



*Community, Environment
& Industry in Partnership*

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To: Whom It May Concern	From: Tamara Steinhardt
Company: Queensland Competition Authority	Department: Executive Support
Fax: 07 3222 0599	My Fax No.: 4975 8767
Date: 17 May 2004	Pages: (including this one) 23
Subject: Gladstone Area Water Board: 2004 Investigation of Pricing Practices	

Message:

Attached is Calliope Shire Council's submission regarding the Gladstone Area Water Board: 2004 Investigation of Pricing Practices.

An original has been placed in today's mail, and a copy has also been forwarded via email.

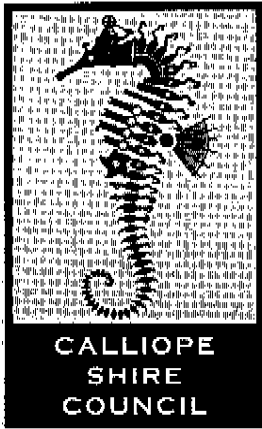
Regards

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PLEASE ADDRESS ALL
CORRESPONDENCE TO THE
CHIEF EXECUTIVE OFFICER

IN REPLY PLEASE QUOTE OUR REFERENCE
Mr Larney:TLS:WS13

YOUR REFERENCE

2 July 2004

Chief Executive
Queensland Competition Authority
GPO Box 2257
BRISBANE QLD 4001

Dear Sir/Madam

RE: SUBMISSION TO ISSUES PAPER GLADSTONE AREA WATER BOARD 2004 INVESTIGATION OF WATER PRICING PRACTICES

Thank you for the opportunity to provide comments to the above mentioned issues paper. Water is an essential commodity which must be protected and conserved. For too long, Australians have neither respected the scarcity of water nor its true cost. The result of this neglect is the massive over-consumption of this scarce resource in many parts of Australia with the resulting negative environmental and economic impacts. Calliope Shire recognises the need for charging the true cost of this scarce resource and supports the principles of the COAG water reforms.

To this end Council was one of the first Councils in Queensland to implement NCP and is considered a leader within mid sized Councils in both implementing this change as well as advocating the benefits of this reform within our industry.

Calliope Shire Council however also wishes to express its concerns with the simplistic way that the Queensland Competition Authority has appeared to have undertaken its investigation into the pricing methodology for the Gladstone Area Water Board. Council's principle argument is not with the calculation of the water price but with the very basis of the pricing methodology.

The Authority appears to have given very little thought to the fundamental issues that form the basis on which water prices are then calculated. Equity is often used as one of the critical reasons for the pricing review process and yet no thought has appeared to have been given to the price implications of the pre-existing network configuration and the consequential winners and losers created by this configuration. No thought has appeared to have been given to the fact that the network was designed and built long before NCP emerged. The Authority has not considered the fact that some customers accept an increased risk profile than others through more severe water restrictions and do not need 100% surety. Customers should pay a water price that reflects their individual risk profiles, rather than a generic 'postage

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stamp' price for all customers that use each defined component of the network.

This response will cover the following issues:-

- Network configuration,
- Different levels of service and risk profiles,
- Method for calculating depreciation,
- Demand and supply issues,
- Demand Issues particularly relating to new industries and their impacts on capacity,
- Long Run Marginal Cost,
- Revenue requirement issues,
- Environmental releases and their impact on the dam's yield and therefore price,
- Existing contracts verse expired contracts,
- Third party access,
- Certainty of investment decisions, and
- Submissions.

Council's comments relate in part to the issues raised in your paper for which the authority is seeking comment, however some of Council's issues are broader than those raised in your paper because they deal with the fundamental characteristic of the business. These characteristics form the essential basis for the calculation of the water price.

Council recognises the work of Gavin O'Donovan from AEC in providing some input into this response.

Network configuration

The QCA's final report for the 'GAWB Investigation of Pricing Practices' released in September 2002 stated that "Identical prices (often referred to as 'postage stamp' prices) do not accurately reflect the cost of service provision nor provide incentives to either users or service providers to use resources and services in a cost-effective manner (unless LRMC pricing results in identical prices)".

Calliope Shire Council does not argue with the intent of the above statement. However to use the postage stamp analogy; if the mail service was priced according to the current QCA recommendations, it would be cheaper to post a letter from Calliope to Rockhampton than from one part of Calliope to another. Why? Mail currently travels from Calliope to Rockhampton, where it is sorted, before being returned to Calliope for delivery. It is assumed that this system or network has been established for overall efficiency reasons, however it also creates individual inefficiencies, which luckily because there is a single price, does not create network configuration losers, as is the case with the current QCA pricing model. Calliope Shire Council is not arguing for a single price and it agrees with NCP principles of recognising and charging the true cost of the service. However it also believes that

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pricing should not adversely impact on customers, simply because of the network configuration that exists for overall efficiency and historical reasons.

The network configuration of any bulk water business has a significant impact on both the overall cost of water and the cost to individual customers. Should there be winners and losers resulting simply from an existing network configuration, or should prices reflect the fact that the existing network does create inequities?

The GAWB came into existence in 1973, taking over the distribution system which existed at the time. Boyne Island was connected to the water system supplied by Gladstone in 1970 and Calliope Township was connected in 1983, replacing the Council provided water system utilising a local bore. Decisions were made at the time based on the fact that the proposed configuration would not adversely impact on Calliope Shire's water consumers. Different decisions would probably have been made at that time if it was known that these residents would now be forced to contribute towards the transportation of water around the region, resulting in a price that is almost twice the price charged to Gladstone residents.

The GAWB distribution network was constructed long before NCP, Full Cost Pricing and COAG water reform were anything more than economic theory. Therefore the network was constructed in the current configuration because of both historical and overall network efficiency reasons. Attached is a basic map of the region containing the GAWB's water network which identifies the dam, the route of the raw water main into Gladstone, where water is treated before being pumped back to Calliope, Boyne Island, Tannum Sands, Wurdong and Benaraby. This water travels along:-

- 42 kilometres of main to get from Awoonga Dam to the Boyne Island reservoir, and
- 44 kilometres of main to get from the dam to the Calliope reservoir.

Compare the above facts with the reality that:-

- Calliope is 13 kilometres from the dam, and
- Boyne reservoir is approximately 14 kilometres from the dam.

The above facts demonstrate that Calliope Shire as a customer, and in turn its ratepayers as water consumers, are paying for three times the length of main that would be required if the treatment and delivery system was optimal for Calliope Shire residents. This is comparable to the communities that bound Wivenhoe dam being forced to pay for the water to be piped to Brisbane and Caboolture before being returned to Esk Shire.

It would seem from the issues papers produced by the QCA to date, that there is an assumption that the network is efficient and equitable and somehow set in stone. If this network was instead viewed as a Greenfield site, the network configuration would likely be significantly

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different, impacting on the water price for nearly all of the Board's customers. The presumption that pricing must be based on a Brownfield's approach is a simplistic pricing methodology which fails to truly examine this complex issue. Complex infrastructure like water distribution networks are traditionally older assets which have generally been sited in the existing configuration for valid practical and financial reasons at the time.

In the GAWB's case, Gladstone was originally the only community receiving water from the Boyne River. As each community or major industry was added, augmentation decisions were made on the basis of overall network efficiency or other reasons. At the time of the connection of Calliope Township to the network, Board discussions took place on the merits of a second treatment plant at Lake Awoonga compared to augmenting the existing treatment plant. The decision was made to augment the existing plant on the basis that the same price would be charged to all of the domestic water consumers. This arrangement has continued to this day. These decisions were made on the basis of overall network efficiencies and therefore ignored individual inefficiencies, because it delivered the lowest overall cost. Should one customer pay a significantly higher price so that the other customers can enjoy the efficiencies created by the existing (sub-optimal) configuration?

The QCA report of September 2002 did look at both the dam structure and its location from a Greenfield perspective to gauge the "appropriate scale and location of storage infrastructure"(Page 47). This assessment from a Greenfield's perspective however was not extended to the rest of the business. According to the GAWB's letter of 19 December 2003 to Council, the commercial cost of delivering water to Calliope Township was \$1,478.14 as at July 2002, of which \$187.17 or 12.7% related to Awoonga Dam. Council would question why a Greenfield's assessment has not been applied to the other 87.3% of Council's water price.

Issue 12 discusses the appropriateness of treating the two Councils as one customer. Calliope Shire would argue that a number of optimisation scenarios could be run that use a more direct route to assess the potential optimal cost of supply to Calliope Shire Council, including:

1. Relocation of the Existing Water Treatment Plant:

The relocation of the water treatment plant to Benaraby would see raw water travel to Benaraby for treatment before being distributed to both Gladstone City Council and Calliope Shire Council. Raw water consumed by industrial customers would be distributed separately from Benaraby towards Gladstone. In this scenario, it is likely that Calliope Shire Council's bulk water charge would be significantly lower than that calculated under the existing Brownfield's approach, while the bulk treated water charges of Gladstone City Council and industrial customers would likely be higher.

2. Establishment of a New Water Treatment Plant:

An alternative option is the establishment of a new water treatment plant at Benaraby to supply Calliope Shire Council and the maintenance of the existing plant to supply Gladstone City Council. Under this

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scenario, Calliope Shire Council would take raw water at Benaraby for treatment and distribution to Shire customers through its own infrastructure or by third party access to existing pipelines where appropriate. This would significantly reduce the raw water and treated water distribution costs associated with Calliope's bulk water purchases, but would be offset to some extent by treatment expenses. The cost of treated water to other customers could well be higher, and there would be an impact on the raw water price as less water would be delivered from this takeoff point along the raw water main.

It is evident from the above two options that historic infrastructure location decisions have an impact on the end prices for all customers. It is Calliope's submission that the current Brownfield's approach to asset valuation and pricing may be overstating the bulk water price for Calliope Shire Council.

Under the present system, Calliope Shire residents are being harshly and unfairly treated when they are being potentially asked to pay over 70% more for their water in 05/06 (\$1,186 compared to \$686) than Gladstone residents, who live over twice the distance from the source of the water, which is sited in Calliope Shire. This inequitable treatment can best be illustrated by the fact that the raw water travels past the doors of Calliope Shire residents in Benaraby, before travelling a further 30 kilometres and adding over \$1,000/ML to the cost before returning as treated water (Water Board letter 19/12/2003 - Commercial Price as at 1 July 2002, which is attached). This price is almost twice the price that Gladstone residents are expected to pay for the same water. As the network currently stands, Calliope Shire residents, particularly those near the dam, are being asked to subsidise the other customers in the network. Is this the intention of the principles on which the reform of the water industry was based? Council would argue that it is not. The QCA must meaningfully address this issue if all customers are to be treated equally and the principles of NCP and the COAG water reforms are to be achieved.

With a treated water price of \$686/ML for 60% of the region's domestic customers and \$1,186/ML for the other 40%, Council would ask how does this water pricing methodology provide real incentives to users of the service to use water in a cost effective manner? Certainly 40% of the customers will be too afraid to turn on the water tap, however for Gladstone residents who are receiving water which is \$500/ML cheaper, those incentives may not be as strong. If these inequities were remedied, the QCA issue of the equalisation of the two Councils' water price would be irrelevant.

Due to the extent of water consumption in Gladstone City compared with Calliope Shire, there is the potential for bulk water to be cheaper on the premise of economies of scale for infrastructure utilised. However, when differential prices are assessed, historic investment and location decisions must be evaluated (possibly via a Greenfield's approach) to determine the optimal supply scenarios for each customer to determine whether prices differ due to such investment decisions or distance from the source. If a certain supply structure is the cheapest method of supply for GAWB given all current customer demands, the

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decision to structure supply in that manner should not then feed through to disadvantage certain customers.

Should the current pricing practices recommended by QCA be continued, Calliope Shire Council will have no option but to pursue an alternate (and more optimal) means of treating and delivering potable water to its residents. Council is currently conducting a feasibility study into such an alternative. A decision by Calliope Shire Council to pursue this course would obviously have an impact on the price of water for all of the Board's other customers, particularly Gladstone who would be required to pay 100% of the costs associated with the existing treatment plant in Gladstone. It could also result in the Board needing to write-off obsolete infrastructure no longer required to deliver water to Calliope, Boyne/Tannum and Benaraby, some of which is currently being installed.

The exiting methodology is politically unacceptable to Calliope Shire Council. QCA must investigate all possible options to arrive at a more equitable outcome for the residents of the Shire if Council is to continue to accept the present network configuration.

Different Levels of Service & Risk Profiles

A significant component of GAWB's Drought Management Plan is that domestic consumers face earlier, and more severe restrictions, than applies to their industrial customers. Council has no argument with the logic of this policy because domestic consumers are better able to deal with restrictions than industry, due to the fact that a significant percentage of domestic consumption goes straight on the garden. As was often stated during the last drought, it is better to have a brown lawn and a job than a green lawn and no job.

In the QCA's report of September 2002 it states that "QAL submitted that the cost allocation should be based on the demand measures approach. It was suggested that residential or urban water users' demand for water is more inelastic than water demand from other sectors and, as such, should be allocated a higher level of costs" (page 103). It is interesting how time has shown this statement to be factually incorrect. During the recent drought, Council was told that if QAL and other industries were forced to suffer restrictions greater than the 25% which was in place at the time, than they may have had to close down. Residential consumers however accepted and met the 50% restrictions required under the Board's Drought Management Plan. Council would agree with QAL's sentiments; the reality is however that they simply identified the wrong customers who have inelastic water demand.

What work has been undertaken by the QCA from a pricing perspective to recognise the lower level of service that both Councils receive? If Council's supply is being restricted earlier and more severely than other customers as part of the Board's Drought Management Plan, then Council would argue that its acceptance of the earlier restrictions (assuming a greater risk), should be reflected in the pricing methodology.

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The fact is that by accepting this lower level of service or supply, Council ensures that the Board's industrial consumers are able to consume more water and for longer periods during times of drought. A relevant pricing model must reflect the differing levels of certainty and consistency of supply levels.

Issues 13 and 14 deal with the GAWB's Draft Drought Management Plan. Unfortunately to this point in time, the QCA has used 'postage stamp' pricing to calculate water prices, because it assumes that every customer's impact on or requirements of the network are the same. The paper appears only to be asking questions from an overall network perspective rather than looking at the details of each individual customer. If each customer or class of customers have different thresholds for restrictions, then it must have an impact on price differences between customers. While the QCA report recognises that there may be a need to modify the previously recommended pricing procedures, the paper does not address different levels of service. This is a fundamental issue which must be addressed in this review.

The demands of Calliope Shire (and Gladstone) on GAWB differ markedly from the demands of industrial customers. A distribution network that has infrastructure incorporated to meet a worst case scenario for a particular industrial customer or customers is not an optimal system for those customers who themselves provide their own means of meeting a worst case scenario. For instance, Calliope Shire Council has reservoir capacity to meet the demands of its potable water customers for 3 days. In recent times GAWB augmented the raw water delivery system by installing a large main from the dam to Gladstone which duplicated capacity. GAWB also replaced the then pumps with two very high capacity pumps and reinstalled an old pump to ensure that there would be no failure of its capacity to delivery. It is understood that these works were undertaken to ensure sufficient capacity to supply water to new industry at Yarwun, and to ensure that those existing industrial customers who have no or inadequate onsite storage have an increased level of surety of supply. This infrastructure augmentation benefited specific industrial customers but was of no benefit to local government. The present QCA methodology does not differentiate between the demands placed on the system by individual customers. The GAWB water system infrastructure is primarily based on industrial needs with local government needs being a secondary consideration. The pricing methodology does not reflect these deferring demands. Calliope Shire Council suggests that there are disincentives of scale for the local governments given the nature of the mix of customers.

Every other commodity that is supplied around the world, including postage, has a premium price for those customers that need 100% surety of supply. Water in the Gladstone region should be no different.

Water pricing can not assume that all customers are the same and thereby charge a generic 'postage stamp' price. The QCA argues very strongly that individual pricing, based on the use of the resource or service, is an essential cornerstone of the pricing model. However the QCA has not look at the impact that individual customers have on the

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network configuration and access to supply during drought. Council believes that these are essential ingredients on which the pricing model should be based. To be equitable, those customers who demand higher reliability should pay a premium which reflects the additional infrastructure costs to deliver that surety. Each customer then has an option to assess their high surety demands against onsite storage or such other changes of practice that ameliorate the requirement.

Depreciation

Issues 17, 18 and 20 deal with the topic of renewals annuity. Council strongly supports the need to move to a Renewals Annuity basis for the calculation of depreciation. If QCA considers that the Renewals Annuity is the appropriate methodology for the calculation of depreciation, it should make a determination accordingly. If GAWB cannot move in that direction because of a failure to finalise an asset management plan suitable for this purpose, it should not be at the expense of customers. GAWB should be given a direction to use the methodology considered appropriate, and a suitable transition path for its implementation.

Demand and Supply Issues

- Reductions in the Dam Yield

The previous yield of the dam with existing infrastructure was estimated at 87,900ML per annum, but that was subsequently reduced to 78,000ML per annum by DNRME in July 2003 following the drought, and then to 67,000ML per annum by DNRME until the Awoonga Dam has filled to its new full supply level of 40 metres.

The lower the yield of the dam, the higher the unit cost of bulk water (should sufficient demand exist to take up the yield). As such, the implications for Councils of recent reductions in the dam yield and potential further reductions in the future may include:

- Lower availability of bulk water for purchase via existing infrastructure; and/or
- A higher price for bulk water through the medium to long term due to higher unit costs or the need for alternative supply sources.

Alterations to the dam yield obviously impact upon GAWB's financial and planning decisions, and therefore to bulk water prices. As such, it is vital that the following impacts also be considered:

- The community impacts of frequent adjustments to the dam yield (e.g. reliability of supply and the management of supply during drought with respect to minimum requirements for public health); and
- The financial and environmental costs associated with decisions regarding alternative supply options to meet projected long-term demand under different yield scenarios.

Continually changing the goal posts may significantly impact on decisions regarding supply options and associated capital expenditure, and therefore on the commercial viability of GAWB and its customers. As such, recent adjustments to the dam yield should be considered and

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incorporated into the optimisation assessment of the asset base and the structure of supply to the region.

Any further reductions in the yield should be incorporated into the pricing model as part of the regular five yearly pricing reviews. Pricing must always be based on known information, rather than the possibility of future falls.

- Impact of Drought on Demand Patterns

There is little doubt that there will likely be a permanent or semi-permanent impact on demand from all customers in response to the recent drought. Industrial customers may have investigated or introduced more efficient processes or alternative processes to reduce their reliance on water availability. Council customers may have also altered their demand patterns due to water saving devices, shifts in household irrigation patterns, etc.

It is essential that realistic demand projections are used for pricing and investment decisions.

New Customers

The QCA notes that the extent of industrial demand, lumpy growth in supply to industrial customers, uncertainty relating to the establishment of new industrial projects and ongoing demand from industrial projects (e.g. due to possible process changes or business closure/relocation) all contribute to an uncertain planning capacity for GAWB when undertaking financial and pricing assessments. As such, it may be argued that industrial customers are a higher risk customer group relative to Councils and should be priced accordingly. Council customers, outside of drought periods where restrictions are enforced, provide a much more stable and predictable revenue stream for GAWB. Large lumps of surplus capacity are not required to address the future demand needs of local government.

A higher risk customer or group of customers (e.g. industrial) should bear the appropriate costs of their risk profile and their demand requirements. A lower risk customer or group of customers (e.g. Council) should expect lower charges, in line with the lesser risk of investing funds to supply that customer or group of customers. It is proposed that the higher financial/investment risk to GAWB from industrial customers be considered when prices are formulated, possibly through a higher rate of return on capital (via specific customer group betas in the WACC equation).

The QCA's report of September 2002 states that *"The Authority considers that there is an economic case for, and the public interest is better served by, charging similar prices to all users who place similar demands on the common infrastructure of the network system. Any differences between individuals' prices should only reflect differences in their use of the monopoly infrastructure and any commercial differences."* (Page 2) In that same report QCA stated that *"GAWB has responded to Callide Power Management's increase in demand and potential future demand by lifting the capacity of Awoonga Dam by*

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about 80%." (Page 35) If one customer can cause a major augmentation of the Board's infrastructure it would seem unrealistic that they should not be called upon to pay some form of premium for the impact they have had on the Board's other customers. In that report Brisbane Water states that a different price for new customers would give existing customers an unfair advantage. Brisbane Water's consumption figures are very stable over a long period of time. They may well have argued a different case if they were affected by the same volatility that GAWB experiences in water demand. Clearly if GAWB had predominantly domestic consumers like South East Queensland Water Corporation, it could accurately calculate water demand well into the future and therefore plan future supply augmentation with some large degree of accuracy and confidence. For GAWB, a crystal ball may well be a more useful tool than a calculator, for planning future supply augmentation and water demand. This uncertainty has a cost which under the QCA's recommendations is unfairly borne by the current consumers.

The QCA also states in their report of September 2002 that "*Such an approach (differentiated prices charged to existing and new users) would, over the longer term, result in higher prices being imposed on new projects and thus reduce the attractiveness of the Gladstone region to new investment.*" (Page 116) Council would question whether regional development advocacy appropriately reflects the QCA's role in this matter? QCA's role is the establishment of pricing models and practices not developing new industry. As a consequence of QCA's approach, existing customers of GAWB are required to pay a higher price for water to attract new investment into this region. This is a novel interpretation of NCP and COAG Water reform principles. What other extraneous items could also be included in the water price? This is a dilemma more appropriately dealt with by Government, which is trying to attract new industry into our region. Government could subsidise the water costs of new industry, thereby not impacting on the water price for existing customers.

The cost per mega litre of each subsequent augmentation is likely to be higher than the previous augmentation, which means that the LRMC of water will increase as a result of each augmentation. Therefore each new business can potentially obtain a benefit from the existing customers because the new water is more expensive than existing water. There is a strong argument that these new customers should pay some form of premium or headworks to offset the negative impacts on existing customers.

Despite the fact that the majority of the current consumption is for industrial needs, GAWB could reasonably accurately chart future demand if there were no new customers or large expansions of current consumer demand (in relation to plant expansions). However each new industry will, depending on its water needs, have a significant impact on future demand, supply augmentation and therefore price. Council believes that QCA must recognise that the water business in the Port Curtis region is unlike any other water business in the world. Therefore the pricing and planning decisions for GAWB must also be unique,

reflecting the realities of this business, if all consumers are to be treated equitably.

Long-Run Marginal Cost

In regulatory pricing, the Turvey Method and the Average Incremental Cost Approach are generally employed to derive the long-run marginal cost of water supply. Given that the estimation of long-run marginal cost can often differ markedly depending on the methodology employed, it is proposed that the financial and pricing assessment review a number of different methods of deriving marginal cost and average cost prior to making a final decision on the level of the volumetric charge. As such, both the Turvey method and the AIC approach should at least be considered when setting prices, and perhaps an average taken of the two methods when setting actual pricing levels to prevent significant changes between regulatory reviews.

Revenue Requirement Issues

- Asset Valuation and Optimisation

The approach to asset valuation is extremely important in the GAWB pricing review as the size of the asset base can significantly impact on the overall revenue requirement. Due to recent shifts in both demand and supply, it is proposed that the QCA undertake a new optimisation assessment of the asset base rather than simply roll forward the asset valuation from the previous assessment using indexation.

Consideration should be given to valuing the assets using a Greenfield's approach, particularly given the reduced yield from the dam and the demand implications from the recent drought. The assessment should take into account at least the following:

- Based on current demand and supply information, would an alternative supply network provide for greater supply efficiency and reliability in sourcing water for a similar or cheaper price? For example, under a Greenfield's scenario, would the money spent on the previous dam raising have been better spent funding an alternative supply with greater reliability from Rockhampton or another source?
- As outlined in an earlier response, the allocation of costs and setting of prices for each customer should take into account the impact of historical investment/location decisions (e.g. location of water treatment plant) on the actual distance travelled and supply costs associated with the current infrastructure layout versus a Greenfield's approach.
- Impact on capacity utilisation in the treatment and distribution network from the permanent demand management impacts following the recent drought, and optimising out any excess capacity due to such a shock to the market.

- Excess Capacity Held for Potential Industrial Demand

Of concern to Calliope Shire Council (as a bulk water customer) is the need for GAWB to ensure sufficient capacity in infrastructure for anticipated or potential new industrial projects. There is a real cost from holding sufficient capacity to cater for significant lumpy jumps in

demand from either expansions by industrial customers or new industrial customers that possibly should not be passed on to existing customers.

It is proposed that the pricing assessment be undertaken on the following basis:

1. Undertake a financial and pricing evaluation with infrastructure requirements relating to demand from existing customers only (i.e. remove any excess capacity in the system via optimisation and ignore any new projects).
2. Undertake a financial and pricing evaluation with infrastructure requirements relating to demand from both new and existing customers.
3. Compare 1 with 2 to determine whether existing customers are better off with or without the new customers. If so, then the same price may be charged on the new customers versus the existing customers. If not, a number of options could be considered, including:
 - a. Levy prices derived in 1 (i.e. optimise out excess capacity) on existing customers until the new customers are established, and then alter prices thereafter; or
 - b. Levy prices derived in 1 (i.e. optimise out excess capacity) on existing customers and new customers, with any difference between 1 and 2 (i.e. marginal cost of supplying the new customers) paid by the new customers via once-off headworks charges to GAWB when operations are established.

- Treatment of Capital Gains Through Asset Revaluations

It is understood that the QCA develops pricing estimates based on the incorporation of a net return on capital component as part of the revenue requirement. Net return on capital is equal to gross return on capital (the nominal WACC times the regulatory asset base), less any capital gains made on assets due to indexation/revaluation in each year. Given the sharp increases in unit costs for water assets in recent years, it may be more appropriate to revalue the assets by a level of indexation more reflective of reality in the industry (e.g. the average increase in the unit cost of water assets over the past five to ten years) rather than by a more general measure of inflation.

- Allocation of Administration Costs

While the existing allocation method seems reasonable, some consideration should be given to the administrative effort provided to certain customers in areas such as financial evaluations, planning and the collection of bulk water charges. For example, it may be argued that industrial customers place a greater burden on planning than Council customers due to the issues outlined in a previous comment. A simple list of cost drivers should be established to allocate selected costs to customers, as well as identified system components.

- Operating Cost Efficiency

It is important that the performance of GAWB in meeting previous efficiency estimates be carried forward to any new regulatory decision. If GAWB is unable to meet the specified operating efficiency targets,

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then the new assessment should assess whether there were valid reasons for GAWB failing to meet the efficiency targets. If valid reasons are not evident, then the operating cost base for the new assessment should begin at a lower level than actual operating costs. Otherwise, there is no incentive for GAWB to achieve efficiency gains during the regulatory period.

Conversely, if GAWB is able to achieve greater efficiency gains than originally anticipated, then it may be appropriate for a mechanism to be introduced that allows such efficiency gains to be shared between GAWB and customers over a certain timeframe.

Environmental Releases

The government's approval for the raising of the Awoonga Dam wall brought with it the requirement to make environmental releases. During the last year there were two significant environmental releases from Lake Awoonga. This response does not seek to debate the pros and cons of environmental releases, because it is outside the scope of your current review. The issue of environmental releases and their impact on the water pricing is however within the scope of this review and is therefore worthy of discussion.

Environmental releases impact on the yield of the dam. The quantity of this reduction in yield has not been quantified in any reports supplied to Council, however the calculation was obviously done when the current HNFY was determined. The fact is that these releases do not benefit either the Board, as it has less water available to sell, or consumers who are required to pay for water they can not use. Council's argument is that these releases benefit the environment and thereby the community at large.

If the whole community benefits from environmental releases from the Awoonga Dam, Council would argue that a CSO should be recognised for the return on capital at a percentage of total dam assets which reflects the loss in yield resulting from these environmental releases. If GAWB recognises just the return on capital forgone as a CSO, it would be still recovering the full cost of the dam (excluding a rate of return) and would be recovering a return on equity based on the yield of dam net of the environmental releases.

The counter argument is that private enterprise would also be required to do the same and therefore environmental releases are just part of doing business. The reality is that private enterprise would purchase infrastructure, such as dams, based on the useable yield of the dam because that is what generates income for the business. They would make any capital investment decisions based on the net yield of the structure, not the yield before environmental releases.

Who loses if a percentage of the return on capital is recognised as a CSO? The answer is the owners of the asset, which in the case of GAWB, is the state government and in turn local government who would suffer a fall in dividends and tax equivalents. However, is it not the community, who is represented by government, that is benefiting

Calliope Shire Council's response to QCA Issues Paper –Page 14

from these environmental releases? Clearly this would achieve a far more equitable solution for all of the board's customers and the general community.

Contracted and Uncontracted Customers

The Board did not come into existence in the last couple of years to coincide with the implementation of the COAG water reforms and the commercialisation of water businesses. The board has in fact existed since 1973. Currently there is a mix of customers who are either on long-term contracts or have come off contracts and are awaiting the outcomes of these pricing deliberations.

In order to ensure the ongoing viability of GAWB and equity between bulk water customers, it is important that contractual arrangements are based on full cost pricing principles. Given that contract terms can often tie a supplier to a certain price for a reasonably long period, it is important that some formal review process occur for each of GAWB's contracts, whether they are renewals of existing contracts or the establishment of new contracts, prior to them being entered into.

At the end of the day, such monitoring would ensure that pricing for Council customers is on the same basis as pricing for industrial customers, with the exceptions of the issues outlined in previous comments. Council customers wish to ensure that they do not pay more than their fair share of total system costs by covering any pricing shortfalls resulting from poor contract negotiation or subsidised industries (if relevant).

Third Party Access

Calliope Shire recognises that there is a need to rationalise the ownership of assets between Calliope Shire and GAWB, particularly where there is existing third party access to the infrastructure. Calliope has been seeking to resolve these issues with GAWB but no resolution has been reached although discussions are set to continue. Calliope notes that QCA in its last report set a "third party access" charge for the use of the Shire's assets for GAWB to provide water to its own customers. The source of QCA's power to set this fee is questioned. It is submitted that any access fee should be negotiated between the owner of the infrastructure and those seeking access. QCA's role would be to adjudicate on disputes relating to abuse of monopoly power only.

Certainty of Investment Decisions

Council is aware of concerns of Directors of GAWB about the position they are placed in when QCA reviews GAWB's investments decisions and particularly when QCA draws a different conclusion. It is submitted that a procedure should be put in place that ensures investment certainty before the project commences.

Submissions

Calliope contends that there are great benefits from all interested parties co-operating with QCA in developing the most desirable pricing methodology to give effect to the national and state government policies

Calliope Shire Council's response to QCA Issues Paper –Page 15

on water. To this end, Calliope supports the principle of all submissions being made public, and gives consent for this submission to be made public. We would also ask that QCA meet with GAWB and its customers, particularly those who took the time to make submissions, in order to progress the investigation in a forum setting. It is only by understanding each other's position and working together that the optimal pricing methodology will be developed.

Summary

This response has addressed a number of issues which relate to the pricing of water in this region. As the QCA rightly states, water is a scarce resource with few, if any substitutes. Calliope Shire Council recognises this fact only too well, particularly with its water price potentially increasing from \$300/ML to approximately \$1,200/ML in little over 5 years. Council believes that to date the QCA has failed to look at either the characteristics and requirements of individual customers or the inequities caused by the existing network configuration. The QCA has argued against 'postage stamp' pricing as it does not accurately reflect the cost of the service to individual customers. In many ways, the QCA has in fact used the same 'postage stamp' pricing methodology in areas of risk profiles and surety of supply.

Calliope Shire Council is not seeking to be treated differently from other customers. Council asks QCA to recognise the fact that the current network configuration over which Council had no control, results in a water price that is significantly higher than all other customers, and is almost twice that of Gladstone City Council, even though the majority of Calliope Shire Council's water consumers live in close proximity to the dam. Council believes that most people would agree that Calliope Shire is being treated inequitably as a result of the existing network configuration. A key principle of NCP and water reform is the elimination of cross-subsidies. To look for cross-subsidies, QCA must look deeper than simply calculating prices based on the existing network and instead must examine the current network configuration and ask "does this network create cross-subsidies by virtue of its existing configuration?" The current QCA definition of cross-subsidies appears to be too narrowly defined, which has resulted in it simply allocating a cost based on the existing network and concluding that there are cross subsidies. The reality is that a network configuration can in itself create cross-subsidies.

The QCA used a Greenfield's approach to review the appropriateness of the dam. Council believes that this approach should be extended to its distribution network and treatment facilities. Only then can all customers consider that their individual water price reflects the optimal cost of providing that service and encourages customers to make consumption decisions based on the true cost of the service.

Council has been continually told that dividends and tax equivalents will flow to Council to offset these massive price increases. The reality to date is that no dividends have yet been declared and none are likely in the foreseeable future. Council argues that pricing and dividends are two completely separate subjects, and therefore must be treated

Calliope Shire Council's response to QCA Issues Paper -Page 16

separately. Council does not believe that it should accept an inequitable pricing model simply because it may receive dividends and tax equivalents some time in the future.

These prices would make Calliope Shire water some of the most expensive water in the country. Calliope Shire Council is being left with no alternative but to identify an alternative that will ensure that the price of water to the domestic market is able to be provided at an acceptable and sustainable rate. Calliope Shire is addressing the issue by investigating options that would achieve an optimal source of supply and distribution. Competition would be introduced at the expense of unused existing infrastructure.

Council hopes that these points will provide the impetus for QCA a pricing recommendation which treats all of the Board's customers equitably. If you have any questions please do not hesitate to contact Mr Mark Larney Council's Director of Corporate and Community services or myself.

Yours faithfully


GI KANOFSKI
CHIEF EXECUTIVE OFFICER

ARWUN

GLADSTONE

BOYNE ISLAND

TAN SAN

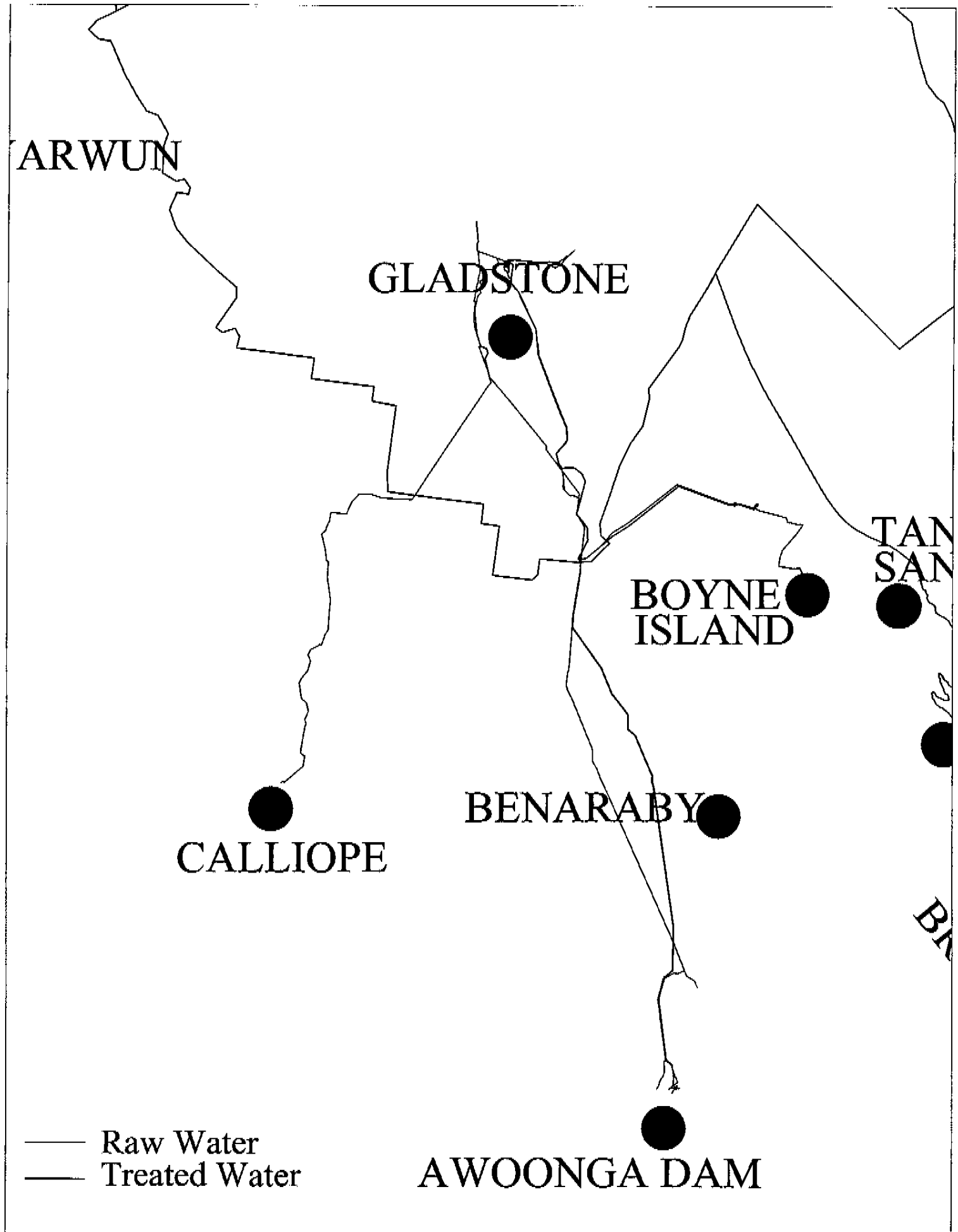
BENARABY

CALLIOPE

AWOONGA DAM

— Raw Water
— Treated Water

Waterlines



Annexure A
Calliope Shire Council
Commercial Prices as at 1 July 2002

	Calliope	Benaraby / Wurdong Heights	Boyne Island / Tannum Sands	Industrial North	Mt Larcom
	\$	\$	\$	\$	\$
Recreation Area	15.71	15.71	15.71	15.71	15.71
Hatchery	1.31	1.31	1.31	1.31	1.31
Awoonga Dam	187.17	187.17	187.17	187.17	187.17
Awoonga Dam Pump Station to Toolooa Reservoir	121.45	121.45	121.45	121.45	121.45
Toolooa Reservoir to Mt Miller Pipeline Junction	19.87	19.87	19.87	19.87	19.87
Mt Miller Pipeline Junction to Hanson Road Connection	12.62	12.62	12.62	0.00	0.00
Gladstone Water Treatment Plant & Sth Gladstone Res	181.16	181.16	181.16	0.00	0.00
South Gladstone Reservoir to Toolooa	0.00	105.96	105.96	0.00	0.00
Calliope Township	871.28	0.00	0.00	0.00	0.00
Toolooa to Golegurnma	0.00	617.93	0.00	0.00	0.00
Toolooa to Boyne Island Reservoir	0.00	0.00	213.12	0.00	0.00
Mt Miller Pipeline	0.00	0.00	0.00	145.49	145.49
Yarwun	0.00	0.00	0.00	11.81	11.81
Yarwun Water Treatment Plant (YWTP)	0.00	0.00	0.00	363.62	363.62
Council charge for use of its Yarwun infrastructure	0.00	0.00	0.00	0.00	69.61
Boat Creek	0.00	0.00	0.00	0.00	31.90
Boat Creek to East End Reservoir	0.00	0.00	0.00	0.00	3,903.49
Allocated Overhead	67.57	67.57	67.57	67.57	67.57
	1,478.14	1,330.75	925.94	934.00	4,939.00

Townships

While ideally GAWB would render a price for each township it appears that we will require meter readings for the Benaraby / Wurdong Heights supply before this can be implemented. Accordingly GAWB has calculated the following weighted average price for all townships serviced by the Gladstone Water Treatment Plant. This price is consistent with the three segment prices set out above.

	\$
Recreation Area	15.71
Hatchery	1.31
Awoonga Dam	187.17
Awoonga Dam Pump Station to Toolooa Reservoir	121.45
Toolooa Reservoir to Mt Miller Pipeline Junction	19.87
Mt Miller Pipeline Junction to Hanson Road Connection	12.62
Gladstone Water Treatment Plant (GWTP) & Sth Gladstone Res	181.16
Weighted Average Township	465.14
Allocated Overhead	67.57
	1,072.00
Capital Contribution	-57.04
	1,014.96

Capital Contributions

The Cement Australia capital contribution to the East End Mine pipeline reduces the Mt Larcom price of \$4,939ML by \$2,573ML to \$2,366ML.

5. PROPOSED DROUGHT MANAGEMENT ACTIONS

5.1 PROPOSED SUPPLY RESTRICTIONS

Drought Level	Warning	Declaration	Medium	Severe	Critical	Emergency
Period of Unrestricted Supply Available from Awoonga	24 Months	18 Months	12 Months	6 Months	3 Months	Nil
Target Restricted Supply Rate (% nominal usage)	95%	85%	70%	50%	30%	10%
Period to Next Trigger Level with Restricted Supply and Minimum Historic Inflow	6 months	7 months	8 months	6 months	9 months	Nil (9 - 12 Months Dead Storage)
Period of Restricted Supply Available from Awoonga and Minimum Historic Inflow	36 months	30 months	23 months	15 months	9 months	0
Municipal Treated Water Target Supply Rate	Public awareness campaign 95%	Non potable use restrictions 65%	Non potable use bans 50%	Non potable use bans 50%	All non-essential uses banned < 50%	
Industrial & PS Treated Water Target Supply Rate	Voluntary measures 95%	90%	Mandatory restrictions 75%	Mandatory restrictions 50%	50%	Essential Uses Only
Industrial Untreated Water Target Supply Rate	Voluntary measures 95%	90%	Mandatory restrictions 75%	Mandatory restrictions 50%	50%	Supply Halted
Untreated Water - Power Sins Target Supply Rate	Voluntary measures	90%	Mandatory restrictions 75%	Mandatory restrictions 50%	Supply Halted	Supply Halted
Irrigation Releases				Supply Halted		
Environmental Releases	No Environmental Releases When Water Level Below RL 30.0m					

The Authority's approach uses SMEC's depreciated asset values as the starting values for DORC for each asset, with straight line depreciation applied over the remaining lives. In future reviews, regardless of the measure of asset consumption chosen, starting asset values should be consistent with the straight line method so that the potential for windfall gains or losses to GAWB is averted.

Table 8.2: Design lives for GAWB assets

<i>Asset Type</i>	<i>Design Life (Years)</i>
Dam earthworks and spillways	150
Dam outlets	100
Bridges	100
Roads and pavements	30
Electrical/power	35
Switchboards	20
Flow meters	15
Pumps, electric motors, cranes and mechanical	25
Pipelines (asbestos cement, reinforced concrete, fibre resin cement)	50
Pipelines (ductile iron, mild steel, poly vinyl chloride)	70
Valves	30
Concrete reservoirs, buildings and other concrete structures	50
Steelwork	35

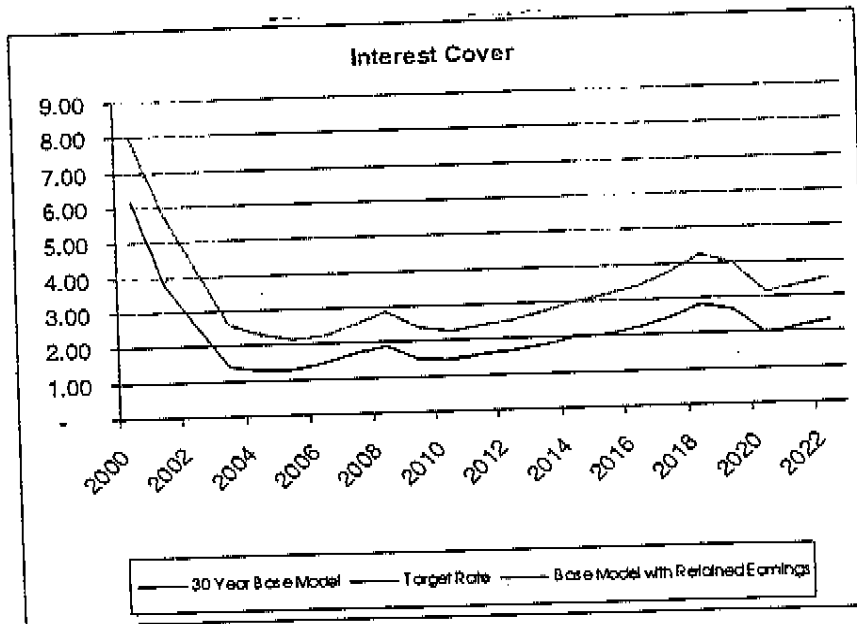
The Authority considers that the use of renewals annuities should be reviewed if and when GAWB develops an appropriate Asset Management Plan.

Recommendation:

That straight line depreciation be used for all GAWB's assets.

**Gladstone Area Water Board
Pricing Paper
15 October, 1999**

Interest cover below also reflects the possibility of cash flow shortfalls and the impact of retaining profits.



6. Pricing Analysis

Prices to cover the long-term average cost of supplying water for each class of customer over a long period of time (30 years) are set out below.

	Price per ml ⁹
Raw Water taken directly from the Dam	\$197
Raw Water Delivered to the Customer	\$325
Treated Water Delivered to the Customer	\$422

These prices serve inter-generation equity by spreading the financial burden of operating the system over a long period of time and imposing no financial risk burden on current customers. They do not however take into account financial and business risk, in particular, that revenue streams are not assured beyond thirty years and that cash deficits in the early years place GAWB's financial viability at risk.

NUMBER
1
NOVEMBER
2003

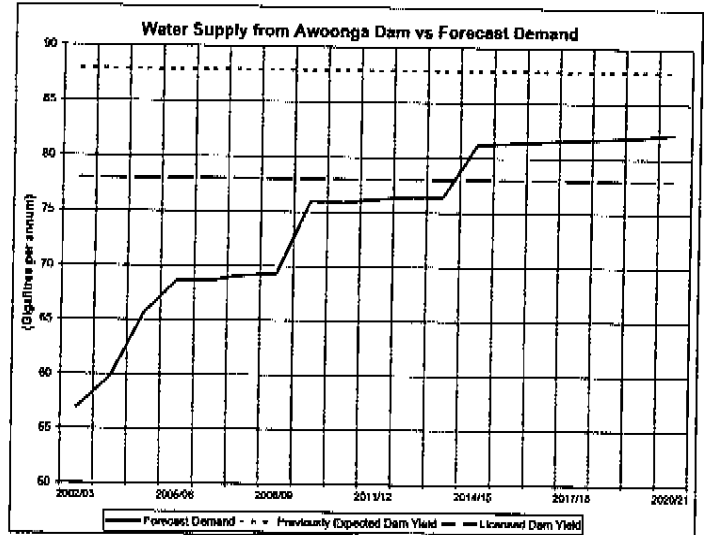
FACT SHEET

The Gladstone Area Water Board's mission is to meet the Gladstone region's long and short term water needs in a way that is environmentally, commercially and socially sustainable for GAWB, its customers and the community.

The recent drought has highlighted to GAWB that it faces, together with its customers, three priority issues:

Capacity: Does the Gladstone region have enough water, and is best utilisation of the available water being achieved?

- In light of the 1992-2003 drought (the worst on record), the Historic No Failure Yield of GAWB's current water supply source, Lake Awoonga, has been revised down by 11% to 78,000MI per year.
- The rainfall events of early 2003, while significant, filled Lake Awoonga to only 62% of its 777,000 megalitre capacity.
- Demand forecasts accepted in 2002 by the Queensland Competition Authority suggest, when compared with the reduced yield of Lake Awoonga, that unutilised supply from this source will become marginal by 2009.



Risk: Is the water supply sufficiently secure?

- The 1992-2003 drought indicated that GAWB's customers are vulnerable to GAWB's reliance on a single source of supply, and to the impact of water restrictions.
- Supply diversification would mitigate this risk, if achievable at an acceptable cost.

Price: How can the required capacity and security be achieved at a price which is both acceptable to GAWB's customers and ensures GAWB's continued viability?

- GAWB's water prices are required to recover the cost of storing, harvesting and delivering water to its customers, including debt service costs — additional investment to increase supply or improve security will be reflected in future water prices.