Submission to QCA Review: Irrigation Prices for SunWater Schemes: 2011-2016

Emerald 28 April 2010

This submission is tendered as an initial submission. The Central Highlands Cotton Growers and Irrigators Association reserves the right to enter submissions at intervals throughout the process as issues arise that the organization believes warrant comment.

The association makes its services available to the QCA for consultation, clarification and input into the process at any stage.

Rate of Return, Capacity to Pay and Efficient Lower Bound Cost.

Our concern with regard to Rate of Return and Capacity to pay is the consequences for our scheme, and the State as a whole. There is no doubt in our mind that Capacity to Pay and Rate of Return could have a significant increase on water pricing. This puts our irrigation industries at considerable financial risk.

When water prices increase, the capital value of water allocations decrease. This has the effect of decreasing equity within the balance sheet of these enterprises. It also affects the viability of any on-farm and off-farm capital improvements and efficiency works in the region.

At a State level, SunWater is the largest holder of water allocations in Queensland. The majority of this allocation is to cover Distribution Losses. If the capital value of water is decreased, SunWater/State Government also suffers the effect of this decline in value, therefore compromising their ability to engage in modernization and efficiency projects funded by the sale of allocation.

We have severe concerns with respect to the time frames set for the ascertainment of efficient lower bound costs. We do not believe that sufficient time has been allocated to accurately extract and evaluate efficient lower bound costs. The majority of the information being sought by the QCA is considered confidential by SunWater, and this will only hinder the process. This submission offers an alternative to this procedure in its recommendations.

Rate of Return

QCA has been requested to establish an appropriate rate of return on scheme assets.

The following questions are raised:

1. Is this process going to enable QCA to identify/investigate **all** beneficiaries of relevant infrastructure (i.e. dam and weirs)?

Beneficiaries of the dam structure through flood mitigation are:

a) State Government through royalties derived from coal sales. At an average value for coal of $100 per tonne, the royalties figure is $126,000,000 per annum from the two coal mines located directly below the dam structure.
b) The town of Emerald (population 12,000).
c) Coal mines on the flood plain directly below the dam structure. Estimated. yearly production of these two coal mines is 18m tones per annum. At an average value of $100 per tonne, this value is $1.8 billion per annum.
d) Water Users

We support the principle of user-pays for the correct apportionment of costs.

2. Is QCA intending to establish whether existing infrastructure has already been paid for by allocation purchases by irrigators?
   In the past, irrigators have purchased supplemented allocation. Supplemented allocation is possible due to the construction of infrastructure. Sale of supplemented allocation enabled a 200% return on the cost of the infrastructure to the State Government[1].
   The State Government has determined that water allocations are a right of access to water. A supplemented water allocation can therefore only be brought about by the construction of infrastructure to capture water (See Appendix 2) . The monies paid by irrigators were for supplemented water allocation – the right of access to water, not water. Recognising that the right of access to water can only be brought about by infrastructure, the monies paid must therefore have been for the construction of infrastructure. If this statement is deemed to be incorrect, irrigators urgently require clarification as to what they did pay for when purchasing allocations. If supplemented water allocations are not shares of infrastructure and an asset (Balance Sheet item), they must then be treated as expense (Profit & Loss) items. We look forward to the Australian Taxation Office ruling on this issue.
3. Is QCA going to take into consideration the competitive disadvantage to Queensland industry? If a Rate of Return is imposed in Queensland and not in New South Wales, our neighbouring State, the Queensland industries are placed at a significant competitive disadvantage. This issue has not been addressed at all in the QCA documents released so far, but is of vital importance to the economy of Queensland.
4. Is QCA going to take into consideration the detrimental effect on balance sheets of public and private enterprises imposed by an increase in water charges? An increase in water charges designed to achieve a Rate of Return impacts upon the capital value of allocation. This creates Balance Sheet equity problems for water using enterprises. As SunWater is the largest allocation holder in the State, balance sheet effects also have implications for the State Government. This leaves both private and pubilc enterprises with less ability to fund capital works and efficiency programs.

[1] Bedford Weir water auction

Capacity to Pay

No industry has any long term future if Government can set a charge based upon that industry's capacity to pay. By determining a "capacity to pay", Government implies that any improvement in productivity achieved in that industry will automatically cause them to pay more for their inputs. Given the current policy that water prices cannot be decreased, if an inaccurate forecast of capacity to pay is made in the first instance, there is a very high probability that an industry or region will be destroyed.

Efficient Lower Bound Costs

This organization contends that the only valid method of establishing efficient lower bound costs is to examine locally managed water supply schemes in other States. Efficient lower bound costs for SunWater are not necessarily the best achievable efficient lower bound costs. It is unclear whether QCA has the authority to extract and compare real cost data. If accurate, properly disaggregated cost data is not available from SunWater, QCA will have no option but to compare aggregated data with comparable schemes.

Tariff Structures

Historically, we have had a two part tariff in this region. One component (Part A) reflects 70% of SunWater's fixed costs. The second component (Part B) is a usage charge to recover 30% of SunWater's costs. The Rate of Return paid within this scheme is attached to the Part B charge. The members of this scheme have worked very hard to achieve this tariff structure and favour its retention.

The Tariff structure (i.e. Part A and Part B) is not the only revenue stream within the scheme, and should not be treated as though it is. There are many other revenue streams provided to SunWater. This issue is addressed further in another section of this submission.

It is unclear whether QCA will investigate separating tariff structures over the scheme as a whole or on individual sections of the scheme. Separating tariff structures for the two channel systems in the area would dramatically impact the viability of the area for agricultural production. It would make a percentage of irrigators unviable, therefore pushing more allocation onto the water market, decreasing the value of allocations and putting irrigator's balance sheets under duress.

Recreational Costs

Recreational costs should be allocated on a user-pays system. By far the biggest use made of the recreational facilities is by urban and industrial customers as they would represent 90% of our population. However, irrigators continue to contribute the biggest portion of recreation facility costs. Costs could easily be apportioned by reference to population demographics.

Drainage Rates.

Drainage rates being charged at present are not reflecting the massive changes in land use experienced over the last decade. This change in use has been brought about by:

- Retention of stubble.
- Use of modified irrigation practices.
- Change in Government compliance requirements brought about by Legislation. Irrigators are now required to install and utilise sediment traps, tailwater systems and infrastructure to limit all off-farm impacts.

These elements have had a huge impact upon maintenance requirements and must be reflected in drainage charges. A more transparent, user-pays approach must be adopted which should be designed at scheme level to account for local circumstances.

Water Use Forecasts.

In the past, water use has been assumed to total 85% of allocation. This figure was established through reliability forecasts from :

- The Resource Operations Plan (ROP)
- Water Resource Plan
- IQQM Modelling

Under the current ROP, all unused allocation at water year-end is carried over into the following water year. The exception is then the dam spills, when all carry-over allocation is cancelled. SunWater also charges an extra fee for all water carried over. We stand very strongly behind our water use forecast of 85% as it best represents the long-term usage figures. It must also be recognized that if water is not used, it does not incur a Part B charge. However, that water is retained within the system and SunWater charges a storage rental charge which does provide revenue.

Revenue Streams – SunWater

When establishing tariff structures, **all** revenue streams must be taken into account. The Scheme information document refers only to revenue derived from Part A and Part B Charges.

Other revenue streams are received by SunWater;

- Flood margin leases
- Drainage diversion licences
- Infrastructure land leases
- Drainage charges
- Storage rental charge
- Transfer adjustment fees

- Exit fees
- Distribution losses allocation sales
- Seasonal assignment of SunWater allocation

Revenue Streams – State Government

Water infrastructure does not only provide revenue streams to SunWater. Significant revenue streams are derived by the State Government from the existence of water supply infrastructure in our scheme:

- Coal royalties.
- Land tax from the increased value brought about by the access to water.
- Rate of return on electricity.
- Rate of return on rail assets.
- Payroll tax.

None of the above revenue streams would exist without the water supply infrastructure in place in this region.

Indexation

Currently, prices are escalated by the CPI annually. If any indexation is to be used, CPI is the preferred method as it is a transparent process. Previously, SunWater has indicate that it would prefer an indexation method utilitising power costs. We strongly object to this proposal as power is a very small portion of scheme operating costs.

Conversion Factors

In previous pricing rounds, a conversion factor for pricing was set at 2.5:1 (MP:HP). Since that time, following extensive consultation and modelling, a conversion factor has been set by DERM at 3:1. This conversion factor is used to convert MP to HP allocation for trading purposes. Given the amount of research conducted by DERM in determining this conversion factor, it is appropriate that this factor be used the utilization of headworks pricing.

Conversion factors must reflect infrastructure use by converting all water captured by storage from MP to HP. When this conversion is made, a more realistic costing of infrastructure requirement per ML will be identified.

Pricing principles for dam spillway upgrades

Any cost apportionment for spillway upgrades must be determined on the principle of user pays. Industrial and urban users are significant beneficiaries of the flood mitigation effects of the dam infrastructure. Therefore, any spillway upgrade works which are intended to cope with extreme events

must be paid for by all beneficiaries of the upgrade, including risk mitigation for State Government revenue streams.

Issues arising from QCA Scheme Description – Nogoa Mackenzie Water Supply Scheme (See Appendix 1)

The water use data published on the QCA website in the Nogoa-Mackenzie Scheme description are strongly disputed.

There are many inaccuracies and ambiguities throughout the QCA document supplied on their web site. It is vital that the information being fed into this review process be absolutely accurate and clear before any review of pricing begins.

Our organization stands ready to assist the QCA in collecting the required, correct data prior to and throughout the review.

Scope of Services

The document states that bulk water services are provided in relation to 202,601 ML of WAE. In the Nogoa Mackenzie Resource Operations Plan (ROP) there is a total volume of Supplemented Allocation of MP 190,925ML and HP 44,398ML.

Customer composition.

The allocations held by SunWater quoted are incorrect. We do not have access to accurate figures but are sure that the figures given are incorrect. We are unsure whether the number of customers quoted includes all holders of unmetered stock and domestic allocations.

The figure quoted for the amount of HP allocation held by irrigators is incorrect.

The channel distribution losses allocation figure is incorrect

Water availability and use for the irrigation sector.

The figures given in Table 53 (Announced allocation for the Nogoa Mackenzie WSS (MP)) show water year-end announced allocation. This misrepresents the available water for irrigators as it implies that 100% of allocation was available for the production of income for the whole water year. When these figures are viewed on a monthly basis, the picture of water availability to irrigators is quite different. QCA should obtain and review the monthly allocation availability.

The charts in Figures 91 and 92 do not indicate whether they show water use for irrigators alone, or are for all water users. If for the irrigation sector alone, we dispute the data used to produce the graphs, and would welcome the opportunity to assist in compiling accurate figures.

Cost Structure

Figure 93 is unclear as to whether it represents total costs for the whole of the Nogoa Mackenzie WSS or just the irrigation component of the scheme. If QCA is endeavouring to investigate the efficient cost of SunWater, lower bound costs data should be separated to clearly identify administration costs.

Figure 94 does not appear to add any value or information to the Scheme description. If this graph is intended to be used to evaluate the use of electricity prices as an indexation tool, then it fails to do so.

Appendix 1: Scheme description – Nogoa-Mackenzie.

3.17 Scheme description – Nogoa-Mackenzie

Customer and water use information

The table below provides a summary of the key information for the Nogoa-Mackenzie WSS.

Table 52. Summary of Nogoa-Mackenzie WSS

Details	*Nogoa-Mackenzie*
Business Centre	Biloela
Number of Customers	366
Uses of Water	
• Irrigation	The main crops irrigated are cotton, citrus (mandarins, oranges and lemons) and grapes. Other crops irrigated include wheat, pulse crops, sorghum, maize, lucerne, oats, barley and sunflowers.
• Urban Water Supplies	Water is supplied to various towns and townships, including Emerald and Blackwater.
• Industrial	Water demand from the coal mining sector is significant. Some coal mines also supply small townships directly.

Scope of services

Bulk water services are provided in relation to 202,601ML of WAE.

The Nogoa-Mackenzie WSS includes a network service which consists of two channel systems, supplying around 95,000ML of WAE (2005/06). Drainage services are also provided.

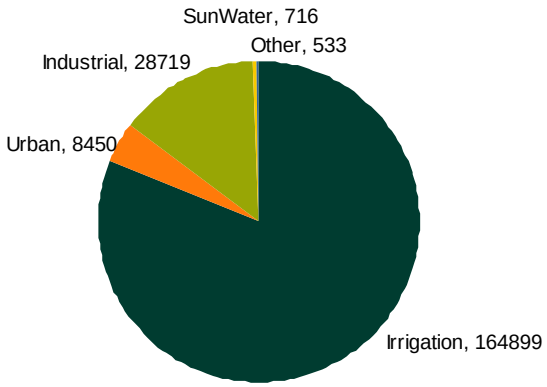
The Blackwater Pipeline also supplies water to various mines, and the town of Blackwater. Stockwater is also supplied from industrial pipelines.

Customer composition

There are 366 customers serviced by the Nogoa-Mackenzie WSS comprising irrigators, local government and coal mining operations. SunWater holds 616ML of high priority WAE and 100ML of medium priority WAE which it trades itself.

The figure below shows the proportion of WAE held by each sector (unadjusted for priority).

Figure 89. Sectoral split - Nogoa-Mackenzie WSS (ML)



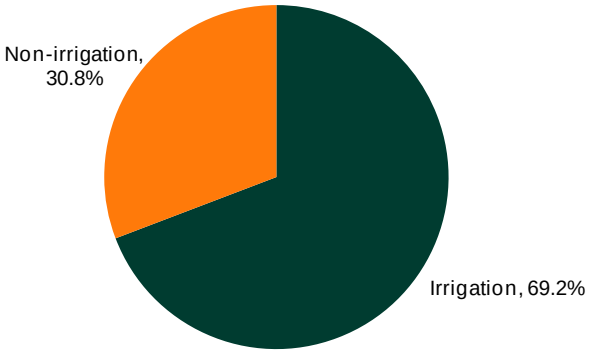
Source: SunWater Annual Report, 2008-09.

While irrigators mostly hold medium priority WAE, a small amount (1,368ML) of high priority WAE is held by irrigators.

SunWater also holds around 31,901ML for distribution losses in the channel system and for the Blackwater Pipeline.

The figure below presents the breakdown of the proportions of lower bound costs that are recovered from the irrigation and non-irrigation sectors.

Figure 90. Breakdown of lower bound cost recovery for the Nogoa-Mackenzie WSS



Source: SunWater Statewide Irrigation Pricing Working Group Tier 1 Report (April 2006).

Water availability and use for the irrigation sector

The table below sets out the historic announced allocation percentages for medium priority WAE in the Nogoa-Mackenzie WSS. High priority allocations have been at 100% throughout this period.

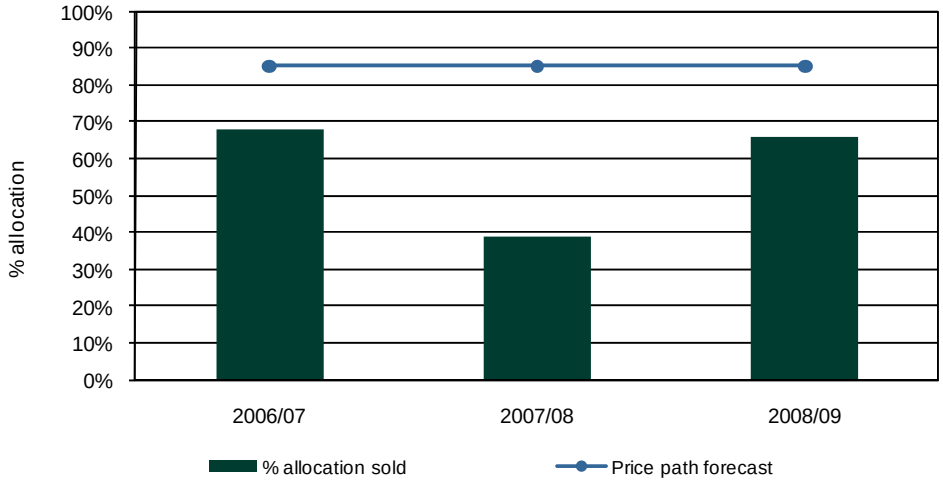
Table 53. Announced allocation for the Nogoa-Mackenzie WSS (medium priority)

Year	*Announced allocation %*
2006/07	80
2007/08	100
2008/09	100

Note: The announcement date for the data contained in this table is 1 July for the relevant year.
Source: SunWater online.

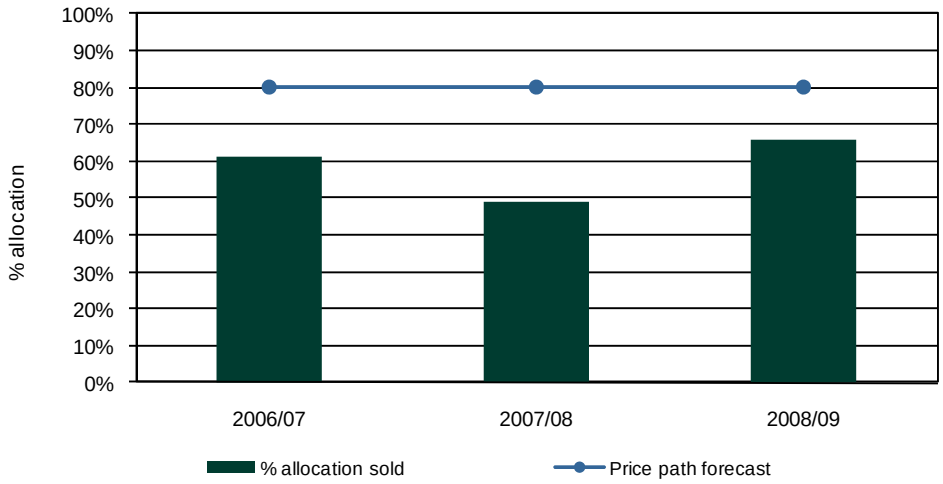
The figures below show historic use compared to the forecasts used for the current price paths for the Nogoa-Mackenzie River and Channel tariff groups. Actual water use to date has been less than the forecast assumed for each of the tariff groups.

Figure 91. Forecast and actual sales for the Nogoa-Mackenzie River tariff group



Sources: SunWater Irrigation Price Paths 2006/07 – 2010/11 Final Report (September 2006); SunWater data.

Figure 92. Forecast and actual sales for the Nogoa-Mackenzie Channel tariff group



Sources: SunWater Irrigation Price Paths 2006/07 – 2010/11 Final Report (September 2006); SunWater data.

Infrastructure

Bulk water service infrastructure

The Fairbairn Dam is the primary source of water supply in the Nogoa-Mackenzie WSS, releasing water to a series of downstream weirs. The construction of the dam was completed in 1972. The scheme is also serviced by four weirs. The table below presents an overview of the bulk storage infrastructure in the Nogoa-Mackenzie WSS.

Table 53. Bulk water service infrastructure in the Nogoa-Mackenzie WSS

Storage infrastructure	*Capacity (ML)*	*Age (yrs)*
Fairbairn Dam	1,301,000	38
Bedford Weir	22,900	42
Tartrus Weir	12,000	24
Bingegang Weir	8,060	34
Selma Weir	1,180	58

Sources: SunWater Annual Report, 2008-09; SunWater online; Water Resources Commission (1989). 'Annual Report 19898-89.' Queensland Government; Department of Environment and Resource Management (2009). 'Fitzroy Basin Resource Operations Plan.' Queensland Government.

Network service infrastructure

The Nogoa-Mackenzie WSS includes a network service, with water being diverted from the Fairbairn Dam to two channel systems which deliver water to the customers throughout the Nogoa-Mackenzie WSS. The Selma Channel System supplies water to customers to the left bank, west and north of Emerald through the 47km long main channel and 26km of subsidiary channels. The Weemah Channel System supplies water to customers to the right bank irrigation area east of Emerald through a 53km long channel.

One tariff applies to both channel systems, as set out below.

Table 54. No. of channel systems and channel tariff groups in Nogoa-Mackenzie WSS

No. of channel systems	2
No. of channel tariff groups	1

Sources: SunWater online; SunWater Statewide Irrigation Pricing Working Group Tier 1 Report (April 2006).

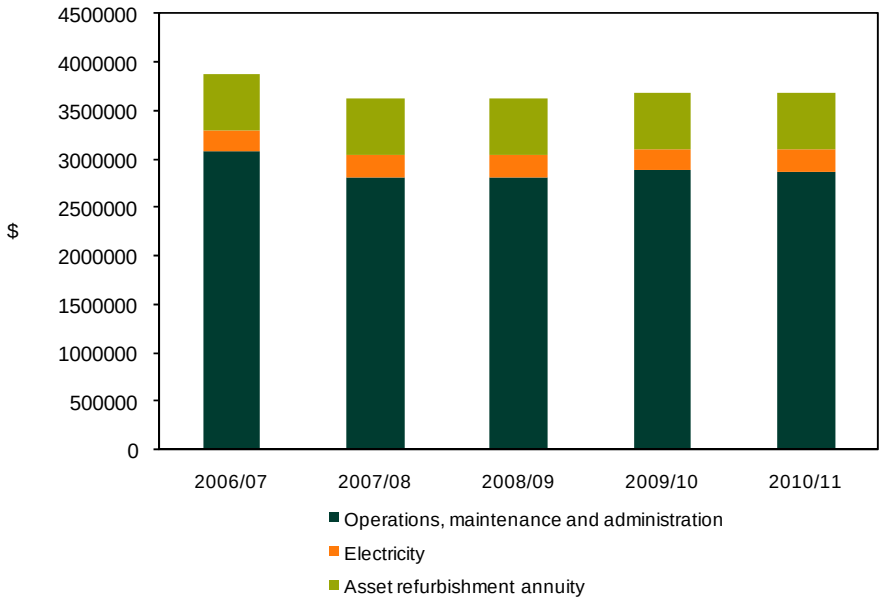
Drainage infrastructure

The scheme also includes a drainage service, with 204km of surface drainage systems providing services to customers in both channel systems.

Cost structure

The figure below presents a breakdown of the lower bound costs attributable to the whole Nogoa-Mackenzie WSS for the 2006/07 to 2010/11 period.

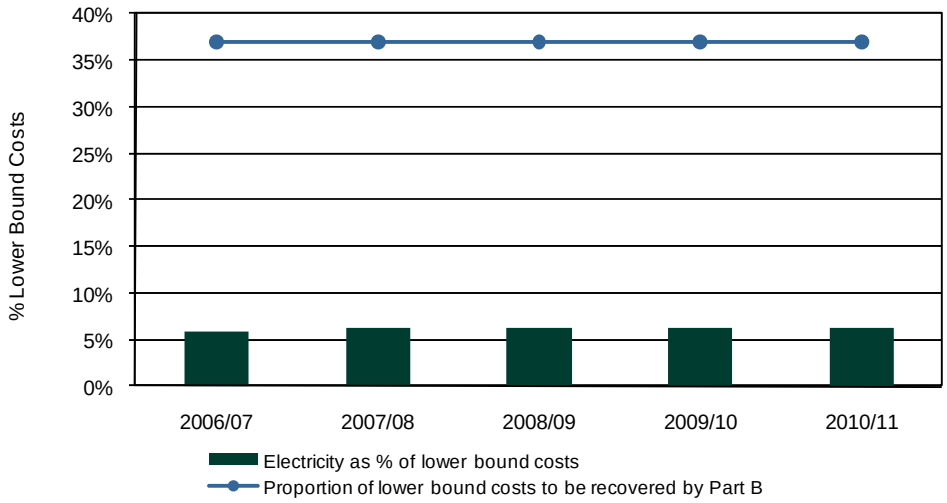
Figure 93. Lower bound costs for the Nogoa-Mackenzie WSS



Source: SunWater Statewide Irrigation Pricing Working Group Tier 1 Report (April 2006).

The figure below compares the proportion of lower bound costs that are recovered by the Part B tariff to the proportion of lower bound costs that are accounted for by electricity.

Figure 94. Lower bound cost recovery and variable costs for the Nogoa-Mackenzie WSS



Source: SunWater Statewide Irrigation Pricing Working Group Tier 1 Report (April 2006).

Appendix 2: Press article: The Central Highlands Observer Thursday April 5 1990.

THE CENTRAL HIGHLANDS
Observer
"Keeps an eye on the Highlands"

Vol. 1, No. 38 THURSDAY, APRIL 5, 1990 25¢

User to pay in new water allocation plan

FUTURE water allocations from the Water Resources Commission, for irrigation or other major uses, will attract a capital charge.

According to Primary Industries Minister Ed Casey, to date the only benefits claimed for a water allocation was by the property owner who sold his land with the allocation attached.

"The farms attracted much higher prices, reflecting the value of the water," Mr Casey said.

He said supply to existing farms had resulted in a substantial increase to the value of the property.

"The recent auction of some additional water allocations at St George clearly indicates that allocation has a significant value - in this case an average value of $375 a megalitre."

Mr Casey said water supplies from WRC schemes were sufficient to release additional supplies to farmers.

The schemes included Emerald, the Upper Burnett, the Burdekin, and other small projects.

"In the case of the Burdekin scheme, the water allocation is already being sold with the farms, and attracts a notional value of about $250 a megalitre."

He said several proposals had been received from Emerald for the use of large additional allocations, and was considering a method of selling, either by auction, tender or nominated price.

"The price paid should reflect the value of the water for crop production, and should represent a substantial contribution to the cost of providing supply from the storage and distribution system."

He said he could see no justification for water to add enormous windfall gains to property values, "with no share in this value being returned to the Government and taxpayers."

"I recognise this move could be unpopular with a few people who had expected to benefit from the increased property values," Mr Casey said.

"However, I have been encouraged by the ready acceptance of the St George auction, and believe most landholders will see the justice of the process," he said.

It appears there is no intention to apply this 'new rule' retrospectively, where this is a history of use.

However, it is expected existing users will have their current allocations 'rationalised' to show actual use before the WRC goes ahead with the sale of future allocations.

Mr Casey has also asked WRC officers to 'reclaim' any unused allocations.

He said this would only happen after a reasonable period had been allowed for the development of on-farm systems to take up the allocation.

"Any allocations recovered this way will be available for sale to others," he said.

"I believe it is up to those who benefited from the works to pay at least part of the cost of those works...I am sure the community at large will support me in this."

Mr Casey said funds raised by the sale of allocations would be used, in part, for new works and to offset part of the State's debt for existing works.

Rotary clocks up 30 years