

**REVIEW OF METROPOLITAN WATER
AGENCY PRICES**

**SUBMISSION BY TOTAL ENVIRONMENT CENTRE TO
THE INDEPENDENT PRICING AND
REGULATORY TRIBUNAL**

December 2004

INTRODUCTION

Total Environment Centre (TEC) welcomes the opportunity to contribute to the Independent Pricing and Regulatory Tribunal (IPART) review of metropolitan water agency prices. Current water use patterns are unsustainable with severe pressure on supplies for all metropolitan water agencies. This should not be viewed merely as a result of current drought conditions. While drought has exacerbated water shortages, it is clear that there is a long-term supply and demand imbalance. Population growth and climate change are placing further pressure on supplies, while water is urgently needed to provide environmental flows for stressed rivers and streams.

The challenge to reduce demand is therefore great. TEC believes that pricing reform has a vital role to play in reducing demand for water and supporting other demand management initiatives, such as the NSW Government's recently released Metropolitan Water Plan.

TEC made a detailed submission to the Tribunal's recent Investigation into Price Structures to Reduce the Demand for Water in the Sydney Basin. We welcomed a number of the recommendations of the final report (IPART, 2004a), particularly in relation to step pricing, however, we believe that further measures will be required. We urge the Tribunal to adopt a bold approach to pricing reform and adopt options that maximise the potential for water savings. In particular, we believe that the step pricing approach should be applied to each of the metropolitan water agencies.

TEC is not convinced that current prices for water, sewerage and stormwater services adequately reflect the environmental and other costs associated with provision and management. Prices adopted in this review should address this and send a strong water conservation signal to consumers. The alternative will be the financial and environmental costs of supply augmentation.

TEC is particularly concerned that there are already moves toward a number of environmentally unsustainable supply augmentation options. Submissions by Gosford City and Wyong Shire Councils to this review reveal that the councils are investigating desalination and other supply augmentation measures (Gosford City Council, 2004; Wyong Shire Council). The NSW Government is also examining desalination as part of the metropolitan water strategy (DIPNR, 2004). TEC views desalination as a very poor and environmentally unsustainable option due to the high levels of greenhouse gas emissions and problems with disposal of brine desalination by-products.

We are also disturbed by the proposal in the metropolitan water strategy to increase transfers from the Shoalhaven River (DIPNR, 2004) and note with concern that the Sydney Catchment Authority is negotiating with the Fish River Water Supply Scheme to increase the amount of water it purchases from the scheme (SCA, 2004). These options will simply have the effect of transferring some of the environmental impact of Sydney's unsustainable water use to other catchments.

This submission details factors that need to be incorporated into the prices set for water, sewerage and stormwater services. It discusses the critical role of pricing in

demand management, promoting effluent reuse, improving performance and placing the operations of water agencies on a more sustainable footing.

REVENUE REQUIREMENTS

Operating expenditure

The discussion paper for this review indicates that the Tribunal is seeking to determine the costs that each business would incur in operating efficiently, without compromising service quality and will be seeking information from each business to this effect. TEC supports this objective but cautions that care must be exercised to ensure that the water agencies do not allow standards to deteriorate in order to reduce operating costs.

Capital expenditure

The critical nature of water, sewerage and drainage services and the massive environmental, social and economic costs of asset failure make sound asset maintenance essential. We urge the Tribunal to ensure that each agency's capital expenditure is appropriate to ensure proper asset management programs in place and that expenditure in this regard is adequate.

Cost pressures

TEC agrees with the Tribunal's assessment that additional cost pressures are likely to be generated as a consequence of current environmental conditions and Government decisions (IPART, 2004b). We believe that this is simply a reflection of the failure of previous pricing arrangements to adequately reflect true environmental costs. Factoring in the costs of measures now being taken to address environmental problems arising from past management practices and supply and demand imbalances should be viewed as a necessary part of true cost reflective pricing.

It is likely therefore that real price increases will be required over the course of the next price path. As detailed elsewhere in this submission TEC strongly believes that increased costs should be recovered by usage prices rather than fixed charges.

Sydney Catchment Authority

The water contamination crisis of 1998 provided clear evidence of the need to improve the management of Sydney's drinking water catchment. Unless this occurs future water quality incidents and loss of public confidence in the safety of Sydney's drinking water supply are highly likely.

It is clear that proper management of the catchment is a major undertaking. In addition to identifying and addressing threats to water quality the Authority must maintain the integrity of the special areas and play a key role in catchment planning through the Regional Environment Plan (REP) and Risk Management Plan (RMP). In order to provide the Authority with the resources needed to properly execute its obligations and to ensure the protection of Sydney's drinking water supplies, TEC believes the Authority should be provided with some form of funding enhancement.

The introduction of 'step pricing' to penalise Sydney Water for failing to meet demand management targets would provide a significant source of revenue. We recommend that the Authority be required to place this revenue in a dedicated fund for environmental research and restoration to ensure that all funds are spent in the catchment and not simply returned to Government in the form of increased dividends.

In addition to step pricing, environment groups have previously recommended two possible sources of funds to finance improved catchment management (PENGO, 2000):

- A catchment levy to raise funds for catchment management. A levy of 5 cents per kilolitre would provide around \$25 million and equate to approximately \$5 per customer per year. Revenue raised in this manner should be placed in a dedicated fund as described above in relation to step pricing;
- Exempt SCA from the requirement to provide dividends for several years and require that the revenue be spent on catchment management instead.

PRICE SETTING

Price structure

In previous submissions to the Tribunal TEC has strongly advocated the introduction of inclining block pricing and a reduction in fixed charges to provide a clear signal to customers of the need to reduce water use to sustainable levels. In particular we welcome the potential of second tier prices to target discretionary water use and hence provide a strong incentive for high volume users to moderate non-essential water use.

TEC therefore welcomes the recommendations of the final report of the Investigation into Price Structures to Reduce Demand for Water in the Sydney Basin (IPART, 2004a). We urge the Tribunal to implement these recommendations in setting the next price path.

We note that under the Tribunal's preferred option the step point would be set at 400kL per annum for Sydney Water customers. While we accept that this may be a worthwhile starting point to introduce customers to the new pricing system and adjust their water consumption behaviour. In the longer term, however, we believe that the step point will need to be set at a lower level.

TEC believes that over time the step point should be reduced to 300 kL as described in scenario 3 of the Tribunal's Issues Paper for the Investigation into Price Structures to Reduce Demand for Water in the Sydney Basin (IPART, 2003) to maximise the potential for water savings.

It is encouraging that Sydney Water has indicated support for the inclining block tariff approach and increasing the total proportion of monies raised through usage based charges in its submission to the Tribunal (SWC, 2004). We support SWC's view that increased usage charges and inclining block tariffs should be used to achieve more cost reflective pricing.

TEC supports the Tribunal's recommendation that an inclining block tariff should be applied on a quarterly basis so that a household would be able to use 100kL of water each quarter before incurring the second tier price (IPART, 2004a). We concur with Sydney Water's view that this approach sends a more frequent price signal to high volume users, allowing them to alter their consumption (SWC, 2004). We also support Sydney Water's view that a quarterly step approach will help discourage discretionary use in summer because customers cannot avoid the second tier price simply because they use less water at other times of the year.

We strongly believe that the inclining block tariff model and a reduction in fixed charges should be applied to each of the other metropolitan water agencies. We note that Wyong Council has acknowledged that there is merit in investigating this approach in their submission to this pricing review (Wyong Shire Council, 2004) and support the proposals by both Gosford and Wyong Councils to increase the proportion of water revenue attributable to usage charges (Gosford City Council, 2004; Wyong Shire Council, 2004).

TEC acknowledges that reducing fixed charges and increasing the proportion of revenue obtained from usage charges exposes the businesses to greater risk from events outside their control i.e. drought and the imposition of water restrictions. We see merit in Sydney Water's proposal for a cost pass-through mechanism triggered by a specified list of events outside their control (SWC, 2004).

Transition arrangements

The Tribunal has expressed concern that there needs to be a balance found between obtaining the maximum behavioural response from a change in price, and allowing a reasonable adjustment period to avoid a severe price shock (IPART, 2004b). It is important to bear in mind though that behavioural change is the ultimate objective of pricing reform and that the imbalance between demand and supply requires immediate action. It is also important to note that given that the Tribunal has identified step points designed to target discretionary water use the price shock should not as severe as if total water use was targeted. We also note that many customers will experience a reduction in bills due to the lowering of fixed charges. Nevertheless TEC acknowledges that a phase in period of several years may be required. We recommend, however, that this period be kept to the minimum possible.

Hunter Water's second and third tier usage charges

TEC notes with concern that Hunter Water's present pricing structure represents a 'declining block' tariff system with customers using more than 1000kL per year paying a lower rate and an even lower rate for customers using more than 50,000kL per year who are close to water source and treatment facilities. This approach is totally contrary to any demand management principles and sends a very poor message to residential customers who pay a lower price than large commercial and industrial users.

Whilst welcoming Hunter Water's proposal to abolish the lower second tier price (HWC, 2004) we are totally opposed to the continuation of 'third tier' prices for high volume industrial customers located close to water sources and treatment facilities.

TEC has consistently opposed this approach and sees no merit in maintaining this system. Reducing prices for large users diminishes the resource conservation signal conveyed by usage charges, thus undermining demand management. Further, this pricing system reduces incentives for large volume users to adopt effluent reuse. It is essential that large volume users be actively encouraged to adopt reuse to reduce demand on potable supplies and ensure the long term viability of effluent reuse. With demand close to the limit of sustainable supply and the potential for new industry in the Hunter to create significant additional demand pressure it is illogical to provide discounts to large volume users.

TEC urges the Tribunal to replace Hunter Water's declining block tariff system with inclining block pricing. We note Hunter Water's comments that only around 10% of houses in the lower Hunter use more than 400kL per year and that the Corporation reads meters three times per year rather than four (HWC, 2004). This merely suggests that some refinement of the approach recommended for Sydney Water may be required. For instance a lower step point may need to be chosen and quarterly application of step points would not be suitable.

Hunter Water also argues that, unlike other regions, demand in the Hunter does not exceed supply capacity. It is important to note, however, that the area is experiencing rapid population growth with the Metro Strategy likely to encourage further growth and that development of new industry in the area may place a burden on supply in the future. It is also relevant to note that there are proposals for Hunter Water to deliver supply to the Gosford and Wyong Council water supply scheme.

Managing impact on customers.

In our submission to the Investigation into Price Structures to Reduce Demand for Water in the Sydney Basin (TEC, 2004) we noted the Tribunal's concern that application of step pricing may penalise large families, particularly those on lower incomes and urged the Tribunal to give consideration to rebates and other options that would minimise such effects.

We therefore strongly support proposals by Sydney Water to manage customer impacts through targeted residential retrofits and assistance with the purchase of water efficient appliances for vulnerable, low-income customers (SWC, 2004). We also support the proposed additional safety nets of increasing the Payment Assistance Scheme to tenants and adjusting the pensioner rebate.

These measures should be applied to each of the metropolitan water agencies in order to manage the impacts of pricing reform.

While it is important to ensure that vulnerable customers are protected from any unintended hardship due to the introduction of inclining block pricing it is worth noting that Sydney Water figures have identified highest water use in more affluent suburbs in north Sydney (SMH 26/9/03). Highest water use was recorded in Woollahra for three years in a row at 409 KL per year with Ku-ring-gai (402), Hunters Hill (401), Baulkham Hills (399) and Mosman (371) also recording well

above average water use. This suggests that a substantial component of above average water use is, in fact, discretionary outdoor use.

Wholesale Step Price

TEC strongly supports the introduction of a wholesale step price to encourage Sydney Water to improve demand management. We have advocated this measure in previous pricing and Operating Licence review submissions to the Tribunal and remain convinced of its value. We are disappointed that the Tribunal did not support this approach in the recent report of the Investigation into Price Structures to Reduce Demand for Water in the Sydney Basin (IPART, 2004)

Sydney Water's failure to meet demand management targets included in the operating licence provides a clear indication that current incentives to reduce demand are inadequate. While the current demand management targets provide a strong regulatory driver for reducing consumption, they are insufficient on their own to ensure the achievement of the required water savings. A critical problem is an inherent incentive for failure to meet demand management targets. As noted in the discussion paper for the price structure investigation (IPART, 2003) current wholesale price setting ensures that Sydney water earns additional revenue for each additional unit of water it sells. The Tribunal's discussion paper for the 2002 price determination estimated that failure to meet demand management targets would result in increased revenue for the Corporation of between \$35m and \$72m (IPART, 2002). Sydney Water's own comment in their submission to the 2002 price determination (SWC, 2002) that "once price is established, demand determines revenue" was particularly telling in this regard.

In order to remove this incentive for failure to meet demand management targets and to provide greater impetus to achieve required savings, TEC urges the Tribunal to adopt step or penalty pricing for any water supplied by the Sydney Catchment Authority in excess of sustainable yield.

TEC strongly believes that the step quantity should be set equal to the sustainable yield from the Sydney Catchment **including** environmental flows. The current estimate of sustainable yield at 600GL per annum does not include any provision for return of environmental flows to the stressed Hawkesbury-Nepean river system. It is merely a reflection of the safe yield from SCA storages.

Any consideration of sustainable yield must include provision for environmental flows for the Hawkesbury-Nepean system. It is understood that approximately 100GL per annum is required for effective environmental flows. The level of sustainable yield should thus be set no higher than 500GL. TEC accepts that this limit would need to be phased in incrementally over a number of years.

TEC believes that any extra revenue generated by a wholesale step price should be captured in a dedicated demand management fund used to promote demand management, water conservation and reuse schemes.

Wastewater/sewerage pricing

TEC supports the introduction of usage prices for wastewater services. We note that the Tribunal has previously expressed concerns with such a system (IPART, 2003; IPART, 2002). It is our view, however, that large fixed charges for sewerage services significantly reduce the control that customers can exercise over the size of their bills. The result is reduced incentive to adopt more efficient appliances and water use strategies, thus eroding the resource conservation signal sent by water usage charges.

TEC also believes that wastewater charges should not only reflect the economic costs of transporting and treating effluent, but also the environmental costs of discharging effluent to receiving waters. To reflect the greater environmental costs imposed by those who discharge higher volumes of effluent and in accordance with the principle of polluter pays, usage charges should be applied to sewerage services.

Reducing pressure for supply augmentation is not the only goal or benefit of demand management. Reducing demand for water will also reduce the volume of effluent discharged to the sewerage system and thus lessen environmental impacts. In this context it is appropriate that volume pricing for wastewater form part of overall demand management strategies.

TEC recognises that this approach has limitations in that it is difficult to meter domestic wastewater discharge. In the absence of any means of metering discharge it is necessary for usage charges to be linked to water consumption.

It is clearly not appropriate for discharge factors to be set at 100% given that most customers do not discharge all their water into the sewer. The discharge factor should therefore be set at a reduced level such as the 50% factor used by Hunter Water for residential customers. We note Hunter Water's comment that for most properties this represents a conservative assessment of the volume discharged to the sewer (HWC, 2004).

While clearly not a perfect system, we strongly believe that it represents a superior approach to present pricing arrangements. It is true that such a pricing structure does not take into account the possibility that the amount discharged to the sewer may vary from property to property. It is clearly fairer, however, than a simple fixed service charge which reduces the capacity for customers to control their bills and effectively subsidises high users at the expense of more water efficient customers.

In order to make such a pricing structure more accurately reflect the contribution of flats and units the discharge factor for such properties should be set at a higher level

TEC believes that the Tribunal should also direct water agencies to investigate mechanisms that would more accurately reflects the contribution of each customer to the sewerage system such as wastewater metering or charging according to property size and land use. Such a system should also include rebates for customers who can demonstrate that they have reduced their contribution to the sewerage system (and thus the environmental costs of effluent disposal) through the installation of water efficient devices and improvements to private service lines.

Recycled water pricing and sewer mining

TEC strongly supports that increased reuse of effluent is an essential component addressing supply and demand imbalance and reducing the environmental impacts of effluent on receiving waters. It is disturbing, then, to note that progress in promoting recycling remains poor.

We are particularly concerned to note that less than 0.1% of Wyong Shire Council's effluent is currently recycled and that it is only planned to increase this to 0.8% by 2005. This represents a lamentable performance on effluent recycling, particularly given the Council's moves toward developing the highly unsustainable option of desalination.

TEC is also disappointed at Sydney Water's decision to abandon the proposed Georges River Recycled Water Pipeline. We believe this is simply another example of the Corporation's apathy toward promoting effluent reuse.

We note that in previous determinations the Tribunal has set a zero sewer mining fee for Sydney Water and required the Corporation to provide access to the sewer for extractive purposes on a full cost recovery basis (IPART, 2004b). Environment groups supported this approach (NSW Peak Environment Groups, 1996; PENGO, 2000) as an important tool in promoting effluent reuse and easing pressure on potable supplies and sewerage infrastructure.

We urge the Tribunal to maintain this approach and apply it to the other metropolitan water agencies. Charging for access to treated effluent would constitute a barrier to competition as reuse effluent is able to compete with potable water for many non-potable applications.

Increased effluent reuse will depend on reuse water being price competitive with potable water. TEC is concerned to note the comment by Sydney Water that, in view of the recent National Competition Council determination regarding Services Sydney, they may be exposed to greater risk of competition and need greater price flexibility to respond to the new market conditions (SWC, 2004). This appears to be a thinly veiled request to undercut recycled water by reducing the price of potable water. If this were allowed to occur it would severely hinder the development of recycling and have the effect of ensuring that potable water pricing does not reflect true environmental costs.

Stormwater management

In determining the revenue requirements of the agencies and appropriate charges for stormwater we urge the Tribunal not to provide agencies with funding that will simply be used to fund environmentally damaging hard engineering approaches such as channelisation and sealing of natural watercourses. Conversely, projects which seek to adopt a more enlightened approach and which will actively reduce urban run off or improve stormwater quality should be regarded as worthy of immediate support and provision made to ensure that charges provide an adequate level of funding.

TEC believes that stormwater charges should, as far as possible, be catchment based and linked to environmental impacts. In this respect charges should be reflective of the amount of stormwater a property contributes to the drainage system (i.e. linked to the total area of impervious surfaces on each property as this determines stormwater runoff to a significant extent).

Pricing should also provide rebates for customers who install on site stormwater management facilities such as retention basins and stormwater recycling (i.e. rainwater tanks). This would act as a powerful incentive for developers and property owners to embrace water sensitive urban design features.

To prevent hardship that may occur as a result of basing charges entirely on the contribution of a property to the stormwater system, TEC advocates a two-part tariff with a fixed service charge and a sliding scale of area based charges. This would reflect the fact that all customers benefit to at least some extent from drainage works, whether or not their property is directly affected while still providing strong polluter pays signal.

To ensure that agencies carry out required stormwater and environmental improvement works, funds raised from stormwater charges should be equivalent to expenditure. Any revenue in excess of current capital expenditure (where that expenditure is necessary and environmentally responsible) should be quarantined and directed to reducing the volume and improving the quality of water carried in drainage systems. Targets for both quality and quantity of stormwater should be established based on the hydraulic capacity of catchments rather than the hydraulic capacity of drains. Such targets should include requirements to restore and rehabilitate a minimum length drainage canals to more natural, riverine habitat.

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