.4	73.6	85.4	2	24.8	4	6
	201		113.	136.		66.								
	1	na	2	1	54.2	2	11.8	15	55	18.2	78.2	11.2	94	na

	201	213.	114.			16.						159.		
	201	213. 8	2	88.6	71.2	2	94.2	62.9	1.4	12.4	24.2	2	24.8	883.1
	201	209.	165.	00.0	, 1.2		7.1.2	02.7		12.11				000.1
	3	8	2											
	201	Ŭ	151.								148.			
Mt Tarampa	0	95.4	2	121	na	na	7	28.4	53.6	49	8	13.8	na	na
	201					56.								
	1	na	49.6	113	45.4	4	na	na	49.4	14.6	29.4	44	98.4	na
	201	174.				16.								
	2	6	120	77	53.8	4	94.4	53.6	4.6	19.4	2.4	121	48.4	785.6
	201	239.	169.											
	3	6	8											
Upper	201		149.	101.							116.	118.	351.	1145.
Tenthill	0	76.2	8	6	35.6	26	3.4	26.2	52.2	87.6	6	6	6	4
	201	387.	104.	112.		62.					174.		139.	1186.
	1	4	8	6	55.8	4	7.6	9	34.2	20.8	2	78	6	4
	201	101.				21.								
	2	4	86.2	48.9	37.4	2	89.8	33.4	8	20.6	34.6	62.8	47.4	591.7
	201	214.												
	3	6												
	201		158.	183.		38.						125.	484.	1424.
Withcott	0	88.6	2	8	61.6	4	5.4	23.8	67.4	94.8	92.6	6	4	6
	201	443.		178.							161.		147.	1298.
	1	4	87.6	4	71.8	53	5.8	17.4	52.8	15.2	2	64.4	4	4
	201	111.	117.			13.	112.							
	2	4	4	103	58.4	8	4	33.4	7.2	17.4	42.6	55.2	na	na
	201	310.												
	3	6	na											
	201		135.	137.		31.				115.	147.		323.	1168.
Gatton	0	86.8	7	5	66.7	3	2.6	31.2	53.5	6	6	36.1	7	3
	201	410.		105.		69.					102.			1121.
	1	6	48.3	5	73.8	8	5.4	15.4	48	14.6	7	76.4	151	5
	201	107.				16.						123.		
	2	2	91.9	60.4	45	2	98.1	39.5	6.2	17.3	32	9	51.6	689.3
	201	259.	183.											
	3	6	2											

These data demonstrate that MBRI irrigators do not rely on, and have no access to, the infrastructure of Somerset and Wivenhoe Dams. The irrigation water is amply provided from natural flows and system recharge. The dams are simply not relevant to the water that is drawn from the river and no element of their operation, maintenance or replacement should be factored into the QCA's methodology. That is, the headworks are neither used nor necessary for irrigation purposes.

MBRI submits:

That any cost reflective price for MBRI irrigation water not include the costs for operation, maintenance or renewal of infrastructure not in fact used for or available for irrigation purposes, namely, Somerset and Wivenhoe Dams.

QCA is also wrong in its assessment that Somerset Dam should be taken into consideration in assessing the source of flows. Historically, the construction of Somerset Dam made no difference to access by irrigators in the natural system flows from the Upper Brisbane River, Lockyer and Mid Brisbane River Catchments.

Under the Moreton WRP 2007, Somerset Dam is part of the Stanley River WSS consisting of the following:

- (i) Full supply level of the impoundment of Somerset Dam at Stanley River (AMTD 7.4km);
- (ii) Stanley River downstream of Somerset Dam at AMTD 7.4km to AMTD

0.0km. 51

Under the Moreton WRP 2007, the Central Brisbane River WSS does not include Somerset and consists of the following—

- (i) full supply level of the impoundment of Wivenhoe Dam at Brisbane River (AMTD 150.2km);
- (ii) Brisbane River downstream of Wivenhoe Dam at AMTD 150.2km to Mt Crosby Weir at AMTD 90.8km.⁵²

Not all the water that leaves Somerset Dam flows into Wivenhoe Dam. From the definition above, the Stanley River WSS extends below the Somerset Dam wall for some 7.4kms. It is noted that the shires of Esk and Kilcoy draw water directly from Somerset Dam. 53 It is also noted that part of the renewals expenditure for Somerset includes "refurbishment of town water" which is taken to mean Somerset Village town water. Is the Authority aware of other users of Somerset Dam water that has not been disclosed to-date? A similar situation may apply out of the lake at Wivenhoe. To what extent have these other water users been taken into account in the Authority's assessment of prices to apply to CBRWSS irrigators?

In conclusion, the Moreton ROP requires Seqwater not to make releases to meet downstream irrigation demand as this can be easily met by natural flows, given the insignificant volume involved. One purpose of the ROP is for Seqwater to continue to have a customer relationship with irrigators so that it can manage the volume of water extracted out the flows in the mid Brisbane River during times of water shortages. This is achieved by conversion of licenses to supplemented water allocations which is then governed by supply contracts.

In practice this is just an artifice to permit the ongoing relationship and manage irrigation allocations so that announced allocations can be scaled back on a basis related to the combined storage levels at both Wivenhoe and Somerset Dams. No such scaling back occurs for high priority water until the dams reach critical levels. By scaling back irrigation water demands, high priority water demands can enjoy an increased share of the natural flows and thereby Seqwater can better conserve scarce water storage reserves in the dams. This is due to the operation of section 72(3) and is done at the expense of irrigators' water access and at a time when demand for irrigation water becomes even more important.

Under the ROP, the scaling back is more detrimental than what was implemented by agreement with Government in the mid 2000's. The Authority is incorrect in its assessment that irrigators have benefited under the ROP with increased water reliability on account of relating announced allocations back to the combined levels in the dams.

The Authority is also incorrect in taking into consideration Somerset Dam as a source of flows to irrigators as it is outside the defined CBRWSS. Under the Moreton WRP 2007, the Stanley River WSS consists of the full supply level of the impoundment of Somerset Dam at Stanley River (AMTD 7.4km) and the Stanley River downstream of Somerset

⁵¹ See section 94 and Schedule 13 of the Water Resource (Moreton) Plan 2007.

⁵² See section 94 and Schedule 13 of the Water Resource (Moreton) Plan 2007.

⁵³ Dept. of Natural Resources and Mines, Moreton Draft Water Resource Plan – Information Report, at page 13.

Dam at AMTD 7.4km to AMTD 0.0km. The CBRWSS does not include Somerset.⁵⁴

Multiple use facilities

Seqwater dams are not special-purpose irrigation facilities as might be found in the irrigation schemes managed by Sunwater. Seqwater's facilities, especially Somerset and Wivenhoe Dams are multipurpose facilities that store and provide water for a range of purposes including:

- urban water;
- flood storage and mitigation;
- environmental flows
- hydro-electricity generation;
- water supply to electricity generators;
- recreation:
- miscellaneous use (eg film production⁵⁵).

The dams do not, as a matter of fact, have an irrigation water purpose, despite Seqwater asserting wrongly that they do, and despite the use of language in ROPs and WRPs inferring such. In determining pricing issues, it is the facts that matter, not formulaic but wrong assumptions.

QCA's analysis fails to account properly for these multiple uses, and instead sheets home to high priority and medium priority water users the vast bulk of the costs associated with the wide-range of purposes. This is seen in the simplistic ratio of high and medium priority volumes used in regard to HUF calculations. See the scant discussion of this at p.140 of Draft Report Vol.1 and Draft Report Vol.2, Ch.4. As QCA admits in the draft report Vol.1 at p.140, the result of the HUF approach suggested by Seqwater is anomalous. MBRI submits that the ludicrous outcome of the method demonstrates the flaws in the approach taken, and it should not be merely "adjusted" but completely abandoned.

MBRI argues that the costs associated with these multifarious purposes should not be apportioned to irrigators who benefit from those other purposes only as community members and not as irrigators.⁵⁶

The scope of recreation is apparent from Segwater documents:

"Seqwater provides a range of recreation facilities to the community in the areas adjacent to our dams, which accounts for more than 50 per cent of the green space for South East Queensland. We provide access to a range of water-based and on-shore activities while striving to balance the ongoing health of catchments and the quality of the region's water supply.

Seqwater's lakes provide access for activities such as boating, camping and fishing, as well as providing facilities such as picnic areas, BBQs, toilets, walking trails and playgrounds." 57

⁵⁴ See Moreton Water Resource Plan, 2007, Schedule 13 at page 81.

⁵⁵ see http://www.previous.seqwater.com.au/public/recreation-7

⁵⁶ MBRI irrigators who, for example, access town water for domestic purposes will pay for an appropriate price for access to drinking water; if they use the dams for recreation, then any fees associated with offsetting the Seqwater's costs of maintaining those facilities, and so on. MBRI landholders are also rate payers and taxpayers

⁵⁷ http://www.seqwater.com.au/what-we-do/recreation.

"We manage recreation facilities which currently provide more than 50 per cent of the green space for South East Queensland. More than 2 million people visited Seqwater managed recreation facilities over 2011-12."58

"During 2009-10 Seqwater recreation facilities continued to be a major drawcard for the community. More than 2.5 million people visited Seqwater dams and recreation sites over the year including record crowds. Over the Easter long weekend. more than 20,000 people visited the major storages." 59

"Wivenhoe Dam is a popular tourist attraction offering a range of activities in the area and the surrounding Brisbane River Valley, which is abundant in wildlife and is a designated koala habitat. The following recreational activities are permitted at Lake Wivenhoe: barbequing, boating (electric powered, yacht or row boat), electric model boating (outside designated swimming areas), camping, canoeing, fishing, kayaking, picnicking, sailing, and walking. Seqwater operates a Visitor Centre at the dam and camping grounds at Lumley Hill and Camp Logan." 60

These recreation facilities come at a cost that should be met as a CSO or a user-pays charge on access or a combination, and not apportioned to entitlement holders who, as irrigators, do not receive the benefit of these facilities. 61 MBRI has not been able to find any separate accounting for recreation capital and operating at Wivenhoe and Somerset Dams.

The issue of costing community service obligations for flood and environmental purposes is dealt with below.

There are several ways one could properly factor out the Seqwater's costs that flow from these multiple purposes. One is to assess fully the costs of each of the assets and activities, identified against purposes. Such a forensic accounting would, no doubt, be complex, time-consuming and inefficient. Presumably that is why QCA adopted a sampling method. MBRI's criticism of the sampling approach is dealt with in detail below.

Another method is to apportion capacity appropriately by reference to storage capacity as illustrated in the next section of this Response. It is relatively simple then to deduct the real or estimated cost for activities that are not volume dependant (eg film production and recreation). This approach has the virtues of accuracy and relative simplicity.

The following analysis is intended to illustrate both why and how such a method should be employed in regard to MBRI irrigators.

Infrastructure relating to CBRWSS

SeqWater is the holder of a single ROL that applies to:

- CBRWSS;
- Stanley River WSS;
- Pine Valleys WSS.⁶²

⁵⁸ Segwater Annual Report 2011-2012 p.6

⁵⁹ Seqwater Annual Report 2009-2010 p.4

⁶⁰ Wivenhoe Fact Sheet (Segwater) p.9

⁶¹ although they may benefit from them just as any other community member might

⁶² Section 34(1) of the Moreton Resource Operating Plan

The infrastructure associated with the ROL for the CBRWSS are described in Chapter 5 of the Moreton ROP as follows:

- 1. Wivenhoe Dam, Brisbane River, with a full supply storage capacity of 1,165,200ML. The description of the outlet works are 1.8m and 3.6m diameter penstocks located through the left hand wall of the concrete gravity spillway structure terminating with a 4.5kW mini hydro station and a 1.5m FDC bypass regulator valve. Maximum discharges are as follows:
 - a. 36m3/s for the 1.5m FDC at E.L, 67`m AHD;
 - b. 18m3/s for the hydro side;
- 2. Mount Crosby Weir with a full supply storage capacity of 2200ML;
- 3. Somerset Dam, Stanley River, with a full supply storage capacity of 379,850ML. The description of the outlet works are:
 - a. 8 x 2.44m x 3.66 m sluice gates
 - b. 4 x 2.3 diameter regulator valves
 - c. 1×4 MW hydro power station releases only to be made for hydropower generation when the dam is above 90.0m AHD (rate of release has capacity of 370 ML/day).

Seqwater in its Attachment No. 2 to Irrigation Infrastructure Renewal Projections – 2013/14 to 2046/47 included Wivenhoe and Somerset Dams but excluded Mt Crosby Weir because its sole purpose is to supply non-irrigation water. Seqwater stated on page 3 as follows:

Where infrastructure has a primary function other than, but in addition to, irrigation water supply (eg Wivenhoe Dam), the full renewals projection has been reported in the expectation that the regulator will provide guidance on the apportionment of costs.

For Wivenhoe and Somerset Dam the two primary functions are water storage and flood storage. Another function is the generation of hydro-electricity at both dams. There has been no attempt by QCA to undertake any apportionment of future renewals between water storage infrastructure; flood storage infrastructure and other infrastructure such as for hydro-electricity.

MBRI reiterates that, as a matter of fact, Wivenhoe Dam does not exist to provide irrigation water, has no irrigation infrastructure and releases are not necessary – indeed cannot be made – to satisfy irrigation demand that is all met amply from unsupplemented water.

The scale of the dams is important in assessing the efficient costs that relate to irrigation. A small scale irrigation-specific facility designed to supply 6771ML pa would not require large and expensive support infrastructure. **The appropriate cost-base**, **MBRI submits**, **should be brought back to that smaller scale of dam**.

Flood Storage Infrastructure

MBRI has identified the flood infrastructure as follows.

Both Wivenhoe Dam and Somerset Dam were designed and constructed with gates to regulate flood waters above full supply level rather than have fixed concrete spillways. This dual capability, water storage and gated flood mitigation is the exception rather than the norm for the majority of dams throughout Australia.

The table below shows the scale of these dams in comparison to other Dams SEQWater manages including for other irrigation schemes the subject of the Referral Notice to the Authority. The comparison is undertaken on the basis of Full Supply Capacity levels and not total capacity levels. Somerset and Wivenhoe Dams are two of a very small number of Referable Dams in Australia that have dual storage capacities, domestic storage and flood storage, and an even smaller number of dams that have flood gates to regulate the flood water discharge above full supply level. North Pine Dam and Leslie Harrison Dam have gates but essentially perform no flood mitigation purpose. The balance of the dams have ungated spillways.

Seqwater Dam	Full Supply Capacity ML	Flood Spillway Type	Flood Mitigation
Atkinson Dam	30,401	Ungated	X
Baroon Pocket Dam	61,000	Ungated	X
Bill Gunn Dam	6,947	Ungated	X
Borumba Dam	45,952	Ungated	X
Bromelton Dam	8,210	Ungated	X
Cedar Pocket Dam	730	Ungated	X
Clarendon Dam	24,276	Ungated	X
Cooloolabin Dam	13,800	Ungated	X
Enoggera Dam	4,567	Ungated	X
Ewen Maddock Dam	16,587	Ungated	X
Gold Creek Dam	801	Ungated	X
Hinze Dam	310,730	Ungated	X
Lake Kurwongbah	14,370	Ungated	X
Lake Macdonald	8,018	Ungated	X
Lake Manchester	26,217	Ungated	X
Leslie Harrison Dam	24,868	Gated	X
Little Nerang Dam	6,705	Ungated	X
Maroon Dam	44,319	Ungated	X
Moogerah Dam	83,765	Ungated	X
Nindooinbah Dam	322	Ungated	X
North Pine Dam	214,302	Gated	X
Somerset Dam	379,849	Gated	✓
Wappa Dam	4,694	Ungated	X
Wivenhoe Dam	1,165,238	Gated	✓
Wyaralong Dam	103,000	Ungated	X

Source: Seqwater

Somerset and Wivenhoe Dams have been assigned the highest failure impact rating, Category 1, as a result of assessment of their potential as classified under the *Water (Safety and Reliability) Act 2008* and the *Water Act 2000*. Seqwater incurs significant costs in ensuring safety and compliance requirements for these Category 1 dams. At stake is the significant population and property at risk below these dams if Somerset Dam failure leads to Wivenhoe Dam failure, or if Wivenhoe Dam fails from overtopping, or one of the other failure modes that have been documented.

Somerset and Wivenhoe Dams are operated as a tandem system to manage potential dam failure risks and maximise the flood mitigation potential of the storages to protect and benefit the downstream areas of Brisbane and Ipswich. This degree of operation requires major investments in ALERT rainfall and river height sensors and real time modelling systems. In addition there is a dedicated Flood Operations Centre that implements flood mitigation strategies within an overall framework of ensuring dam safety is not put at risk. These decision support systems and resources are substantial and well documented.

Flood storage release infrastructure is as follows:

- Wivenhoe Dam has a primary spillway 72 m wide and consists of five radial gates (12m wide by 16m high) and a secondary spillway consisting of a 164m wide spillway chute with 3 m ogee crest and three fuse plug embankments.
- Somerset Dam has 8 radial gates with a fixed crest level of 100.45m AHD and 8 sluice gates with invert at EL 71.2 m AHD and four regulator valves.

Seqwater has a dedicated flood operations centre that is mobilized during floods.

There is extensive telemetry, including rain gauges, river and creek flood gauges, manual and automatic lake gauges used, to monitor and manage flood operations.

Under the Manual of Operational Procedures for Flood Mitigation at Wivenhoe and Somerset Dam, Revision 9, November 2011, the flood mitigation infrastructure can only be used in accordance with the Manual.

- At Wivenhoe Dam the five radial gates can only be opened and operated after a flood event is declared and mobilization has occurred at both the flood operations centre and at the dam and the lake level has exceeded the full supply level by a specified height. The operation of the gates is then undertaken in accordance with the strategies contained in the Manual.
- At Somerset Dam the eight sluice gates can only be opened and operated after a flood event is declared and mobilization has occurred at both the flood operations centre and at the dam and the lake level is greater than EL 100.45 m. The operation of the sluice gates and regulator valves is then undertaken in accordance with the strategies contained in the manual. Under the Manual, the eight fixed radial crest gates must be raised, if closed, to enable uncontrolled releases to occur. These radial gates have not, since the construction of Wivenhoe Dam ever been used for flood mitigation. They have no role in providing for water storage. The Manual seeks to ensure that they are not used by requiring them to be raised when a flood event is declared to enable unregulated flows out of the dam and also by omitting procedures in the Manual for their operation during a flood event. These radial gates no longer provide any useful purpose and should be considered redundant assets and removed. SMEC Australia in their detailed risk assessment on Somerset in 2004

noted that should the spillway gates not operate as intended the dam could become unstable and as part of a risk reduction strategy Seqwater needs to consider risk reduction measures including the removal of the sector (radial) gates, or anchoring the dam to the foundations.⁶³

Flood mitigation infrastructure is not available to release water to supply allocation holders in the CBRWSS and on this basis alone, capital expenditure and operating expenditure cost items relating to flood storage infrastructure should be excluded from any assessment of water storage infrastructure.

It follows from the foregoing, as MBRI asserts, the dams, and in particular the flood compartments, are not relevant to irrigators and do not supply irrigation water.

On the basis that full analysis of all infrastructure items and apportionment to various purposes is not possible or inefficient, an appropriate apportionment is able to be calculated starting with the storage statistics of the dams as set out in the Manual of Flood Operations.

Capacity (ml)	Full Supply	Flood	Total Storage	Flood as % of Storage
Wivenhoe	1,165,000	1,980,000	3,145,000	62.96
Somerset	379,800	750,000	1,129,800	66.38
Total	1,544,800	2,730,000	4,274,800	63.86

It is noted that Wivenhoe Dam has had its full supply level temporarily reduced on a number of occasions since 2011 to levels of 75% and 88%. At the time of writing this Response it was 88%.

One appropriate way of assessing irrigators' "share" is then to apportion the costs as a fraction of the available water (not ratios of medium to high priority water as used by the QCA,⁶⁴ whether adjusted or not). MBRI irrigators' total entitlement (subject to management through announced allocations) is 6771ML. This represents the following percentages:

Capacity (ml)	Full Supply	Flood	Total Storage
Total	1,544,800	2,730,000	4,274,800
6771ML	0.435%	0.248%	0.158%

On this basis, with further adjustment downwards for other usage (recreation, film production, electricity generation etc), the proper costs attributable to MBRI irrigators' taking of water from the CBRWSS system can be calculated on the basis of the above percentages, namely 0.158%.

This approach has the added benefit of approximating the cost and value of the CSO components without the need for full forensic accounting of each component of infrastructure.

MBRI's primary submission remains that the water drawn from the river for irrigation is independent of the dam infrastructure.

⁶³SEQWater, Provision of Contingency Storage in Wivenhoe and Somerset Dams, Appendix H – Somerset Risk Assessment, Failure Modes and Consequence Assessments, March 2007

⁶⁴ Draft Report Vol 1 p.135-146; Vol 2 p.31ff

Exclusion of Flood Mitigation Operations

Irrigators receive neither a service nor special communications to pre-warn them about flood operations or changes in flood release operations and as a consequence irrigators on numerous occasions are caught by release levels flooding or otherwise damaging irrigation pumps. For example, as a consequence of the high releases undertaken on 11 January 2011 many irrigation pumps and irrigation platforms were destroyed. Had irrigators been pre-warned about those large releases, damage or loss to irrigation equipment, stock, crops and other farming equipment could have been minimised.

Unfortunately for local downstream communities to Wivenhoe Dam, the areas of Lowood and Fernvale are used as flood basins with Savages Crossing available as a natural restriction causing water to back up into these low lying areas. This has a natural mitigating effect on high discharge releases from Wivenhoe Dam but at the expense of local communities. A further constriction in the river exists in the area known as Cameron's Scrub at Pine Mountain where the river narrows between hilly terrain, backing up higher level flows. This appears to have been government policy for 35 years, but only now are irrigators aware of this.

The general public (including MBRI irrigators) may register to receive emails and SMS advices about releases. Tis general service only advises of releases after the fact, and does not allow irrigators to prepare for inundation: it is not as an irrigation service.

Flood mitigation activities of Seqwater are not part of a typical service provided to irrigators in other schemes and are not part of the operations covered under the CBRWSS. Flood mitigation is governed various legislative instruments and regulated checks and balances. Seqwater provides no service to irrigators about flood operations above those provided to the general public and releases are more detrimental than beneficial.

Recent experience has shown that the major beneficiaries of this flood storage capability are residential and industrial landholders in lower lying parts of the river systems. MBRI irrigators are more likely to suffer harm from water discharge in flood management than to be beneficiaries.

Community service obligations

MBRI submits that if Somerset and Wivenhoe Dams are delivering benefits to the community, the costs of which should be borne by the community as CSOs.

In particular, the costs associated with flood mitigation and environment flows cannot logically be visited in whole or part to MBRI irrigators through pricing mechanisms for water because they do not benefit from flood storage capacity and releases and environmental flows (other than as members of the community).

Recent experience has shown that the major beneficiaries of this flood storage capability are residential and industrial landholders in lower lying parts of the river systems. As shown elsewhere in this Response, MBRI members are more likely to suffer hardship than to be beneficiaries when Seqwater releases high volumes of water to manage flood.

Environmental flows are stated in the Moreton WRP. Seqwater releases that are designed to achieve the stated targets and averages are not releases for the purpose of supplying water to irrigators. They are releases required by law for other purposes,

namely the environmental health of the riverine environment, and as such are a community service.

QCA indicates in the draft report that irrigators should pay a significant portion of the cost of managing environmental flow. Due to the nature of the CBRWSS for every 1ML of water used productively, 2ML of water is for environmental flow. Water passing Mt Crosby Weir is about 920,000ML and has come from one of three primary sources.

- (a) approximately 300,000ML impounded first in Somerset Dam, released into Wivenhoe Dam and into thence the river;
- (b) approximately 500,000ML impounded only in Wivenhoe Dam (that is from catchments other than Somerset) before release;
- (c) approximately 120,000ML not impounded at all (that is from Lockyer Creek and other sources below Wivenhoe).

Allocated water under the ROP is 286,041ML, meaning about 620000ML is water for environmental flow.

Every litre of water passing Mt Crosby has the same costs associated with it, being a blend of the costs associated with the dams, (a) and (b) above, and "free" water, (c) above.

Seqwater indicates that the average cost reflective estimate per ML is about \$16.50. This yields an estimate >\$10M CSO, which should be treated as a CSO and not attributed to irrigators.

The QCA's *Statement of Regulatory Pricing Principles*⁶⁵ states a range of principles about how CSO's should be accommodated in water pricing. Those principles appear not to have been used by QCA in its analysis for the Draft Reports. In particular MBRI submits the following principles and commentary from that document are relevant to the current review for the MBRWSS.

- (iii) "Options for the treatment of flood mitigation assets are to: ... exclude flood mitigation works from the regulatory asset base, on the grounds that these are not integral to the provision of water services (and perhaps should be accommodated through a specific CSO arrangement)" (p.40);
- (iv) "Given that there may be differences between the beneficiaries of flood mitigation works and users of water from relevant infrastructure facilities, the preferred approach would be for these works to be funded by the beneficiaries." (p.41)
- (v) "Indeed, flood mitigation works may be considered 'public goods', in that consumption by one individual, in terms of the reduced prospect or severity of flooding, does not impact on the consumption by others (ie, non-rivalry) and as it is difficult to exclude 'non-paying' consumers from benefiting (non-excludability). Further, there may be differences between the users of water services and the beneficiaries of flood mitigation works." (pp.40-41, fn17).

MBRI is not in a position to analyse the full cost and value of these CSOs, and believes in any case such a task is central to QCA's role. However, as shown above, one rational and efficient method is to calculate the quantity of entitlement as a percentage of the overall

⁶⁵ Statement of Regulatory Pricing Principles for the Water Sector, December 2000

storage capacity of the dams. The remaining percentage is a fair and representative estimate of the costs that are apportionable to other purposes, the bulk of which are the CSO elements and supply of urban water. It is then a more simple accounting task to account for the costs associated with recreational and other uses.

Riparian land benefits and burdens

One of the objectives for which the MBRI was established was "to promote effective sustainable catchment management with particular emphasis on water quality by promotion of sustainable farming practices". MBRI's members account for approximately 90% of the riparian landholdings in the mid Brisbane River, along some 120kms of riverbanks.

MBRI members recognise and embrace their role as catchment managers. Since its formation in 2005, MBRI has engaged with Seqwater and SEQCatchments to formalise this role and to implement measures to enhance it. These include numerous meetings, workshops and field days including the following.

- Extensive meetings with Seqwater about their water release procedures causing environmental damage to the mid Brisbane River riverbanks. The quick shutdown of water releases in the draindown phase of flood releases causes riverbank slumping through hydraulic drawdown. This is an ongoing source of poor water quality due to the large amounts of sediment released into the river. (On one property, the cost of riverbank slump repair after the 2011 flood release was \$50,000 for 1km. See photographs below of the damage caused by the releases.) This damage and cost is ongoing with every release.
- The majority of members have undertaken Property Management Planning (PMP's) workshops to develop plans with the main aim of ensuring water quality to the mid Brisbane River. These were held in partnership with SEQ Catchments.
- Many members have undertaken environmental works projects to ensure water quality. Projects include remediation of gully and river and streambank sites, revegetation, improvements to irrigation efficiency, contour banks to manage storm water runoff, and riparian weed management.
- Soil and Water Field days are frequently held to promote sustainable farming which improves soil health, reduces runoff and improves water quality.
- In 2009 MBRI won the Healthy Waterways Rural Award for Property Management Planning and Environmental Rehabilitation, sponsored by Seqwater.



Photographs: Damage caused by Seqwater floodwater releases, Pine Mountain

The following email, sent by an MBRI irrigator with an entitlement in the 60-100ML range, illustrates the scale of problems caused by flood events in the basin.

Following the 2011 flood we have had 4 attempts at restoring our irrigation site due the severity of the bank erosion. The problem keeps occurring after each rain event and flood. The problem not only occurs when it floods, we also are having a lot of problems with general rain washing our site away. It appears to be an ongoing problem with no easy solution. The river banks are in such a bad state the problem just keeps on occurring with nobody being able to tell us how best to solve this problem.

Below are some of the costs we have incurred so far and an approx cost to repair the site after this latest flood. With each flood the problem just gets bigger and cost more money each time.

Repair costs incurred after 2011 flood event

- o Earth works repairs \$ 2282.00
- o Electrical repairs \$ 3631.00
- o Replace irrigation fittings washed away \$ 4071.00
- Repairs to pump site after a storm in late 2011
- o Earth works and rehabilitation work \$ 2750.00

Repaired again in 2012

• Earth works and rehabilitation work \$8200.00

Repairs are to be made again after the 2013 flood events with a approx cost of \$8200.00.

As you can see the total amount comes to \$28,934.00. This cost is only to the irrigation site alone.

We had a quote to repair the farm which was severely damaged in the 2011 flood with an approx cost of \$ 450,000.00, which would also mean we would lose about half of our farming area trying to get enough fill to fix the bank which has a sudden drop of about 40 metres deep.

Landholders manage issues such as invasive weeds (eg hyacinth and lantana) and undertake land care. If pricing of irrigation water results in MBRI irrigators being forced out of business there is a grave risk the catchment will become a wasteland.

In August 2011 Seqwater commissioned the 'Mid Brisbane River Restoration Study' by Professor Jon Olley from the Australian Rivers Institute at Griffith University. MBRI is on the Steering Committee for this study along with SEQCatchments. In his update report Dec 2011 Professor Jon Olley states:

"the aim of this study is to understand processes within Seqwater catchment's (source, store, supply) that influence water quality, and to identify ways to assess, investigate and improve treatment barriers for enhanced water quality outcomes. These aims will assist in developing asset investment options to optimise investment across the multi-barrier components of the water treatment chain, which will ultimately reduce the treatment cost across source, store, supply to achieve required water quality and yield".

The Study's objectives are to "identify options for remediation and enhancement of the mid- Brisbane channel".

Another study states that a 20% reduction in colour and turbidity would save between \$4/ML and \$17/ML in operating cost which is an annual saving of \$762,000 and \$2.43M

at full capacity. Capital costs of such additional treatment processes would be \$129 million with additional operating costs of \$5.5M pa.⁶⁶

MBRI total water allocation is a tiny percentage of the water in the CBRWSS system, yet arguably, MBRI irrigators provide an essential service (at no charge) to the other 98% of users by working to maintain water quality. That effort would otherwise have to be carried out by other authorities including Seqwater, local governments and the State. MBRI argues that maintaining the status quo of no charge for water is appropriate as recognition of MBRI members' commitment and efforts as catchment managers.

QCA asserts that MBRI irrigators benefit from the flood capacity of Wivenhoe Dams.⁶⁷ Those assertions are simply wrong, as demonstrated by the massive impacts the flood water releases wrought on the mid Brisbane River area in 2011. The MBRI community is, in reality, penalized substantially by the flood mitigating infrastructure of the Dam. QCA's analysis suggests that the costs associated with operation and maintenance of the flood infrastructure is \$2,439,000. The sum is clearly not relevant to irrigation water.

Methodology to assess prudency and efficiency.

QCA has adopted a sampling approach to assessing verification of submitted cost information on renewals expenditure (capital expenditure or "capex") and operational expenditure ("opex"). Sampling methods used and the population of cost items selected do not result in a representative assessment of capex and opex costs relating to water storage infrastructure across the schemes being investigated.

The analysis does not take into adequate consideration the scale of operations in the CBRWSS in comparison to other schemes participating in the sampling process. The scale of operations of Somerset and Wivenhoe dwarf the other schemes upon which QCA is to investigate and make recommendations on pricing. Wivenhoe Dam is the largest dam in South East Queensland and the third largest dam in Queensland following the Burdekin and Fairburn. Somerset Dam is the second largest Dam in South East Queensland. Extrapolations of assessments based upon prudency and efficiency on capex items for small scale WSS to significantly larger scale operations of Somerset and Wivenhoe is problematic, akin to comparing apples and oranges. This is particularly so given the multifunctional purposes of Somerset and Wivenhoe Dams. Insufficient consideration is given to the importance of adequately weighting the sampling process and across all cost categories of capex and opex. The sheer scale of monetary items of capex and opex items for Somerset and Wivenhoe justify a more intense assessment with a great coverage of items. The sampling process fails to sample all cost categories on a proper stratified random basis.

The assessment wrongly assumes that flood storage infrastructure is part of the normal operations of the water storage infrastructure upon which irrigation prices are to be assessed and therefore results in an underestimation of savings that should be applied to non-sampled items. Disallowing items or apportioning items back to only reflect prudent and efficient items necessary for water storage infrastructure and its operations would result in considerable savings being applied to non-sampled items. Ideally, however, firstly all items to be included in the population for sampling purposes should only relate to water storage infrastructure and its operations. Secondly,

⁶⁶ Kellogg, Brown and Root (2009) 'Valuing the Natural Asset: Investigating the Impact of Water Quality Changes on Mt Crosby Water Treatment Plant Cost'

⁶⁷ Volume 2 pp 75 and 79

sampling could then be undertaken on a proper stratified random sampling basis related to that adjusted population to improve the confidence in assessments undertaken and extrapolated.

The lack of detailed description about proposed capex and opex and lack of comparative information over Sequater operations makes it very difficult to make judgements about prudency and efficiency and the reasonableness of allocations between schemes and as a proportion of Segwater operations. Errors may be reflected in WSS picking up a disproportionate share of costs relative to Segwater as a whole or result in an imbalance between the relationship between direct and indirect costs. It is noted, for example, that the allocation of rates expenditure across WSS under review represents a significant proportion of rates expense incurred by Segwater in 2011-12. This indicates that the allocation of direct costs across WSS may be disproportionate relative to Segwater operations as a whole. While indirect costs represent a real cost of doing business they would be expected to be materially less than direct costs, otherwise they reflect inefficient operations. Where indirect costs are material and even approach the quantum of direct costs as is in the assessment undertaken by QCA, it points to the possibility that the allocation of indirect costs across WSS is disproportional to allocations across other operations undertaken by Segwater. Segwater is a very significant organisation with large range of activities and errors in allocation of indirect costs are not only possible but could be substantial in nature.

MBRI submits that there are sufficient concerns about the methodology and the resulting assessment of costs to warrant QCA undertaking a more thorough investigation and analysis.

Renewals annuity

(a) Capital Expenditure Sampling Process

Because of time constraints QCA was unable to comprehensively review all past or forecast renewals expenditure for the CBRWSS for prudency and efficiency. 68 Rather QCA pooled all future renewals expenditure across the seven WSS (Central Lockyer, Lower Lockyer, Logan River, Warrill Valley, Mary Valley, Cedar Pocket and Central Brisbane River).

Rather than individually assess each of the future renewals expenditure, QCA chose to adopt a sampling process of renewals expenditure and engaged SKM to undertake the assessments. SKM was requested to undertake a full assessment of 12 capital expenditure items identified by QCA from all WSS as a representative sample of the capital expenditure program for Seqwater irrigation schemes. For reasons outlined above this approach is flawed. There has been no attempt by QCA to correctly identify the population of items before sampling. The population includes renewals for water storage infrastructure, flood storage infrastructure and other infrastructure such as for hydro-electricity. The scale of capex expenditure across the various WSS has not been adequately taken into consideration.

The selection process is not scientific. It is not based upon stratified random sampling from a correctly identified population of capex items and is therefore not a representative sample of the population. For example, it is noted that only one item in

⁶⁸ See the scant discussion of this at p.119 of Draft Report Vol 1.

the 12 items selected relates to the CBRWSS and that item related to renewal year 2026. As noted by SKM about 47% of proposed capital expenditure for the period 2013-14 to 2016-17 relates to the CBRWSS. However, only one item was selected for CBWSS. The Central Lockyer, on the other hand, represented just 4% of proposed expenditure and QCA selected 6 items (50% of the sample) for detailed analysis.

SKM assessed these sample items against the QCA's definitions of prudency and efficiency. Where an item failed to be prudent then the project cost was not allowed. Where the project was found to be not as efficient as it could be, then SKM revised the project cost down. The variance that was found between SEQWater's and SKM's estimated project's value on these items sampled was found to be 13%. QCA then applied a 13% discount to all items that were not sampled.

In addition to the items identified for detailed analysis, a number of other expenditure items were identified from ten asset classes. Again there was an underrepresentation for the CBRWSS – only 4 of the cost items spread over two classes out of 49 cost items over 10 classes related to the CBRWSS. This compares, for example, to 11 items over 6 classes for the Central Lockyer WSS. It is noted that no further cost items were selected for outlet works.

MBRI submits that sampling bias in the selection of the 49 items has once again occurred for reasons set out above. SKM was asked to provide a recommendation as to whether the findings can be generalized across a particular asset class to determine the likely prudency and efficiency of total expenditure in that class. Where SKM could not make such a finding then the future particular expenditure item was treated as a non-sampled item to which a 13% was applied rather than disallowed. The rationale for this is that the 12 items selected for detailed analysis identified the savings figure which is assumed to be representative of and reflected in the population, that is, 13% of items in the population would be either disallowed or reduced based upon prudency and efficiency assessments. The level of confidence in reliance on that savings figure is expected to be low based upon the previous discussions.

If as MBRI submits, flood storage infrastructure and other non-water related infrastructure is excluded then the population would be significantly reduced. The 13% savings factor is therefore grossly underestimated by the inclusion of non-water storage related infrastructure.

Whilst there is not sufficient information provided in Appendix A to describe the future renewals that apply to water storage infrastructure, the list could be grouped under the following categories with some items in more than one category:

- 1. hydro-electricity generation, eg, refurbish hydro, trash screens/racks, transformer, power reticulation, switch gear, power supply, etc.
- 2. water storage infrastructure, regulators and trash screens/racks, etc
- 3. flood storage infrastructure, eg, sluice gates, radial gates, sluice and crest spillway refurbishments related to operation of gates, counterweights, gate winches, gearing, hosting mechanisms, gantry cranes, tracks, winches, drive motors, service bridge, three regulators and trash screens, water meters, winches on Wivenhoe Dam gates, communication systems, pumps, gate seals, transformer, switch gear, power reticulation, power supply, etc.

- 4. a combination of two or more of the above requiring some method of apportionment, eg regulators, inlet screens and trashracks, structural walls, columns and beams refurbishment, inlet/outlet works, fences, gates and railings, water and fire services, seismic monitoring, generators, power supply, etc.
- 5. other purposes not related to CBRWSS, eg refurbish town water to Somerset, Logan Camp Water Reservoir and tank, etc.

In respect to regulators, only one regulator out of the four at Somerset is needed for domestic water release into Wivenhoe but it is also used as part of flood mitigation release strategies. There is only one regulator at Wivenhoe and again it is used for domestic water release and flood releases.

A quick assessment indicates that the proposed capex items would be substantially reduced in number and value if those items that relate to flood storage infrastructure and other non-water infrastructure are removed. Based upon the smaller population, a statistically representative sample could be drawn and assessed based upon prudency and efficiency to arrive at a representative saving discount to be applied to non-sampled items.

As noted above, the appropriate reference point for MBRI is small-scale rural infrastructure that does not require the high-cost, heavy-duty, specialised facilities relevant only to a large dam, especially one with hydro-electric generating capacity.

In the circumstances MBRI submits the sampling approach is unscientific and seriously flawed:

- 1. the future renewals population includes items not related to water supply services under the CBRWSS;
- 2. the sampling process has not been undertaken on a stratified random basis to select items that would be representative of the population;
- 3. CBRWSS is under represented and it is evident that sampling bias has occurred. Given the scale of operations for Somerset and Wivenhoe, it would be more appropriate to undertake a sampling process separately for he CBRWSS rather than pool items with other smaller WSS.
- 4. The outcome has produced a savings factor that is not representative of the factor that would be expected at higher more appropriate levels of confidence.

MBRI submits the calculation for the renewals annuity for the CBRWSS is not only flawed but the outcome grossly in error and overstated.

(b) Specific comments on the four items detailed in the draft report

Item 1: Somerset inlet and outlet works

SKM undertook a detailed assessment of cost items for the Somerset inlet and outlet works (\$3,251,000). As detailed in the Moreton ROP, the outlet works comprise:

- (a) 8 x 2.44m x 3.66 m sluice gates
- (b) 4 x 2.3 diameter regulator valves

(c) 1 x 4MW hydro power station – releases only to be made for hydropower generation when the dam is above 90.0m AHD (rate of release has capacity of 370 ML/day).

Item (a) above is not relevant to this review. The sluice gates are part of the flood infrastructure and are only available for flood mitigation in accordance with the Manual of Operational Procedures for Flood Mitigation at Wivenhoe and Somerset Dam.

Any costs that relate to (c) above should be excluded as the generation of hydroelectricity is not needed as part of the scheme. Other schemes currently being reviewed do not include hydro infrastructure as part of irrigation. While it could be argued that the water that passes through the hydro is available for the WSS, it is neither prudent nor efficient to include it. Under (b) above Somerset has four regulator valves which provide more than ample the level of releases into Wivenhoe Dam for ultimate supply of water below Wivenhoe Dam.

At full supply level for Somerset, each regulator is capable of releasing 69 m³/s. The regulator at Wivenhoe is capable of releasing 29.5 m³/s at full supply level (930,312 ML pa) into the CBRWSS. Accordingly only one regulator value at Somerset should be included as this is all that is needed during normal operations at Somerset. The other three regulators should be excluded as being part of the flood infrastructure. If the dam was only a water storage infrastructure dam it would not need all of this expensive infrastructure.

Seqwater identified the inlet screen structures as essential to the safe operation of Somerset Dam as they house the trash screen structures. However, it is noted above that only one regulator is needed and therefore the majority of these works relate to flood infrastructure and hydro.

MBRI submits that the majority of these future cost items relate to flood infrastructure and are not needed for water storage infrastructure. It is unreasonable to allocate the total of these costs to the CBRWSS on the basis that they are required to operate the WSS. A distinction needs to be made between what would be required if Somerset was built only for water storage and not for a combination of water storage and flood mitigation and other uses.

MBRI recommends that QCA apply a savings factor that seeks to adjust out operations related to flood mitigation. Such a savings factor is discussed below.

The lack of detailed description on this project creates material uncertainties. Is this project only related to inlet and outlet works? Seqwater describes the project as involving refurbishment of structural walls, columns and beams. This expenditure was put forward in the past as being necessary if the FSL at Somerset was to be increased. And it was at that time brought into question as something that needed to be done even if the FSL was not raised on account of it would be required to meet state guidelines on acceptable flood capacity. ⁶⁹

To what extent is a sizable portion of these costs tied up with works to upgrade flood security to satisfy State Government Guidelines? The Ministers' Referral Notice requires QCA not to consider the recovery of capital expenditure relating to dam safety upgrades. The limited level of detail provided makes it difficult to assess this component to meet dam safety upgrades required by Government.

⁶⁹ See SEQWater, Provision of Contingency Storage in Wivenhoe and Somerset Dams at Page 56.

If a component of these costs was removed on account of flood storage cost and dam safety upgrade cost then the calculation of the savings factor to be applied to non-sampled items across all WSSs would have been significantly higher than 13%.

Item 2: Telemetry

SKM undertook a detailed assessment of cost items for Cedar Pocket (\$68,000) and Logan (\$70,000) WSS and then sought to assess whether the findings could be applied to Lockyer (\$70,000), Central Lockyer (\$70,000), Logan (\$20,000) and Central Brisbane River (\$282,000) WSSs. SKM found that:

- no assessment could be made in respect to the telemetry cost for the Logan as no detail had been provided;
- it could not apply the telemetry findings for Cedar Pocket and Logan to the CBRWSS because the cost estimates indicate the work is on a scale that is not comparable
- the results of their analysis could not be applied to assess prudency or efficiency.

Nevertheless, QCA decided to accept this significant cost of \$282,000 as a non-sampled item and discount it by 13%. This approach by QCA is not sustainable for the flowing reasons:

- It is not known whether the cost includes any telemetry damaged from the 2010-2011 floods;
- The scope of works and purpose of replacing the telemetry system is not known and whether its primary function relates to flood mitigation, given the scale of the costs of the project are at least four times that for other telemetry projects in other WSS being investigated by QCA.

Unlike the telemetry projects investigated in detail by SKM, the telemetry system is of no value to irrigators. It is not used to control water flow to irrigators and would be of no benefit during high river flows because there is no opportunity for water harvesting.

MBRI submits that if QCA insists on the inclusion of any telemetry cost item then it should be limited on prudency and efficiency grounds. It would be unfair and inappropriate to provide the sum of \$245,000 without knowing the precise detail of its function and purposes given the other primary function of the dam is to provide flood mitigation.

If the reductions were assessed as detailed above, the resulting costs would be significantly less than if a 13% savings factor were applied.

Item 3 - Trash Screen Projects

SKM undertook a detailed assessment of this cost item for the Clarendon Diversion (\$50,000) and found the proposed periodic refurbishment to be prudent and efficient. SKM then sought to see if the results of that review could be applied to nine additional trash screen projects, namely:

- Atkinson Dam replacement of trash screens (\$45,000)
- Somerset Dam replacement of trash screens (\$1,399,000)
- Somerset Dam refurbishment of spares (\$175,000)
- Kent's diversion weir replacement of trash screen (\$5,000)
- Upper Warrill diversion replacement of trash screen (\$3,000)
- Mortonvale refurbishment of trash screen (\$18,000)

- Maroon Dam refurbishment of trash screens (\$36,000)
- Borumba Dam replacement of trashracks (\$11,000)
- Wivenhoe Dam refurbishment of trashrack (\$80,000)

SKM found that it was not possible to extrapolate the findings from a refurbishment project to a replacement project, as the two activities are very different in scope. QCA noted the outcome of the SKM review that the results could not be applied to assess prudency or efficiency but otherwise allowed the Somerset and Wivenhoe Dam item costs above but as non-sampled items discounted by 13%.

The scope of these works is not known. It is noted that the replacement of trash screens at Somerset is a significant cost. No attempt has been made to differentiate between whether some of these trash screens relate to flood infrastructure and also the hydro. As detailed in the Moreton ROP, the outlet works comprise:

- (a) 8 x 2.44m x 3.66 m sluice gates
- (b) 4 x 2.3 diameter regulator valves
- (c) 1 x 4MW hydro power station releases only to be made for hydropower generation when the dam is above 90.0m AHD (rate of release has capacity of 370 ML/day).

Item (a) is not relevant to this review. The sluice gates are part of the flood infrastructure and are only available for flood mitigation in accordance with the Manual of Operational Procedures for Flood Mitigation at Wivenhoe and Somerset Dam.

Any trash screen costs that relate to (c) should be excluded as the generation of hydroelectricity is not needed as part of the scheme. While it could be argued that the water that passes through the hydro is available for the CBRWSS, it is neither prudent nor efficient to include it. It is not needed to deliver water supply and as there exists four regulators it is not prudent and efficient to include it.

MBRI submits that trash screen costs associated with the hydro be excluded.

Under(b) above (regulator valves), Somerset has four regulator valves which provide amply more than the level of releases into Wivenhoe Dam for ultimate supply of water below Wivenhoe Dam for whatever purpose. At full supply level for Somerset, each regulator is capable of releasing 69 m³/s. The regulator at Wivenhoe is capable of releasing 29.5 m³/s at full supply level (930, 312 ML pa) into the CBRWSS. Accordingly only one regulator value is needed during normal operations at Somerset and is therefore not prudent and efficient to include more than one. The trash screens for the other three regulators should be excluded as being part of the flood infrastructure.

MBRI submits that the trash screen costs associated with only one regulator should be included.

It is also noted that in the same year of replacement of the trash screens, it is proposed to refurbish some trash screens. It is not known whether the refurbished trash screens are the ones replaced or are spares. If they are the ones removed then they should be refurbished rather than replaced. If they are spares then they should be refurbished and used rather than replaced. In the absence of further information including normal practice, it is not efficient to replace trash screens if they existing screens can be refurbished.

MBRI submits that it would neither be prudent nor efficient to provide for the replacement of the trash screens if the existing screens can be refurbished or

other refurbished screens are available. Such costs should be excluded entirely unless and until proven to be efficient and prudent.

If the reductions were assessed as detailed above then the resulting costs would be significantly less than the 13% savings factor that was applied.

Where SKM has found that individual results of its assessment of 49 cost items across all schemes could not be applied to assess prudency or efficiency for other cost items, QCA has treated such items as non-sampled items and applied a 13% saving (discount). As stated above the process is fundamentally flawed as no attempt has been made to identify the subpopulation of future renewal assets that apply only to the water service under the CBRWSS. Nor has any attempt been made to exclude hydro and flood storage infrastructure.

MBRI submits that as the 13% is not scientifically determined to be a representative saving expected across the population of cost items not sampled and therefore the approach is flawed.

MBRI's preferred approach is to factor out the flood capacity entirely, and this Response suggests a method to do so. Another acceptable approach would be to undertake a proper assessment and analysis of the future cost items. If QCA in unwilling to do this, at the very least, Seqwater should be required to provide detailed purpose and scope of works so that QCA can exclude or apportion out flood, hydro and other future cost items that do not relate to water infrastructure for irrigation.

If for convenience sake, QCA wishes to disregard identification of the correct population and not undertake a representative sampling approach, a larger savings factor needs to be identified. It is not appropriate to apply a single factor as these dams are not identical storages and their construction, size and capacities differ. Set out below is the storage statistics of the dams as set out in the Manual of Flood Operations and the savings factors that could be applied:

	Full Supply Capacity	Flood Capacity	Storage Capacity	Flood:Storage (%)
Wivenhoe	1,165,000	1,980,000	3,145,000	62.96
Somerset	379,800	750,000	1,129,800	66.38
Total	1,544,800	2,730,000	4,274,800	63.86

It is noted that Wivenhoe Dam has had its full supply level temporarily reduced on a number of occasions since 2011 to levels of 75% and 88%. At the time of writing this Response, it was 88%.

MBRI submits that the savings factor of 13% is grossly inappropriate and overestimates the extent to which these future cost items relate to the water service infrastructure as distinct from flood infrastructure and other infrastructure such as electricity generation. Appropriate savings factors might be 66.4% for Somerset and 63% for Wivenhoe but further work would be required.

Direct and Indirect Costs and Offsets

Direct Costs

The Ministerial Direction requires the Authority to recommend a revenue stream that allows Seqwater to recommend irrigation prices to apply. While the Referral Notice identifies a number of costs for inclusion it does not extend to including matters that are too remote to be included as being part of an irrigation service.

As discussed elsewhere, Somerset and Wivenhoe Dams are multifunctional dams of significant size with primary functions of water storage and flood mitigation. Both dams produce hydroelectricity. It is difficult to assess the extent to which Seqwater has:

- (a) excluded costs associated with flood mitigation;
- (b) excluded costs not associated to water infrastructure;
- (c) excluded costs and revenues associated with hydroelectricity;
- (d) captured revenue offsets;
- (e) undertaken allocation of costs appropriately across the various activities of Seqwater and for water infrastructure, across the various WSSs.

SKM and QCA have not attempted to verify the accuracy or completeness of the cost information provided. QCA considered it was not practicable within the time available for the review, nor is it desirable given potential costs involved to assess prudency and efficiency of each planned expenditure item.⁷⁰

Accordingly, QCA requested SKM to review a sample of forecast operating costs (55%) for prudency and efficiency. The sampling was only across three operation cost categories – direct labour, repairs and maintenance, materials and other. SKM did not review electricity, rates or dam safety cost categories. The sampling process does not result in a representative reflection because it is not based on samples drawn from a stratified random sampling process across all classes of costs.

For the CBRWSS, QCA sampled two direct operating cost items. The information about these cost items is scant and by the definition of dam operations includes costs associated with flood mitigation for both dams. Even the costs associated with the Flood Operations Centre have been included.

These costs should be excluded from water storage costs of Seqwater as these extensive and significant operations are managed elsewhere and not under the Moreton ROP and are not part of normal costs that would relate to typical irrigation schemes and water storages.

Within the time frame and its limited resources, MBRI has not been able to assess whether the monitoring arrangements solely relate to requirements under Seqwater's resource operations licence and the Moreton ROP or whether they go further and are association with related activities required under other legislation, for example, the *Water Supply (Safety and Reliability) Act 2008* (Qld).

⁷⁰ See Vol. 1 of the draft Report at page 178.

For example, the Wivenhoe Drinking Water Quality Management Plan was developed to comply with s.207 of that Act that deals with augmentation of drinking water supplies from recycled water. This is hardly relevant to the cost of irrigation water.

MBRI understands that the plan has been implemented but that no recycled water has yet entered the dam. Nevertheless 44,426 analyses were conducted under the plan over the 2011-2012 year. Again, hardly relevant to irrigation water.

There is insufficient information in order to undertake a proper assessment of the relevance of water quality management related to requirements under the Moreton ROP and those that are external and relate to monitoring the quality of water in the dams, the quality of water entering into the Brisbane River from Lockyer Creek and the quality of water as it passes sanitary facilities down to Mt Crosby pumping station for urban water related purposes.

One area not investigated relates to rates. Rates are part of direct costs of the schemes and reflect local government rates payable on Seawater's land including storages. Forecast rates are included for Logan River, Central Brisbane River, Warrill Valley and Lower Lockyer Valley WSS. For 2012-2013 Seqwater's forecast expenditure for rates is \$836,066.

QCA's recommended operating cost for rates in 2013-14 across the WSS is as follows:

WSS	2013-14
Logan River	57,623
Central Brisbane River	706,434
Warrill Valley	44,946
Lower Lockyer	47,965
Total	856,968

To put the rates cost into context, no information has been provided on the total rates Seqwater pays in aggregate across all its activities. The Annual Report for the year ended 30 June 2012 reveals in note 14 that the rates and tax expenditure was \$1,161,000. The 2012-13 estimate for only the WSS (that is excluding for other activities including Mt. Crosby, etc.) represents some 72% of Seqwater 2011-12 rates.

Why is it so high as a percentage of Seqwater total rates? Seqwater owns assets from the border with New South Wales to the base of the Toowoomba ranges and north to Gympie. Major assets include:

- 26 dams
- 46 operational water treatment plants
- 50 weirs
- 14 ground water bore fields and aquifers
- the Western Corridor Recycled Water scheme
- the Gold Coast Desalination Plant.

Seqwater manages recreational facilities that currently provide more than 50 per cent of the green space for south East Queensland.

Segwater's Annual Report reveals the fair value of these assets as:

- Land \$541,949,000
- Buildings \$15,830,000
- Dams and Weirs \$1,937,379,000
- Water Treatment Plants \$2,442,168,000
- Pipelines \$1,119,458,000
- Plant and Equipment \$20,697,000.

One possible explanation is that Seqwater owns considerable lands around the margin of the dams that are not only the subject of this review but in respect of other dams, for example, Hinze Dam. For example, Seqwater owns all the land between full supply level EL 67m and EL75m around Wivenhoe Dam that represents the flood compartment of Wivenhoe Dam up to 75m. Seqwater also owns lands above that level as part of acquisitions and some of those lands may have houses on them. These acquisitions relate to flood mitigation activities of Seqwater and therefore rates relating to lands above full supply level should be excluded from water storage costs. Can this be explained by looking at the level of offsets, for example, lease revenues?

Offsets

It is noted that Seqwater leases out its rental properties, office space, gazing land and recreation facilities. It is not known the extent to which Seqwater may provide housing to employees at dams. The 2011-2012 Annual Report reveals lease revenue of \$1,048,000. Other revenues received included:

- Consulting revenue \$741,000
- CSO \$1,368,000
- Government grant \$11,382,000
- Other grants \$599,000
- Other revenue \$806,000.

Seqwater receives CSO payments from the Queensland Government. The Rural Water payment is for the provision of rural irrigation water to rural irrigators. The Water Planning Development payment is for activities to ensure compliance with regulatory and policy areas of resource management.⁷¹ This is one cost area for the CBRWSS that incurs significant costs above other WSS, given the scale of its domestic water storage operations.

The total of these other revenues is \$15,944,000. Excluding the Government grant of \$11,382,000, as no details exist as to what the grant was provided, the total is \$4,562,000. However, revenue offsets only for the four schemes looked at were only \$585,174 for 2913-14 or 68% of estimated rates expense. Revenue offsets are shown below for the schemes where rates were also allocated:

WSS	2013-14
Logan River	24,967
Central Brisbane River	523,650
Warrill Valley	22,426
Lower Lockyer	14,131
Total	58,5174

⁷¹ See Seqwater Annual Report 2011-2012, at page 51.

In conclusion it is not possible to ascertain whether the WSSs above are bearing an unfair and disproportionate share of rates and not receiving a reasonable share of revenue offsets. However, the analysis raises this as an issue by looking at these items in context with the Financial Statements for Seqwater for 2011-2012.

Non-Direct Costs

It is not possible in the time frame and based upon the scant information to make any proper assessment on the validity of and quantum of non-direct costs.

However, Seqwater's insurance costs increased significantly in 2011-12, from \$2,394,000 to \$5,294,000. Part of the reason for this increase would relate to claims. The Insurance Note in the Financial Statements for the 2011-12 year states:

The Entity's insurance claim in response to the January 2011 South East Queensland flood is in progress. The Entity is pursuing insurance for costs incurred to date and estimates for the restoration of asset damage due to the flood. The actual amount to be received from the underwriters is dependent on their review of the submitted claim and the ongoing completion of engineering assessments.

Four insurance claims totalling \$21.77 million plus prolongation costs for the Gold Coast Desalination Plant in respect of rectification work yet to be finalised. Out of the total claims, \$15.18 million has been received.

Insurance claims totalling \$24.84 million have been submitted in respect of WCRWS-Gibson Island. The claims are in relation to professional indemnity and material damages. \$5 million has been received.

Insurance claims have also been submitted for the WCRWS-Eastern Pipeline for \$8.5 million in relation to professional indemnity.

It would appear that a number of these insurance claims relate to matters not relevant to the provision of water storage and irrigation but there is not the time and information available to review this in any detail. The insurance component for the CBRWSS is proposed at \$708,711 for 2013-14. Based upon 2011 insurance costs it represents a very substantial component of Seqwater insurance costs, about 30%. This seems high given the significant assets Seqwater owns as detailed above. Again by looking at the cost allocation in the context of Seqwater's overall costs, it suggests that the apportionment to CBRWSS may be high. If so, this would be to the financial detriment of MBRI irrigators.

A further check on the appropriateness of the allocation of non-direct costs would be to compare the total non-direct costs to direct costs for the CBRWSS. For the 2013-14 year, QCA's recommended operating costs are as follows for the CBRWSS:

Direct Costs \$7,838,350 Non-Direct Costs \$6,889,264 Total Costs \$14,727,615

Non-direct costs being 47% of all costs is not indicative of efficient operations or possibly indicative of poor accounting practices. It also points to the possibility that the allocation of indirect costs across WSSs is disproportional to allocations across other operations undertaken by Seqwater.

Sequater is a very significant organisation with large range of activities and errors in allocation of indirect costs are not only possible but could be substantial in nature.

Summary

MBRI has concerns about the extent to which the costs put forward by Seqwater reflect costs associated with water storage. The testing and verification of those costs was not undertaken on a representative sampling basis. On a non-tested direct item, rates expense, the apportionment between WSS and other Seqwater operations appears high for WSS. On the non-direct item of insurance, the amount allocated to CBRWSS also appears to be high when compared to insurances across other Seqwater activities. As a further check, the balance between direct and indirect costs is generally out of kilter with typical operational activities. One would not expect that the aggregate of indirect costs would nearly match the aggregate of direct cost and may be indicative of problems in properly identifying and allocating non direct costs. Seqwater is a very large organization that carries out a significant range of activities and has significant assets and costs and errors in apportionment can result in WSS picking up more than a fair share.

MBRI submits that that there are sufficient concerns about the methodology and the resulting assessment of costs to warrant QCA undertaking a more thorough investigation and analysis.

Sleepers and dozers

QCA justifies its proposed pricing structure in part on an assumption that high Part A costs will facilitate water trading. This is not true for MBRI irrigators and based on incorrect assumptions.

The Submission made to QCA by MBRI prior to the issue of the Draft Report went to some length to identify problems associated with using a high cost strategy to remove Sleepers and Dozers from the WSS.

A proportion of the 7000ML per annum is not being used productively for a variety of reasons revealed in MBRI's survey of members.

MBRI's position is that it would be wrong to use punitive pricing structures to improve the productivity. Forcing all irrigators pay an un-affordable unit price is inefficient and inequitable.

It should be noted that the licenses issued under the provisions of the *Water Act 2000* before the ROP was promulgated were not subject to a beneficial use condition.

MBRI recently carried out a survey of its members which revealed the following.

- 31.5% of members did not have pumps in the river and were not using their entitlement.
- The main reason for this is repeated damage to their infrastructure since September 2010, including from dam releases.
- A second reason was the effect of significant restrictions for 4 out of 5 years prior to 2010.
- Perceived value of water rights varied considerably. Optimists might consider the rights tradeable at \$2000 per ML or higher. Realists tend to consider the rights be worth \$500 or less per ML.

- Current owners believe they paid a significant premium for their land because of the riparian location and the water rights (whether attached to the land or not). The water therefore takes on a significance not amenable to pricing incentives.
- The MBRI community believes that the value of a block is enhanced by holding an allocation. That is, landholders believe land sold with an allocation is considerably higher in value than land without irrigation rights, and that separate sale of the allocation would yield much less than the difference. For example, 5ML might be thought to add say \$75,000 to the value of the land while separate sale of the water on the optimist's view would be \$10,000 or less.
- Seqwater's flood release strategies are thought to have seriously devalued many of the properties involved and depressed real estate in the area generally.

The majority of the MBRI water users hold small allocations where the impact of a Part A tariff is minimal. That is, the proposed structure would provide no incentive on small holders to trade, especially in conjunction with the perceived increase in land value of a small holding

However, business irrigators would face large input cost increases even when water was not needed or used because of good seasons. That may have the perverse effect of encouraging larger farmers to sell entitlement to small land holders, to reduce their fixed input costs.

MBRI submits that instituting a Part A tariff would not provide an incentive to trade water, especially for small entitlement holders.

MBRI considers that the uncertainty surrounding the Government's approach to water charges is the greatest deterrent to improving the efficiency of water usage. Once a decision that appears sustainable is made, then there should be a focused effort on ensuring the value of this water is reflected in activity in the community.

MBRI submits that incentives to encourage trading and improved efficiencies in the water usage should be separated entirely from the pricing structure.

MBRI calls on Seqwater to work with irrigators to address the need to provide the right conditions for efficient water trading.

A price on irrigation water

MBRI's primary submission is for retention of the status quo, a zero price on irrigation water, for the reasons already stated, but including:

- 1. the historical reasons for setting a zero charge being the sustainability of the economy and community of the mid Brisbane River area and the lack of reliance on the infrastructure that was built for urban water and flood mitigation;
- 2. legislated guarantees of no charge for access to the water;
- 3. the complete absence of services or infrastructure that is relevant to MBRI irrigators and represents the goods and services paid for;
- 4. the impact of water prices on the economy of irrigated properties (affordability);
- 5. the impact on land values, already diminished by Seqwater having release water from the dams in a way that damaged properties.

None-the-less, MBRI remains concerned that QCA has predetermined an outcome that a charge must be placed on CBRWSS irrigation water for other reasons. MBRI argues those reasons are not relevant and represent irrelevant considerations in the decision making.

While not conceding the primary argument MBRI submits that if a price is recommended, it should be reflective of four primary facts:

- i. <u>No infrastructure or services to irrigators</u>. MBRI irrigators do not source their water from Seqwater infrastructure, do not have any security of water because of the dams, and receive no services from Seqwater;
- ii. <u>Infrastructure is for flood purposes</u>. As shown elsewhere in this Response, the infrastructure was built for flood and other non-irrigation purposes. The operating and capital expenditure for Somerset and Wivenhoe Dams is distorted by the cost of maintaining the flood infrastructure and these costs should be factored out of any price;
- iii. <u>Efficiency</u>. MBRI is concerned that collection of the impost would be more costly than the revenue raised, or that those costs would be shifted from Seqwater and the government onto irrigators. The efficiency issue is compounded if high-cost metering is imposed by Seqwater on irrigators. (See below.)
- iv. <u>Community service obligations</u>. The capital and operating expenditure associated with environmental flows and flood management are community services and should be paid for as such, and not by individuals and enterprises that merely happen to live and operate in the mid Brisbane River area. The appropriate contribution is through the taxes, charges and rates that apply to them as residents and landholders, a matter not for this review.

Efficiency

Placing a price on water to cover Seqwater's costs does not make sense if the cost of collecting the impost is high, rendering the impost inefficient. Efficiency is one of the standard "design principles" that should underpin any taxation system⁷² including these proposed imposts. The costs of a water pricing system necessarily includes the following elements:

- (a) administrative costs (including operating costs of the system);
- (b) government compliance costs;
- (c) business compliance costs;
- (d) business costs arising from uncertainty and complexity.

Compliance costs, whether borne by the operator (Seqwater) or the business (MBRI irrigator), include, for example:

⁷² Eg Adam Smith in *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) identified 4 cannons of tax design: equality, certainty, convenience of payment, and economy in collection. More contemporary Australian sources suggest five principles: equity, efficiency, simplicity, sustainability, and policy consistency: *Australia's Future Tax System*

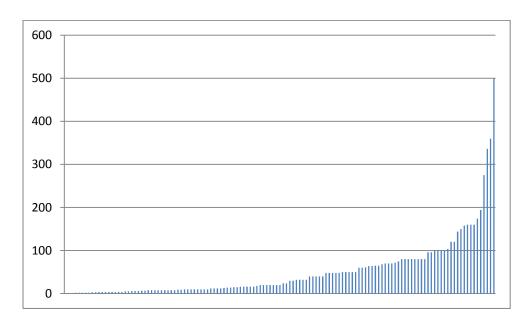
 $⁽http://taxreview.treasury.gov.au/content/ConsultationPaper.aspx?doc=html/publications/Papers/Consultation_Paper_Summary/Chapter_2.htm)\\$

- (a) capital investment in compliance: e.g.
 - (i) purchase and install flow meter;
 - (ii) capital improvements to house meter
- (b) operating costs:
 - (i) metering costs (meter operating costs; exit charges etc); or
 - (ii) maintenance costs:
 - (iii) complete log book entries;
 - (iv) validate and revalidate meters;
 - (v) report data to operator (post, telephone or computer costs);
 - (vi) analyse, manage and store data (including data entry and software);
 - (vii) maintain meter; or
 - (viii) procure other necessary items like logbooks and other stationery;
 - (ix) solar or reticulated power supply to meter (if necessary);
 - (x) workplace health and safety compliance re access to and reading of meter, such as land clearing;
 - (xi) banking costs and fees;
 - (xii) time to collect data and maintain meter, access etc (salaries and wages, real or notional)
 - (xiii) legal fees, such as bad and doubtful debt management (operator).

Business costs arising from uncertainty and complexity are harder to qualify, and pricing mechanisms are poor at providing the correct incentives in the face of uncertainty. The Draft Reports provide examples of how complexity and uncertainty can confound pricing by its sampling and data estimation and deferral of meter costing, discussed elsewhere in this Response. These all add to uncertainty for the irrigator. What will the future capital costs and volumetric charges be? At which point is it cost-effective to enhance water efficiency? What will QCA take into account in future price reviews? What are the sovereign risks (government policy uncertainty)? All these issues militate against effective risk management and add to business costs.

MBRI irrigators are generally small-scale farmers, with allocations ranging from as little as 1ML to the largest single allocation of 500ML. The following chart shows the distribution of the 131 MBRI allocations:

⁷³ eg Rogoff, K. (2010) *The BP Oil Spill's Lessons for Regulation*. Project Syndicate. (http://www.project-syndicate.org/print/the-bp-oil-spill-s-lessons-for-regulation, accessed 7 March 2013)



Source of raw data: Moreton ROP 2009, Attachment 8, Table 1 (MBRI irrigators only).

Sixty-eight per cent of MBRI irrigators hold allocations less than 60ML; eighty-five per cent hold less than 100ML.

QCA's recommended prices would impose in 2013-2014 imposts per ML at \$34.97 (Part A + Part B).

MBRI is not aware of any estimates of the cost to Seqwater of collecting and enforcing the projected revenues. It also appears QCA has made no attempt to calculate the costs to business of compliance and uncertainty and complexity.

In order to fully understand whether the proposed impost is efficient, QCA should undertake a detailed analysis of the costs of institutional administration and business impacts. MBRI submits:

That no price for MBRI irrigators be set without QCA undertaking a proper analysis of the costs and efficiency of collecting the revenue on both Seqwater and MBRI members.

Metering

A volumetric pricing system must provide for the measurement or estimation of the volume of water taken by each irrigator. The *Water Regulation 2002* (in Pt.7) and the WRP (s.89) mandate the use of meters for taking water under an entitlement that is a metered entitlement (other than for domestic and stock watering). A metered entitlement becomes such if the chief executive of the department merely gives a notice under Reg. s.73. No consultation is mandated. Metering of MBRI entitlements is a significant sovereign (i.e. government policy) risk for irrigators, and presents great business uncertainty in the current climate.

The Draft Reports indicate that there are insufficient data to calculate water use patterns. MBRI has pointed out to QCA in meetings subsequent to the publication of the Drafts that MBRI initiated a comprehensive logbook system that provides a good base of

hard data that should be taken into account. This is detailed above in this Response. **Metering is not the only system available to QCA and Sequater.**

Seqwater has failed to develop a business case for CBRWSS metering.⁷⁴ MBRI agrees with QCA's exclusion of metering from any price considerations in the absence of full and accurate data and a properly considered business case.

However, MBRI is also of the view that as purchase and installation of meters is integral to volumetric pricing, metering must (eventually) be properly considered.

The cost of purchase and installation of meters is a fixed cost. The fact that the Draft Reports excluded metering from the pricing model merely defers a significant impost on irrigators, estimated as high as \$10,000 per meter compliant with the new national metering standards.

Such a cost is clearly inefficient and not equitable for the small irrigator.

Assuming \$10,000 is sufficient for capital purchase, installation and maintenance (including finance) of a meter amortised over a 10-year economic life, the costs per ML per year ranges from \$2.00 to \$1,000.

For almost half MBRI irrigators, metering costs would be over \$100/ML/yr on that basis.

And for the 19.3% of users with allocations less than 6ML, the notional annual cost of such a meter exceeds the recommended water charges for 2013-2014.

If metering is prerequisite to supply in the MBRI area, the cost of purchase, installation and maintenance of meters in the system should be an operating and administrative cost of the provider. Logically, reading meters should also be an administrative cost on the provider.

Requiring Seqwater to supply, install, maintain and read meters within their operating budget (and not as an extra impost on MBRI irrigators) would drive far greater efficiency in the system.

Seqwater would have a powerful incentive to put in place alternate systems for small irrigators (eg log books; limiting pump capacity), and to install the most cost-effective meter for mid-scale irrigators for whom sophisticated and costly meters would not be efficient or necessary. It is only the handful of irrigators with High Priority water access in addition to Medium Priority BMRI entitlement for whom high cost meters would be necessary. MBRI understands that such users already have meters on their works.

The alternative, cost-shifting metering costs to users only encourages Seqwater to be inefficient.

MBRI submits:

That the purchase, installation, maintenance and reading of any meters in the CBRWSS be the responsibility of Seqwater at no additional cost to MBRI irrigators.

⁷⁴ Draft Report Vol 2 p.26

Affordability

In Vol 2, QCA states at p.91:

The Authority also notes that the capacity of irrigators to pay cost-reflective charges is beyond the scope of the Ministerial Direction. In the Authority's SunWater review, the original Ministerial Direction was amended to exclude consideration of capacity to pay from the Authority's brief. The same approach is considered to apply to the Seqwater irrigation review.

This is patently nonsense.

The Ministerial Direction must be read on its face, and cannot be interpreted as meaning something that is not in the document, but in another document, especially one that was amended specifically to achieve the stated object.

The introduction of a new charge on irrigation water on enterprises is a new input costs that cannot be recovered by enterprises that are price-takers for their products. These enterprises were built in the full knowledge of the status quo of no charge and the business models rely on stability, or at least predictability of input costs. Charges of the scale proposed in the Draft Reports must affect the viability of the business activity, and have never been adequately foreshadowed. A price path over one cycle is manifestly inadequate to allow businesses to regear their operations.

Such a new input cost has never been factored into the business models of the enterprises because it does not currently exist. And it is not capable of being recouped by irrigators who operate in the real markets, where prices are not determined by input costs. The cost of farming and doing business rises while revenues remain static. The obvious result is that farmers lose net income and some may not be sustainable.

Further any water charges would come on top of massive hikes in the cost of electricity, another matter determined by QCA. Electricity is necessary for pumping water and is a major input cost for most farms.

MBRI submits:

That capacity to pay (affordability):

- a. is not excluded from QCA's consideration by the terms of the Ministerial Direction; and
- b. is a relevant consideration that QCA should take into account in its analysis of prices.