Submission by Rockhampton Regional Council to the Productivity Commission
Issues Paper on Australia's Urban Water Sector
November 2010

Setting objectives

The Regulator, whichever level of government ultimately carries that responsibility, should be looking for urban water business to have as primary objectives, the following:

- a safe water supply – full compliance, at least, with the ADWQS;
- a secure water supply – consistent achievement of levels of service and minimisation of need to apply restrictions due to limits of supply;
- efficient operation to maximise value to stakeholders;
- sustainability in business operations, supply and the environment.

The primary impediments to achieving the objectives as stated above is the 'politics' of water – community perception and reaction to what may be considered by others to be valid directions for the effective and efficient delivery of water services.

There is also a generally accepted notion within the community that there is a right to water and that this should be at minimal cost – such thinking is prevalent despite efforts by water service providers and others to 'educate' the community.

Other issues that impact on the achievement of objectives include the security of supply to the various sectors with smaller communities competing against mines and other major industries for bulk water. There is topical evidence of this with the recent announcement of water management measures for the Murray Darling system.

There is a strong case for reforming Australia's urban water sector including the need for the implementation of a true reflection of all costs involved in the delivery of water and sewerage services. In the past this has not been the case and, as institutional reforms occur, the new bodies and the process has been blamed for escalation of costs and hence price increases; however, this is only a reflection of what has been occurring in the past but had been not exposed to the same level of transparency. Also, any reform should ensure that there is a reflection of the work and associated costs for ensuring long term security of supply.

It is suggested that the above would go a long way to achieving the objectives as it is only through that baseline work that the higher order objectives are attainable.

It would be difficult for anyone not involved in the individual schemes to comment on opportunities for efficiency gains in those schemes as it will vary from scheme to scheme; however, it would suffice to suggest that there was

scope for efficiency gains through enhanced governance arrangements and practices.

The largest impediment to achieving any gains in a service delivery sector such as water is the community reaction to prices and service levels. The latter is then manifested through the political decision making bodies involved.

There are a number of options that may provide benefits in metropolitan and regional urban areas and these include:

- review of efficiency of service providers;
- corporatisation of Water Service Providers to ensure that decisions are made on efficiency and effectiveness grounds with the underlying objective of sustainability of both supply and the business operations; and
- third party access which should result in greater competition that could lead to reduced prices which in turn will drive greater efficiency.

Whilst it could be argued that organisational capacity to deliver and meet the key objectives is paramount to reforming Australia's urban water sector, we should not lose sight of the community capacity. With all the best intentions, an organisation will not be able to achieve on the objectives without the support of the community that is served. This will require a significant community engagement process to foster that support as we see previous examples where communities may be supportive for efforts of Water Service Providers during drought periods and the like but that is soon forgotten when supply is more abundant.

Whilst objectives for urban water systems should be the same there will be a need to apply differing metrics depending on the individual characteristics of each scheme and region.

The frequency of restrictions is an obvious and easily monitored metric for security of supply; however, this needs to be balanced by the community's acceptance of those restrictions and the associated price differentials that may have applied.

The economic efficiency will be impacted by the community's ability to pay versus the agreed levels of service including restrictions.

Given the nature of the water industry in Australia the parameters on these issues will require significant community input.

There should be an acceptable minimum level of water services for households for living and drinking and this should be in the order of 200kL per annum for the average household. This base level should also reflect a level of social pricing as it is considered that it could be argued that this represents a level of non-discretionary use.

This ‘social pricing’ should be through either direct pricing or rebate to ensure that the consumer receives the full benefit. Any suggestions to utilise the tax system would only overcomplicate the matter and would see the level of government administering that tax system deducting an ‘administration fee’ which would reduce the ‘return’ to the consumer.

There is a need for specific environmental objectives for the sector with the primary environmental objectives being achieved through the considered siting and operation of bulk storages. The maintenance of environmental flows should also be ensured; however, this needs to be balanced by the respective community’s needs.

Environmental externalities such as carbon accounting will also play a significant role in such objectives.

Overall, sustainability, security and safety of supply should be the primary objectives for any urban water scheme.

Achieving objectives

Currently there is what could be considered an over regulation of issues impacting the water industry in Queensland that has an effect on the efficiency of the Water Service Providers. Whilst it is recognised that there is need to maintain standards there is also a need to allow providers to manage their businesses as they should have these matters in hand.

Another impediment, and a major one, to the good governance of water across Australia would be the inconsistency of intergovernmental relations and the inconsistent focus on water sustainability and associated actions.

A significant lesson to be learned from other sector reforms is that blind following previous examples or the one model is fraught with danger due to the variations in operating environments that apply across Australia. These environments include, social economic and physical. Any reforms to be applied need to be in context.

It should also be remembered that there is significant differences with transmission arrangements between the water and electricity industries.

If one was to review the reforms implemented in South East Queensland with ‘centralised’ or single ownership storage, it would be fair to say that they would not be a good model for a region such as Central Queensland with its diverse ownership of bulk storage, no connectivity and a far greater geographic spread of urban water service providers.

Also, a pure commercial model could not be implemented in regional areas whereby larger metropolitan areas could see a more commercial approach successful due to the larger and more diverse markets. Those markets may be more reactive to price movements; however, the larger markets may make third party access a more attractive proposition with resultant pricing competitiveness.

Provided any reform implemented had provision for a socially acceptable amount of water at a socially acceptable price, there may be consumer/community acceptance of such reforms; however, any reforms that are perceived by the community to be adding unnecessary layers of management/control at additional cost to the consumer will not receive the necessary support. This would also require a community engagement process that raised awareness of the need to manage this resource for sustainability.

The manner and cost of the transmission of water, both potable and recycled is costly and in many urban areas is contained within already overcrowded utility corridors. These issues also impact on the opportunities for use of recycled water and retro fitting dual reticulation systems.

It is considered that there is scope for reform in all areas; however, the level of reform will vary from region to region. Even within regions, this level of reform could change from scheme to scheme depending on the maturity of the organisational capacity and governance structure.

Supply augmentation planning and decision making

There is always scope to increase the efficiency of planning for water and the decision making from long term strategy to day to day operational issues and pricing; however, the current structure, especially in Queensland provides a level of impediment to achieving that. That structure sees political decision making based on community sentiment be that real or perceived; however, in many regions it could probably be argued that such decision making is all that keeps this essential service 'affordable'.

Yes, this is addressed through identification of appropriate and agreed levels of service including restriction frequency, population movements and climatic forecasts. This responsibility needs to lie with the Water Service Provider in the first instance with the need to engender the cooperation of the State regulating body to ensure that cross regional/scheme issues are all addressed to achieve the required security level.

Anecdotal evidence would suggest there are implicit and, at times, explicit 'policy bans' occurring at the governance and representative tiers within the various levels of government that impact adversely on logical augmentation options.

The matter of transferring of allocations/licences from irrigators to urban issues is a complex matter and one that can have longer term ramifications for a range of sectors. The issues that need to be considered when contemplating such transfers are as wide and complex as the fabric of the communities that may be affected and those issues include:

- is the transfer to be seasonal/temporary or is it a permanent reallocation from a production sector to a domestic sector;
- what are the social impacts of the loss of industry and the growth of residential;

- what are the long term economic impacts of removing a vital input in to the production sector be that primary or other; and
- the short term highest use is not always the optimum long term use.

In some water jurisdictions the model reflects different levels of reliability which in turn is reflected in the price; however, whilst reliability is variable in the short term, there remains in the longer term some surety about supply albeit not full supply. Transferring to another sector would diminish that surety with a resultant loss of effort in that production sector.

Any reviews of supply augmentation should be options based to ensure that the matters of sustainability from both economic and environment can be addressed. An options approach is also vital to the gaining of acceptance of pricing models, so that there is a transparency around the reasons for and basis of the costings that have led to those pricing decisions.

Obviously one of the objectives, when reviewing supply augmentation, is to minimise cost where possible; however, this needs to be balanced by the optimum long term outcome. This obviously varies from project to project and also needs to take in to account the community and economic factors mentioned above.

Utilising and operating sources of supply

It is not possible for us to provide comment on the operating costs of desalination and water recycling plants as we have not been exposed to such plants. It would be anticipated that the operating costs of those plants would be an integral component in the assessment of the viability of desalination and recycling plants and not merely when they should be operated. This again reinforces that various factors that contribute to the overall sustainability of the plants and schemes in which they operate.

The recovery of capital costs should be borne by those accessing the service and whose demand for water have contributed to the need to expend capital to augment supply or seek alternative sources of supply. Should that alternative supply be for recycled water, the matter of substitution versus new use needs to be considered as well as whether the previous effluent was being discharged in accordance or otherwise with environmental licences and whether there should be some attribution of costs back to the users of the sewerage system that are befitting from alternate disposal/use. Other factors also include dependency on a restrictions regime and the ‘social’ pricing to ensure that a level on what could be referred to as non-discretionary water use, remains affordable. There may also be occasions where the capital costs could be subsidised by others to foster economic development within an area; however, any such direct subsidisation or cross-subsidisation from other sectors/users needs to be fully transparent.

It could be argued that the management of water catchments is not appropriately influenced by the value of the water that they yield especially with the impacts by and to the rural industry. Whilst this is a significant portion of the economy, the management of the use of water by a range of categories

of the rural industry does not or has not in the past placed the appropriate emphasis on catchment management.

Water treatment, transport and distribution

It is difficult to comment on whether there is scope to increase the efficiency of water treatment, transport and distribution as this will vary considerable from scheme to scheme. This is influenced by geography, topography, demography and technology.

It could be suggested that water quality standards are being consistently met in the schemes operated by the medium to large water service providers; however, the consistent meeting of those standards may be a little more problematic in the smaller communities. This is not intended as any criticism of the water service providers in those smaller communities but merely recognition of the issues faced including source water and adequate resources both physical and financial.

Wastewater services

It would be difficult to give an overarching comment on the scope to increase the efficiency of wastewater services as again that will vary significantly from provider to provider. It could obviously be argued that there should be more recycling of 'wastewater'; however, this is also very dependent on the prevailing circumstances faced by individual providers.

Some of the particular challenges and opportunities in providing wastewater services in regional urban areas are related to the environment and the disposal of effluent. This can be countered where there is a demand for re-use water; however, any widespread acceptance of use of re-use water for any purpose other than irrigation, industrial or construction use is still an anathema to a large proportion of the Australian population.

The retro-fitting of re-use schemes (if dual supply was being contemplated) in existing urban areas would be problematic for a range of reasons with the primary reason being the costs of duplicating existing networks. Another significant factor is the already 'overcrowding' of service or utility corridors.

The two (2) previous comments are also applicable to the environmental performance of sewerage treatment in that should they be efficient and operating in accordance with requirements, one would expect that the environment impacts are minimised or at least within the parameters set by any regulating body. Re-use opportunities should also provide environmental benefits.

Integrated water management

The efficiency gains available from the wider adoption of integrated water management are many and varied; however, one of the basic issues to contemplate is the type of use of what has traditionally been either 'wastewater' or stormwater. Previous studies have shown that stormwater run-off has significant contaminants and, depending on the volume of rainfall

resulting in the run-off, could require a high level of treatment compared to even sewage. Notwithstanding the latter, with changes to technologies, treatment methods and mindsets it should be possible to supply a significant proportion of potable water needs closer to the demand. It is suggested that the widespread implementation of efficient integrated water management practices is again cost and community perceptions.

Consumption and pricing

Growth in population, trends in technology, consumer behaviour and climate will all have major impacts on the demand for water and wastewater services in the future. Enhancements in technology for the treatment of 'wastewater' may well see increasing demand for the source of water as community acceptance grows. The resultant growth in demand may then have a commensurate effect on the price of water as the capital costs can be apportioned across a larger consumption. These will also have an impact on the subsequent pricing of potable water be that upwards or downwards through greater demand within current investments in sources. Greater awareness within the community will also have a positive effect on the acceptance of re-use water.

Integrated water management may also see a reduction in the demand for potable water as alternate sources such as 'wastewater' and stormwater are perhaps treated to lower standards and then used for external and non-drinking and food preparation uses.

When there is mention of efficient pricing for the water sector there appears to generally be some confusion as the terminology can be and is interpreted a number of ways. Is it where demand and supply is balanced or are we referring to the efficient and effective development of pricing models to ensure that all inputs are captured appropriately.

If we look at the former first, it is generally a parlous position to be in where current supply equals current demand with supply issues arising should there be an increase in demand. That premise is also predicated on the situation that would see demand directly correlated to price whereby in such situations amending the price will maintain demand at a steady level despite externalities such as population growth. Unfortunately, there is not such a direct correlation and whilst small to medium price movements may have a short term reaction with consumers manifested by a reduction in consumption, this is generally not maintained for any long periods. Obviously, that reaction is tempered by the quantum of any price movement and also whether the base was considered high or not.

If we then take the other approach that efficient pricing is about a robust full cost recovery approach, it would be assumed that medium to large water service providers in most jurisdictions would be either currently meeting that objective or on a path to achieve same.

Also, should business/commercial operators pay a premium for surety of supply during times of restricted access to residential consumers or should

that unrestricted use for production purposes bear a premium in the normal consumption price to those operators. It is suggested that the price generally charged to commercial/industrial operators should have a component for the long run marginal cost or there should be the opportunity to charge large commercial/industrial operators a loading for surety of supply.

Any restrictions imposed through pricing should take in to consideration a level of consumption for 'social' or non-discretionary purposes that should be priced accordingly. It would be difficult to forecast what the community is prepared to pay for both unrestricted and restricted access as this will be largely deponent on the price they are currently paying, the levels of service being received and whether there are supply issues, be those short, medium or long term.

Pricing that reflects the long run marginal cost is necessary in the establishment of appropriate pricing regimes and this should apply to that level of consumption that, should it continue and become the norm, would require the augmentation of supply sources. This is a level of scarcity-based pricing; however, it is assumed from the Issues Paper that a more flexible approach is being mooted which would see prices fluctuating during a financial year depending on the seasonal/climatic conditions.

The latter would see considerable criticism from the community in respect of household and business budgeting and would need to be subject to notice periods to ensure that the desired result (decreased consumption) was achieved. It is assumed that following periods of significant rainfall and good storage holdings that the water pricing would decrease to reflect abundant supplies. It is suggested that any pricing movements would be marginal from season to season as all operating costs and capital costs are still applicable, therefore the success of such pricing would be predicated on the fact that the revenue largely remains static whilst the consumption decreases. Is that sustainable?

It is difficult picture how efficiency gains in the supply of water and wastewater services will be successful being dependent on pricing reform unless it is intended that those pricing reforms take in to account full costs including the long run marginal cost that some water service providers may not currently be incorporating.

There are obviously improvements that can be made in the area of metering and billing and these include:

- shorter time period – (minimum quarterly);
- robust asset replacement programs that are based on loss of revenue and not merely age; and
- smart meters – provide full consumption data including times and volumes (to allow water service providers to minimise pumping costs through the use of off-peak arrangements and to allow time based (peak and off-peak) pricing.

The implementation of changes to metering and billing need to be assessed closely to ensure that any resultant benefits are commensurate with the costs.

In respect of billing, it will be required, in Queensland, from 2011 that water service providers send information to the "occupier" regarding water consumption which will in itself pose problems through the need to identify what properties are rented as this is not readily identified from rate records. Also does sending consumption information to the occupier (tenant) shift the onus from the owner to the water service provider to regulate water usage at the rental property (or give this perception). The other issue raised by this direction – are we heading towards a consumer based water billing system as opposed to the current property based system. The issues with this are evident and one only needs to look at the electricity sector to identify outstanding monies collection and tracking problems.

Equity

It is considered that there is generally equitable access to water services for urban communities in Australia; however, there is not the same equitable distribution of wastewater services. The latter is dependant on the stage of urban development, industrial/irrigation demand and the prevailing licence conditions for the discharge from relevant sewerage treatment plants.

That matter of equity/social objectives in the supply of water have been identified earlier in this submission.

Water restrictions and other non-price demand management measures are equitable provided that they are appropriately applied and enforced.

It is considered that inclining block tariffs are the most equitable method for applying water prices to ensure that the higher consumers are meeting a higher proportion of the costs to deliver and plan for the service. Postage stamp pricing is not equitable as it provides the opportunity for cross-subsidisation with the consumers in the more urbanised schemes assisting in maintaining a lower price for the smaller scheme consumers despite, quite often, the costs per unit being far higher in the smaller schemes.

Any current equitable delivery of services could be eroded through price reform and non-price demand management unless there is consideration given to the social pricing referred to earlier in this submission and the availability of what we have referred to earlier as the non-discretionary use by households.

Non-price demand management

In the past, any non-price demand management measures have met with mixed levels of success due to the onus being on a cooperative approach from the consumer and unless these are supported by the imposition of penalties they will continue to deliver those mixed results. It is considered that consumers will tolerate uniform restrictions on consumption provided that they

are applied uniformly and do not impact on the availability of sufficient water for the non-discretionary use.

Queensland, as have other States, over recent years undertaken extensive community awareness and water efficiency programs with, it is suggested, a reasonable level of success. This has seen not only the State Government but also local government and water service providers throughout the State offer rebates on water efficient devices to encourage take-up by the community. These community awareness and financial incentive programs have been implemented in a number of regions in conjunction with water restrictions and the notional targets of consumption have been achieved. These programs are not inexpensive; however, they are necessary to change the mindset of the community in respect of water conservation. Had those programs not been implemented as a package, it is doubtful that the same levels of success would have been achieved.

Competition and contestability in Australia's urban water sector

It is considered that there is scope for competition and contestability within the water and sewerage sectors in Australia; however, much will depend on at what stage of the water and sewerage process is the implementation of that competition. The margin for price variability in the distribution and retail of water, it is suggested, would be minimal given the need for the payment of third party access fees and the proportion of the cost of water that reflects costs associated with that infrastructure. The obvious competition level is retail as there would be confusion for consumers and regulators alike for multi-access/control at levels below that. Any such approach may become problematic when attempting to implement restrictions especially should those restrictions be price based as has been suggested in the Issues Paper.

Of course, any implementation of competition and contestability will need to be balanced by the continued involvement of governments at all levels and the effect that such involvement has on the viability of water businesses when there is a level of political policy that impacts on pricing and service delivery issues.

Again, each region will have their own characteristics and will need to be subject to a thorough review by both the regulators (if they remain) and the prospective businesses to ascertain opportunities and viability.

Case for reform

Is there a strong case for urban water reform to be pursued? Or is there a need for developing organisational capacity and business acumen with the water and sewerage sectors with a view to the sectors achieving growth and efficiencies from within?

If we look at the reforms implemented in South East Queensland, over recent times, and the resultant significant burdens being placed on the consumers through the more complex institutional arrangements and the adhoc capital investments decision made by the State Government, there is need for any

reforms to be much better considered than those. It could also be suggested that with a more effective approach to the governance and management of water much of these reforms were not necessary.

There is a history of unsuccessful and, basically, unnecessary reforms in a range of service related sectors as the decision makers consider that they need to not only be doing the right thing but need to be seen to be doing the right thing, hence there is a situation where a 'sledgehammer is used to crack an almond'. Quite often all those reforms succeed in doing is adding layers and costs; and allows 'sharing of the blame' when pricing and supply issues cause criticism in the community. It needs to be realised that quite often merely nuancing, providing more tools and guiding existing structures, the same, if not better, improvements can be achieved.

By working with and within the current providers, there is greater opportunity for reform whilst meeting consumer demands both in respect of supply and pricing. A greater onus could be placed on meaningful performance reporting to ensure that what is being measured does provide clarity regarding the ability of the providers to manage the delivery of these critical services as well as to manage the governance of those services.

Economic regulation

It is considered that there is merit in having a single entity that administers prices for water and wastewater services in each jurisdiction as there needs to be a realisation that this is a single resource and that there needs to be a maximisation of its use and 'once is not enough'. This approach, if considered to have merit, should be implemented nationally to ensure consistency but to also give the industry the opportunity to help itself with capacity growth opportunities.

Summary

Overall, it is considered that any proposed reforms need to take into consideration the idiosyncrasies of each scheme/region including:

- objective setting and strategies;
- current governance structure;
- business structure and performance;
- community/market wants and needs;
- supply issues, both short and long term;
- pricing regimes – real or artificial;
- current regulator involvement; and
- realistic opportunities for integration of water management.

Any reforms need very careful and robust consideration and, it is suggested, the time provided for this review by the Productivity Commission does not permit that level of consideration. It is hoped that this review is not like previous forays in to the water sector by the higher levels of government that are generally 'knee jerk' reactions that do not give adequate consideration to the long term ramifications on the community and other stakeholders.