

REVIEW OF METROPOLITAN WATER AGENCY PRICES

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

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INTRODUCTION

Total Environment Centre (TEC) welcomes the review of metropolitan water agency prices as an opportunity to ensure that environmental costs are more accurately reflected in prices.

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. We are also concerned that high profits of water agencies continue to be provided to government as dividends, rather than being internalised to improve services and environmental performance.

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.

REGULATORY FRAMEWORK: PRICING

Incentives to protect and enhance service levels

The maintenance and enhancement of service and environmental standards is of paramount importance in ensuring that water agencies' operations are placed on a more sustainable footing. It is necessary to ensure that agencies do not compromise standards in order to reduce operating costs or capital expenditure. In the case of water agencies this could lead to increased incidences of service interruptions, sewage surcharges, failure of demand management, inferior catchment management, water quality incidents and environmentally insensitive operating practices.

TEC sees merit in the Tribunal's proposed approach to facilitating enhancements to customer service levels (IPART, 2002) by allowing agencies a higher price at the next review if services have improved, but reducing the price if services have declined. We would urge the Tribunal to extend this principle to providing incentives to maintain and enhance environmental performance. In particular where an agency has improved environmental performance within existing pricing structures they should be allowed marginally higher prices at the next pricing review. Equally agencies whose environmental performance has declined should be penalised with lower prices in the next review. We note that the Tribunal does not intend to introduce such a system at this review. We recommend, however, that such a system be thoroughly investigated and refined for introduction in the 2005 determination.

Period of price path

TEC notes the Tribunal's view that given uncertainty regarding environmental flow requirements, reviews of institutional arrangements for stormwater management and the desire to synchronise price determinations with the renewal of operating licences for SCA and SWC, a two year price determination is appropriate for all four retail water agencies (IPART, 2002).

While accepting the logic of this position, TEC is concerned that the shorter period of the determination should not be seen as reason to avoid addressing critical issues relating to water pricing. In particular, TEC urges the Tribunal to ensure that current disincentives for water agencies to pursue demand management are removed. This issue is discussed in more detail later in this submission.

PRICE STRUCTURE AND REGULATORY BALANCE

Demand Management

Step pricing

It is clear from Sydney Water's abject failure to meet operating licence demand management targets 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. We note from the Tribunal's issues paper that the failure to meet demand management targets results in increased revenue for the Corporation of between \$35m and \$72m (IPART, 2002). Sydney Water's own comment in their submission to the Tribunal (SWC, 2002) that "once price is established, demand determines revenue" is 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 introduce severe financial penalties for failure to meet targeted per capita demand reductions. Such financial penalties should include step or penalty pricing for any water supplied by the Sydney Catchment Authority in excess of demand management forecasts. As noted by the Tribunal, such an approach would provide a commercial incentive for SWC to pursue leakage control, reuse schemes and more aggressive demand management. It is, in effect, necessary to create an environment in which it is more cost effective for Sydney Water to invest in demand management than to incur higher prices for water supplied by SCA in excess of demand management targets.

TEC totally rejects the argument put forward by Sydney Water in their submission to the Tribunal (SWC, 2002) that consideration of the issue of step pricing should be deferred until the 2005 price determination. It is unsurprising that Sydney Water would seek to delay the introduction of any form of step pricing given the revenue surplus currently accruing to SWC as a result of failing to meet demand management targets. Nevertheless, the fact remains that SWC are abjectly failing to meet operating licence demand management targets. It is therefore urgent that stronger incentives be provided for SWC to meet these targets. As noted earlier in this submission the two year period proposed for the present determination should not be used as a reason to defer urgent pricing reforms that could be made now. The removal of financial disincentives to pursue demand management is perhaps the most important and substantial pricing reform that could be made in this determination.

While it is unsurprising that SWC would seek to defer the introduction of step pricing we are perplexed as to why SCA has chosen to support this argument. In its submission (SCA,

2002) the Authority has highlighted the inherent lack of incentive for SWC to achieve demand management targets. SCA points out that a net difference of approximately 74c between the bulk water and variable costs and the retail price for water sends inconsistent signals to SWC between selling more water and fostering demand management. Given that it is the Authority that will be required to invest in new infrastructure should demand management fail to prevent augmentation, it would be more logical for the Authority to desire that a clearer demand management signal be sent to SWC. It has, however, become depressingly predictable for water agencies to repeat the mantra that key reform issues not be addressed in IPART reviews and instead be deferred until subsequent determinations due to lack of information, changing circumstances, etc. TEC is increasingly frustrated by the refusal of key agencies to embrace long overdue reform. We urge the inquiry to resist this institutionalised preference for reform inertia from water agencies and adopt a more enlightened approach that ensures that the government's policy of not building a new dam is not compromised.

While the introduction of such a step pricing regime may remove the incentive for Sydney Water to fail to achieve its demand management targets it does not provide an option for the other metropolitan retail water agencies. Hunter Water, Gosford Council and Wyong Councils are responsible for their own bulk water provision, unlike Sydney Water. Nevertheless, these agencies also have a disincentive to pursue demand management as increased water sales will also provide these agencies with greater profits. The fact that Hunter Water's current total demand of 72 Gegalitres per annum is only slightly below the sustainable supply of 73 Gegalitres per annum (HWC, 2002a) and that the Gosford/Wyong scheme is under significant pressure with new supply options under investigation (Gosford City Council, 2002; Wyong Shire Council, 2002) highlights the urgency of improving demand management for these agencies.

In the case of Hunter Water TEC strongly recommends the introduction of a regime requiring hypothecation of any profits resulting from the sale of water in excess of Operating Licence targets into a dedicated fund for enhancing demand management programs. This would not only remove the financial benefits of failure to achieve demand management targets, but help address the causes of that failure. If this cannot be created under the present pricing determination, then such arrangements should be introduced at the time of the mid-term operating licence review.

In the case of Gosford and Wyong Councils we recommend the establishment of stringent demand management targets and a similar hypothecation requirement to that described above.

Inclining block tariffs

TEC notes the Tribunal's ambivalence toward inclining block tariffs. Used purely as an economic instrument it is probably true that (due to quarterly billing) customers would be unaware of what block they are in and what the marginal cost of their current consumption is (IPART, 2002). We suggest, however, that inclining block tariffs may be effective in promoting a demand management signal if linked to a more interventionist demand management program. For instance customers' bills could clearly indicate the fact that their level of water usage over the previous quarter placed them in a higher pricing block, highlight options for reducing water use should they wish to avoid this in the future and

offer assistance where appropriate. In this respect inclining block tariffs could provide a useful means of increasing participation in programs such as residential retrofit.

The issue also arises as to what use increased revenue accruing to agencies from higher block prices should be put. TEC recommends that any water agencies should be required to direct any increased revenue to demand management and assisting customers to reduce consumption.

Price increases and split between access and usage prices

TEC strongly advocates reducing the level of fixed charges in favour of increased reliance on usage charges in order to provide customers with more control over the size of their water bills. Current levels of fixed charges provide a disincentive for customers to reduce water consumption as the fixed charges increase as a proportion of the bill as water use declines. This effectively undermines the principle of "user pays" as an incentive to reduce usage, particularly for most customers on or below the average level of consumption.

TEC supports Hunter Water's request for an increase in usage charges to be offset by a reduction in the water service charge. We endorse the view put forward by the Corporation that recovering a greater proportion of fixed costs through usage charges sends an important water conservation signal (HWC, 2002b)

We note the Tribunal's review of Australian and international data has indicated that price elasticity of water demand is low at between -0.1 and -0.3 per cent so that a 10 per cent increase in price would reduce demand by only between 1 and 3 per cent (IPART, 2002). In the context of current demand management performance and water agencies approaching or exceeding the limits of sustainable yield such a reduction should not be viewed as insignificant. A reduction in demand of 1 to 3 per cent would in fact provide a valuable contribution to overall demand management and avoiding the high environmental, economic and social costs of supply augmentation.

It must be made clear that TEC is not advocating an increase in overall water bills in the order of 10 per cent. As discussed above we believe that access charges should be reduced in favour of recovering a greater proportion of fixed costs from usage charges. The result need not be an increase in customers bills or revenue for water agencies, but rather to provide customers with more control over the size of their bills and a stronger water conservation signal.

It is also important to note that fixed charges are not imposed for other utility services such as electricity, gas and transport. In view of this the continued reliance of water utilities on fixed charges is difficult to justify.

Hunter Water's 'third tier usage charge'

Whilst welcoming Hunter Water's proposal to reduce water access charges in favour of an increase in usage charges we are totally opposed to the continuation of 'third tier' prices for high volume (greater than 50,000 kL per year) industrial customers located close to water sources.

TEC sees no merit in 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.

Wastewater/sewerage pricing

TEC supports the use of a volume charge (two-part) tariff for wastewater services. We note that the Tribunal is not convinced that a two-part tariff is warranted for cost reflective reasons (IPART, 2002). The Tribunal expresses the opinion that costs are driven by infrastructure costs of laying pipes and capital costs of building treatment plants and pumping stations. Further, the Tribunal argues, the main driver for capacity is wet weather inflows rather than residential discharges. This is an exceedingly narrow and flawed view. 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, TEC urges the Tribunal to retain a two-part tariff for wastewater charges for Hunter Water and extend the system to the other agencies.

The Tribunal also notes that volume pricing for wastewater is often cited as strengthening demand management signals. The Tribunal questions whether such a signal would be better sent through higher water charges (IPART, 2002). Again this is an exceedingly narrow view. 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. Furthermore, the maintenance of large fixed charges for sewerage services significantly reduces 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 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% used by Hunter Water.

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 (i.e. two thirds as estimated by HWC as the relevant figure (HWC, 2002b)).

TEC believes that the Tribunal should also direct water agencies to investigate mechanisms that would more accurately reflect 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.

Effort must also be directed to identifying and repairing faulty private sewer lines. It has been estimated that 45% of wet weather sewage flows are attributable to infiltration from faulty household service lines. We recommend that a proportion of revenue from sewerage charges be devoted to a pipe check program to identify faulty private sewer lines.

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 development of a Regional Environment Plan (REP) and Risk Management Plan (RMP).

TEC is concerned that SCA has been slow to develop the REP, identify and address water quality threats and has not devoted sufficient resources to protecting the special areas. 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, 1999; 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.

Stormwater management

TEC concurs with the view expressed by the Tribunal that current institutional arrangements do not assist improved stormwater management (IPART, 2002). We welcome the review of institutional arrangements currently underway and recognise that appropriate levels and mechanisms of funding will be clearer once this review is complete.

Notwithstanding this it is also important that agencies be provided with sufficient revenue over the period of the determination to carry out important stormwater works. We are concerned, however, that the agencies not be allowed to simply continue pursuing failed engineering solutions to drainage issues. In this regard we are concerned to note a strong engineering focus in Gosford Council's table of outstanding stormwater drainage works (Gosford City Council, 2002) and a number of projects which increase piping or extend trunk drainage. In contrast, little attention appears to have been given more environmentally sensitive approaches and projects that will reduce runoff and/or improve stormwater quality.

In determining the revenue requirements of the agencies and appropriate charges we urge the Tribunal not to provide agencies 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). We therefore support the view of Hunter Water (HWC, 2002b) that the last vestiges of valuation-based charges should be removed. We do not, however, support their view that they should be replaced by a regime of fixed charges only for all customers as this does not reflect the principle of "polluter pays".

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.

OTHER PRICING ISSUES

Removal of property value based pricing

As discussed above in relation to stormwater, TEC supports the elimination of residual property value based charges by the end of this determination. Charges should be based on the environmental, economic and social costs of resource usage (water consumption) and contribution to sewerage and drainage systems.

Vacant and unconnected properties

TEC does not support the views of Gosford and Wyong Councils that vacant and unconnected properties should attract an availability charge for both water and sewerage charges where these services are available (Gosford City Council, 2002; Wyong Shire Council, 2002). The practice of levying fixed charges upon customers who disconnect from water and sewerage services is a major barrier to competition and provides a disincentive for customers to disconnect from or refrain from connecting to the system (in the interests of self-sufficiency and reducing stress on existing systems). Providing alternative arrangements adhere to relevant health and environmental standards this may have a positive environmental effect by reducing demand for water and the volume of water entering the system. This is particularly the case in high density urban areas where a reduction in the volume of effluent carried in the sewerage system provides a public benefit, especially in terms of reducing wet weather overflows.

In the interest of removing barriers to competition and reducing the pressure on potable water supplies and sewerage systems TEC recommends that:

- Any customer should be able to disconnect from water, sewerage or drainage infrastructure and pay the costs of the necessary works to their own plumber who certifies that the works have been carried out and adhere to relevant health and environmental standards;
- Fixed charges for water, sewerage or drainage should cease upon disconnection;
- There should be no fixed charges for a person who is not connected, since such charges provide no incentive for opting out as a customer of the monopoly and making other arrangements.

A related issue identified by Sydney Water is the fact that extension of services on the fringes of the existing network will benefit more than one property, however not all owners initially want the service or agree to contribute (SWC, 2002). As noted above TEC believes that it would be inappropriate to recover costs from those who do not wish to be

connected. Equally it would be inequitable to only recover costs from those who agree to pay, as those who elect to join later would effectively be subsidised by those who had connected initially.

In view of this TEC supports the option proposed by Sydney Water that an “owner contribution” be established and increased each year in line with inflation and recovered as and when individual connections are made.

Clubs and sporting bodies

Wyang Council has proposed to continue the practice of providing a substantial rebate on usage charges to clubs and sporting facilities as part of a Community Service Obligation (CSO) (Wyang Shire Council, 2002). In previous submissions to the Tribunal environment groups have questioned the logic of providing such a discount on the basis that it reduces incentives for treated effluent to be used instead (NSW Peak Environment Groups, 1996; PENG0, 2000). As previously noted by the Tribunal (IPART, 1996) sporting clubs have the greatest potential for using recycled water. The use of recycled water should be encouraged as an important component of demand management, particularly in view supply constraints now being experienced by the Gosford/Wyang scheme.

TEC understands and supports Wyang Council’s objective to ease the financial burden on community organisations. This should not, however, be provided by effectively discounting potable water use by organisations that have the greatest potential to utilise treated effluent. We recommend that the CSO to these organisations be provided in the form of financial and material assistance to convert to reuse water.

Developer charges

In addition to fully recovering costs and reflecting variations in the costs of servicing different development areas, developer charges should reflect the full environmental costs of providing water, sewerage and drainage services to developments.

Charges should be representative of the impact of each particular development. As noted by the Tribunal in its 1999 developer charges review (IPART, 1999) these charges need to provide better signals for resource allocation and better signals to reflect the environmental costs of development. Charges should reflect the environmental costs of providing services to each location. This would ensure that developments in more sensitive locations attract higher charges than those in less sensitive areas, thus discouraging development in sensitive environments and promoting redevelopment over greenfields development.

Developer charges should also be reflective of the designs of each development. Those which fail to incorporate design principles that limit water consumption, sewage discharge and urban runoff should attract higher charges than developments of more sensitive design. This would provide an incentive for developers to include features such as effluent reuse and stormwater detention and reuse.

Environment groups have previously argued that fees for large or complex developments should include a small allocation to assist community group research and submissions (PENG0, 2000). This approach which has been used in the United States, would allow earlier, more structured and informed community involvement. This is likely to reduce the

scope for conflict and save government and private sector resources in having to deal with conflict at a latter part of the development process.

Access to sewer mining and reuse water pricing

In the 1996 pricing determination the Tribunal introduced a new charge for sewer mining for Sydney Water which was set at the higher of zero or cost until the reuse market increases to 20 percent of the total water use market (IPART, 1998). Environment groups supported this approach (NSW Peak Environment Groups, 1996; PENGGO, 2000) as an important tool in promoting effluent reuse and easing pressure on potable supplies and sewerage infrastructure.

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. We therefore believe that a nil or cost price should apply to all customers who connect to the sewer to abstract treated effluent at their own cost, and in accordance with relevant health and environment standards.

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