

# **WATER BOARD**

**PRICES FOR SPECIAL WATER, SEWERAGE AND DRAINAGE  
SERVICES FOR THE ROUSE HILL DEVELOPMENT AREA**

**GOVERNMENT PRICING TRIBUNAL  
OF NEW SOUTH WALES**

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# **DETERMINATION OF PRICES FOR SPECIAL WATER, SEWERAGE AND DRAINAGE SERVICES FOR THE ROUSE HILL DEVELOPMENT AREA**

The Government Pricing Tribunal of New South Wales has determined the maximum prices for special water, sewerage and drainage services to be provided by the Water Board for the Rouse Hill Development Area (RHDA). This follows review by the Tribunal of the Boards pricing proposals and submissions by developers, councils, environmental groups and the NSW Treasury.

## **The Rouse Hill Development - Background**

- The Rouse Hill development is the first large scale urban development project that aims to achieve a balance between the demand for development and the need to protect the environment, particularly the Hawkesbury-Nepean rivers.
- The Water Board's decision to proceed with this development was based on the expectation that all necessary environmental and infrastructure costs would be fully recovered.
- The Rouse Hill development incorporates integrated water management comprising water recycling, a "soft" engineering approach to drainage, and state-of-the-art wastewater treatment and artificial wetlands.

## **The Determination: Key Elements**

This price determination has been made on the basis of full recovery of efficient costs. This is consistent with the basis on which the government previously agreed to the Rouse Hill project.

In the case of the Rouse Hill development, capital costs will be recovered via developer charges which have been established under the Financing Deed, between the Sydney Water Board (SWB) and the Rouse Hill Infrastructure Consortium. This "special" determination covers recurrent charges to reflect full recovery of operating costs for the new infrastructure.

Special price determinations such as the present determination should not be necessary for future urban development projects. The Tribunal intends that future developer charges will be differentiated geographically using the "net present value" methodology to reflect the full cost of providing and operating infrastructure in different areas. Recurrent charges for water, sewerage and drainage services can then be the same in new development areas as in the SWB's existing service areas.

The Tribunal is concerned that the SWB's submission was unable to adequately explain how the costs and charges were calculated. Key policy issues relating to pricing and demand management for recycled water were not fully addressed.

Protection of the environment is a key consideration for urban development projects but may make the provision and operation of new infrastructure more expensive. This is particularly true for the Rouse Hill Development Area because of its proximity to the Hawkesbury/Nepean river system. The Tribunal believes that its determination will recover the costs necessary for environmental protection without providing an unnecessary impediment to urban development in the Sydney region.

The Tribunal acknowledges that an alternative view is that the higher operating costs for Rouse Hill should be shared by the community at large or absorbed by the Government. All customers of the SWB (not just those in new development) would pay uniform but increased annual charges for the new infrastructure costs. This approach is thought to be fair because existing as well as new residents contribute to the pollution problem of the Hawkesbury-Nepean and would benefit from improvements (or the absence of deterioration) of water quality. However, under this "community pays" approach:

- Developers and purchasers would not be given signals regarding the relative costs to society of providing and operating infrastructure and services in Rouse Hill.
- High cost development might be encouraged, which could result in higher costs to society and more damage to the environment than if strong "location signals" were provided.
- The general community may not wish to subsidise this major fringe urban development.

On balance, the Tribunal believes that charges for Rouse Hill should reflect the full costs of development, including the costs of operating environmental infrastructure.

The setting of prices should be based on what the costs would be if the efficiency improvements available to the Board were taken up. Given the uncertainties surrounding operating costs, the Tribunal has decided to set charges based on a lower cost level than that proposed by the SWB. This "low" starting point will minimise impacts on those who purchase property within the Rouse Hill area and will also encourage improvement in the SWB's operational performance.

Environmental groups have expressed a major concern about the regulation of recycled water. They submitted that recycled water should be compulsory for all applications for which it is suitable. The SWB responded that there is uncertainty regarding its powers to compel people to use recycled water. The Tribunal believes that property owners should be encouraged to use recycled water. Advisory services should therefore be provided to land purchasers and the pricing structure should, as far as possible, not discourage the use of recycled water.

In coming to a determination the Tribunal has had to weigh important but competing considerations. First, the RHDA has been identified by the Government as a priority area for urban development. The Tribunal is therefore concerned that its decision should not unnecessarily discourage development. Moreover, "double dipping" - where the same costs are recovered both in up-front and periodical charges - is unfair and should be avoided.

Secondly, the Government has agreed that Rouse Hill should proceed on the basis of full recovery of costs. Full cost recovery will encourage developers and land purchasers to consider all costs (including environmental costs) in reaching their decisions and may promote good use of existing and new infrastructure.

Thirdly, the Tribunal is concerned to encourage better environmental outcomes in the Hawkesbury-Nepean catchment. As noted, purchasers in the RHDA should be required to pay the full costs (including environmental costs) involved in providing them with water, sewerage and drainage. Moreover, the determination needs to provide adequate incentives to use recycled water.

The Tribunal has attempted to reconcile these requirements as follows. The Tribunal believes that the *minimum full* cost of providing Rouse Hill services (but no more) should be recovered through a combination of up-front and periodic charges. In setting these charges, the Tribunal has taken into account that capital costs for the RHDA will be recovered through developer charges.

The choice between up-front and periodic charges has been made on a service-by-service basis. A buy-in charges has been favoured for sewerage because of the greater certainty of costs. Periodical charges (which may be easier to adjust) have been chosen for recycled water and drainage where the cost estimates appear to be particularly uncertain.

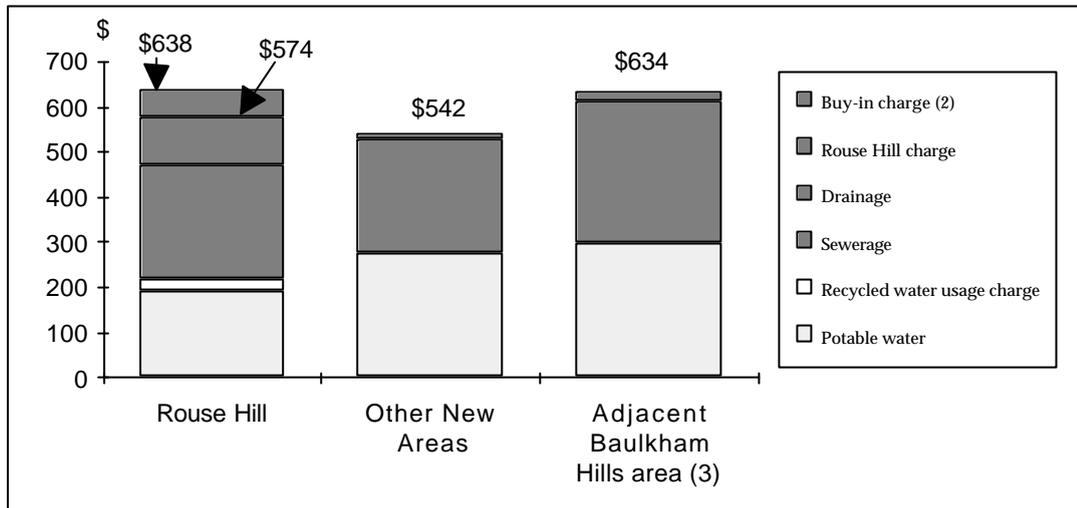
In summary, the Tribunal has decided as follows:

- Sewerage services
  - i payment of a once-off *buy-in sewerage charge (\$887)* to reflect the higher costs associated with sewerage treatment infrastructure in Rouse Hill.
  - ii application of the SWB standard recurrent charges for sewerage for the Sydney area.
- Rouse Hill drainage services and recycled water supply
  - i payment of a *combined base charge of \$105,per annum for the availability of both recycled water and drainage (the "Rouse Hill" charge)*. This charge consists of \$85 for stormwater and drainage services and \$20 for the recycled water access charge.
  - ii introduction of a usage charge of 20 cents per kilolitre for recycled water.

## Residential Bill Comparison

The Tribunal has assessed the impacts on water bills. A comparison between residential water bills for Rouse Hill and the SWB's standard charges is presented in Figure 1.

**Figure 1 Residential Water Bills Comparison<sup>(1)</sup>**



### Notes:

- (1) Based on 300 kL total water consumption a year (170kL potable water and 130kL recycled water in Rouse Hill)
- (2) Assuming a risk free discount rate of 6.96, the annualised effect of the initial sewerage buy-in charge of \$887 is equivalent to a \$64 annual payment for the next 30 years.
- (3) No property based charges for Rouse Hill and other new areas. For comparable established properties in the adjacent Baulkham Hills area, the bill includes a property based charge of \$92 (which is based on land value of \$46,000 as at January 1980)

The total water bills for a Rouse Hill household consuming 300 kL will be \$574 a year (6% higher), compared with \$542 for other new areas without property value based charges. When the annualised effect of the once-off sewerage buy-in charge (\$887) is taken into account, the "adjusted" annual water bills for an average Rouse Hill household will be about \$638. The Tribunal anticipates that, over the medium term when the property tax is phased-out, the Rouse Hill residents will pay higher water bills than other parts of Sydney.

Thomas G Parry  
Chairman

8 December 1993

## **ROUSE HILL DEVELOPMENT AREA - A BACKGROUND NOTE**

The Rouse Hill Development Area (RHDA) covers about 13,000 hectares centred around Castle Hill, Kellyville, Parklea, Rouse Hill and Box Hill. This area has been chosen as the first part of the North-West Sector<sup>1</sup> to be developed. This decision was based primarily on RHDA's capacity to accommodate a large population, its employment potential, its proximity to the metropolitan area and the presence of major roads and a railway line.

Because it is being planned from the ground up, the Rouse Hill development presents an opportunity not only to provide an advanced water supply, sewerage and drainage system, on a large scale and at an early stage, but to integrate all these services into a water cycle management program.

Given the sensitivity and potential impact of the development on the water quality of the Hawkesbury River, a special system design is required to meet environmental standards. The main features are:

- A dual water supply system, ie potable water for drinking purposes and recycled water for toilet flushing and external use.
- Tertiary sewage treatment followed by disinfection. Some of the treated effluent will be used as recycled water. Unused treated effluent will enter the river system.
- Drainage system design, including grass-lined channels and floodways. Excess water will temporarily be held in large detention basins.
- Wetlands and riffle zones. This is to further reduce the nutrient content of the treated wastewater before returning into the river system.

A consortium of public and private sector landowners - the Rouse Hill Infrastructure Consortium - was formed in 1988 to provide initial funding, and to design and construct water, sewerage and drainage infrastructure for the RHDA. On completion, the infrastructure will be transferred to the Sydney Water Board, which will own and operate it. This arrangement has been provided under a deed of agreement between the Consortium and the Board.

Construction works for Stage 1 release area is now in progress. It is expected that first stage of Parklea-Kellyville release area will be available for sales by the end of 1993.

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<sup>1</sup> The North-West Sector (stretching from Baulkham Hills to Wisemans Ferry to south of Windsor) has been identified as a major growth area to meet urban development needs.

**REPORT TO THE PREMIER AND DETERMINATION**

# REPORT TO THE PREMIER ON THE DETERMINATION OF MAXIMUM PRICES UNDER SECTION 11(1) OF THE GOVERNMENT PRICING TRIBUNAL ACT, 1992

## Report No 7, 1993 (Matter SRD/93/07)

**Maximum prices to be charged for government monopoly water, sewerage and drainage services (as declared in Government Pricing Tribunal (Water Services) Order 1992, No 11, dated 12 December 1992) supplied by the Water Board within the Rouse Hill Development Area, applicable from 8 December 1993.**

As required under Section 11(1) of the *Government Pricing Tribunal Act 1992* (the "Act"), the Government Pricing Tribunal has investigated proposals by the Water Board (SWB) with respect to the maximum prices to be charged for declared government monopoly water, sewerage and drainage services for the Rouse Hill Development Area (RHDA). The Tribunal's determination of the maximum prices for these services is set out in Schedule 1 of this report.

In making its determination, the Tribunal has had regard to the various matters listed in Section 15 of the Act.

### 1. Summary of Determination

The main features of the determination are:

- The Tribunal accepts the criterion of full recovery of efficient costs for the Rouse Hill project, both in terms of capital and operating costs. Developer charges have already been established to recover capital costs under the Water, Sewerage and Drainage Infrastructure Deed. Recurrent charges will reflect full recovery of operating costs for the new infrastructure, *after* allowing for the improvements in operating efficiency which are available to the SWB.
- Water (potable):  
Current base and usage charges (65 cents/kL) will apply to Rouse Hill property owners.
- Sewerage services:  
The same sewerage base charge will apply to Rouse Hill customers as for other customers of the SWB. A once-off buy-in charge will apply to Rouse Hill property owners to fund the expected shortfall in the recovery of operating costs. The initial once-off buy-in charges are as follows:

i	residential properties	\$887
ii	non-residential properties	Subject to meter size

- Rouse Hill drainage services and recycled water supply:
  - i Combined base charge (the "Rouse Hill" charge)  
*Residential properties*  
Given the unique nature of the Rouse Hill drainage infrastructure and water recycling, the Tribunal has decided on a combined base charge of \$105 a year, which consists of \$85 for stormwater and drainage services and \$20 for the recycled water access charge.  
  
*Non-residential properties*  
For properties occupying not greater than 1,000m<sup>2</sup>, the same combined charge as for residential properties will apply. For larger properties, the combined base charge will be factored up according to the lot size.
  - ii Usage charge  
20 cents per kilolitre for recycled water
- Existing properties in Kellyville area which will receive Rouse Hill sewerage and drainage services will continue to pay the current charges, including the property value based charge. In addition to the standard sewerage and drainage base charges, the current standard drainage charge will apply. The new Rouse Hill charges would however apply should these properties be redeveloped and subdivided.
- Property value based charges will not be applicable to Rouse Hill properties.
- The total water bills for a Rouse Hill household consuming 300 kL (170kL potable water and 130 kL recycled water) will be \$574 a year, compared with \$542<sup>2</sup> for other new areas without property value based charge. When the annualised effect of the once-off sewerage buy-in charge is taken into account, the "adjusted" annual water bills for an average Rouse Hill household will be about \$638.
- The charges for Rouse Hill will apply to properties with sewerage, drainage and recycled water supply services available from the Rouse Hill Water, Sewerage and Drainage Infrastructure. Where a *service* is not available from the Rouse Hill Infrastructure, the special service charge for such a service will not be applicable.
- The sewerage buy-in charge will be adjusted annually in accordance with movement in the Sydney Consumer Price Index. The "Rouse Hill charge" will be reviewed by the Tribunal as part of the annual determination of maximum prices for the Sydney Water Board.

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<sup>2</sup> Charges for water, sewerage and drainage are those applicable for bills forwarded to customers subsequent to 1 January 1994.

## 2. The Sydney Water Board Submission

The Tribunal's determination was made after considering the pricing proposals of the Sydney Water Board.

- Two pricing options were presented to recover operating costs for the provision of sewerage and drainage services within the RHDA.
  - i Option one - differential periodic charges. The charges proposed for residential properties were \$422 pa for sewerage and \$127 pa for drainage. By comparison, current standard base charges are \$252 pa for sewerage and \$15 pa for drainage.
  - ii Option two - a once-off buy-in charge for sewerage and drainage following which Rouse Hill property owners would be subject to the same periodic charges as the rest of the SWB's customers. This proposed buy-in charge comprises a \$2,275 sewerage fee and \$1,765 drainage fee for a residential property.
- New charges for the use of recycled water, comprising a \$35 annual base charge and a usage charge of 20 cents/kilolitre.
- Similar proposals for non-residential properties but subject to meter size (for sewerage and recycled water) and the number of equivalent residential lots occupied (for drainage).
- The above charges would be adjusted annually by CPI.

## 3. Other Major Submissions

The Tribunal's determination was made following consideration of a number of issues raised by developers, local councils, NSW Treasury and environmental groups. These included

- Concerns about the lack of supporting information and details on operating costs and the proposed charges. Most submitted that all data should be made public.
- Concerns by developers and Landcom about the potential adverse impact on housing affordability and rate of development.
- Environmental concerns related to demand management for recycled water and water requirements for wetlands.
- Questions raised in regard to:
  - i the responsibility for maintaining drainage works; and
  - ii coverage of the development area that is subject to the proposed drainage charges.
- Recommendations by developers that the standard charges for the rest of Sydney should apply to Rouse Hill because the new infrastructure will generate benefits (environmental benefits and reduced demand for potable water) for the community at large.

- Recommendations by some environmental groups that
  - recycled water should be charged at the same rate (65 cents/kL) as potable water. The additional revenue so generated could be used to reduce the sewerage charge
  - the use of recycled water should be compulsory in all applications for which it is suitable.
- The developers preferred periodic to up-front charges if charges above those of the rest of Sydney were necessary to pay for services in the RHDA. By contrast, some environmental groups recommended a buy-in charge.

#### **4. Major Considerations in the Determination**

##### **4.1 Distinctive features of the Rouse Hill development**

The Tribunal recognises that the Rouse Hill development is a distinct project from others:

- Progression of the Rouse Hill development was based on an understanding that costs would be recovered fully and that the environmental problems in the Hawkesbury-Nepean catchment would not be exacerbated. At the signing of a deed of agreement in May 1990 between the SWB and the Rouse Hill Infrastructure Consortium, the Ministers involved stated that:

The signing of this agreement (the Water, Sewerage and Drainage Infrastructure Deed) will ensure all necessary environmental and infrastructure costs for the development are recovered, including for water, sewerage and drainage supply, major works and other financing costs.

- It is the first large scale urban development project that aims to achieve a balance between the demand for development and the need to protect the environment, particularly the Hawkesbury-Nepean rivers.
- Innovative and comprehensive new infrastructure will be provided to recognise the needs of water conservation and environmental protection. The Rouse Hill development incorporates integrated water cycle management comprising water recycling, a "soft" approach to drainage, and state-of-the-art wastewater treatment and artificial wetlands.

## 4.2 Urban development and pricing

The costs of service provision vary across development areas. This is particularly so if the development occurs in environmentally sensitive catchments. The Tribunal, in its Final Water Report, has recommended that the setting of prices must reflect true, efficient costs, including environmental costs.

Accordingly, the Tribunal accepts the principle of a "net present value" approach to setting developer charges for new water, sewerage and drainage works. Under this approach, uniform Sydney-wide periodic charges will be maintained because both capital costs and shortfalls in the recovery of future operating costs will be fully recovered via developer charges which will be separately calculated for each development.

However, this approach cannot be applied to Rouse Hill since developer charges have already been established under the Financing Deed between the SWB and the Rouse Hill Infrastructure Consortium. These developer charges cover capital costs only.

In setting recurrent charges for the RHDA, the main criteria include:

- cost-reflective pricing
- full recovery of operating costs associated with the new development after allowing for the scope for efficiency improvements
- avoidance of unnecessary impediments to the rate of land development in the RHDA.

## 4.3 Costs and efficiency

There is concern about the lack of evidence to support the SWB's estimates of maintenance and operating costs for the RHDA. Some organisations submitted that all cost data should be made available to the public. Given the possibility of contracting-out, the Tribunal accepts the SWB's argument that such cost estimates are commercial-in-confidence information. Despite this, the basis for these cost estimates needs to be explained in greater detail.

The Tribunal has assessed the available cost data. Because of the unique nature of the services to be provided to the RHDA, comparisons with the cost of servicing the SWB's other areas may not be helpful. The Tribunal has reserved its judgement on absolute costs, but believes that large productivity gains are potentially available to the SWB in existing and new operational areas.

A total 25% efficiency gain over the next five years for the SWB (20% over the first three years plus 5% in the following two years) has been indicated in the 1993/94 annual price determination for the SWB. The SWB has already adjusted the costs for wastewater reticulation in its proposed sewerage charge.

Overall, the Tribunal has taken a demanding approach by setting a low price which incorporates potential productivity gains. This "low" starting point will have the advantage of minimising the impacts on Rouse Hill property owners. It is believed that this approach will provide an effective "challenge" for improved operational performance. The estimated SWB operating costs have been reduced by:

- i 10% for sewage treatment
- ii 30% for drainage.

The Tribunal notes that significant uncertainty exists regarding these costs. Whatever price is determined may not reflect the true costs over a long time frame of 15-25 years. Future reviews of costs and productivity achievements may be required.

#### **4.4 Derivation of charges**

Three key questions arise from the SWB's pricing proposals: (i) How are the charges derived? (ii) What assumptions are used? and (iii) Are the price outcomes sensitive to the assumptions?

The Tribunal has reviewed the derivation of charges:

- The "net present value" methodology used by the SWB in estimating the proposed buy-in charges is appropriate and is consistent with the Tribunal's recommendation in regard to calculating developer charges for new work. The same methodology has been applied to calculating differential recurrent charges.
- Given the lumpiness of infrastructure investment and the indivisibility of the operation, calculating charges on a total Rouse Hill system basis (rather than on a stage-by-stage basis) is accepted.
- The Tribunal accepts the SWB's argument that urban development projects are not without risks and that the risk level may be different under various pricing options. But for simplicity, the Tribunal has adopted the same discount rate for calculating charges under the two pricing options. Given the prevailing real interest rates and the risk premium required for such development projects, a 10% real discount rate has been used in the calculation of both periodic charges and buy-in charges.
- The SWB has revised upwards the proposed buy-in charges to take into account the perpetual nature of the shortfall between operating costs and revenue. In recognition that all sewerage infrastructure will be completed in 22 years and that blocks will be fully developed in 30 years, the Tribunal has decided to adopt a period of 30 years for analysis. The SWB's argument for an indefinite period is not supported because technological changes and future environmental standards may lead to quite different results both in the Rouse Hill and the general Sydney area.

#### **4.5 Sewerage service**

Tertiary treatment of sewage, disinfection and nutrient removal will be provided in Rouse Hill. The treated effluent will be used as recycled water. Unused effluent will pass through a series of wetlands and riffle zones to further reduce the nutrient content before entering into the Hawkesbury /Nepean river system. This process will meet stringent public health requirements and environmental standards.

The Tribunal recognises that higher standards come at a cost. The SWB submitted that large operating deficits will be incurred in the initial years until the area is fully developed in 25-30 years. Unfortunately, such deficits cannot be avoided given the "lumpy" nature of investment and the high costs of operation. There is a clear question of who should pay for the costs.

There are two views on this issue:

- Some people would argue that residents of Rouse Hill should pay only the same annual sewerage charges as residents of other areas of Sydney. Existing as well as new residents contribute to the pollution problems of the Hawkesbury-Nepean and would benefit from improvements (or the absence of deterioration) of water quality. Some of the high costs of sewerage (per capita) in Rouse Hill arise because relatively few people will at first use the large facilities that have to be provided. The costs of servicing properties in the RHDA may not be much greater than those of servicing some other properties that drain to the Hawkesbury-Nepean. Uniform charges are therefore equitable. Moreover, higher charges might discourage the rate of land release in Rouse Hill which has been identified by the Government as a priority area for development.
- Others would say that developers and land purchasers should be given price signals regarding the relative costs to the community of urban development and environmental protection of our waterways in Rouse Hill and other areas. Moreover, residents of other parts of Sydney are unlikely to wish to pay high charges to subsidise developers and purchasers in Rouse Hill.

The Tribunal acknowledges there are advantages and disadvantages associated with each of these two approaches. On balance, the Tribunal reiterates the importance of full cost recovery (reflecting the scope for efficiency improvements) provided that the charges are reasonable.

The Tribunal notes that the option of once-off buy-in charge would send a stronger price signal than a uniform periodic charge to developers and land purchasers in the RHDA.

Given all these considerations, the Tribunal has decided to supplement the Sydney-wide recurrent charges for sewerage with a relatively affordable buy-in charge.

#### **4.6 Rouse Hill drainage services and recycled water supply**

The stormwater and drainage standards for Rouse Hill will provide a unique service. The stormwater discharged into the river system is of high quality and the grassy channels and detention basins will provide open space for the community.

Water recycling will help to reduce the demand for potable water but will also limit the amount of wastewater entering the river system. Although recycled water has been trialled on a small scale (50 households) in NSW, the Rouse Hill dual water supply will be the first project on such large scale. It is likely to become a model for similar schemes elsewhere in Australia.

The Tribunal recognises that Rouse Hill residents will have a "unique" drainage service and a "new" supply of recycled water. In recognition of the innovative nature of the drainage and recycled water services to be provided to Rouse Hill and the benefits that will be provided to the environment, the Tribunal has decided to introduce a new access charge (the "Rouse Hill charge") for properties where one or both of these new services is available. A usage charge for recycled water is also introduced.

The option of a buy-in charge for drainage and recycled water was rejected because of the uncertainty regarding operating costs. For example, drainage works will not be completed until 2006 and current cost estimates will vary as work practices change and productivity gains are achieved. A recurrent base charge thus offers scope for flexibility in price adjustment if costs change.

The Tribunal accepts that recycled water is a product that needs to be priced differently from potable water. Nevertheless, a balance needs to be maintained between pricing which reflects costs and the provision of adequate incentives for the use of recycled water. The SWB has suggested that charges for recycled water should be set to balance demand and supply. This is unlikely to be achieved in the initial years given that the demand and supply for recycled water may not be known for some time.

The combined base charges which have been determined by the Tribunal (\$85 pa for drainage and \$20 pa for recycled water) are lower than that proposed by the SWB (\$127 pa for drainage and \$35 pa for recycled water). The difference is due to assumed efficiency improvements of 30% over and above the SWBs estimates. This is considered to be achievable over the next 10 years.

#### 4.7 Impacts

A comparison between residential water bills for Rouse Hill and the SWBs standard charges is presented below:

**Table 1 Residential Water Bills Comparison<sup>(1)</sup>**

	Rouse Hill	Other new areas without property value based charges	Adjacent Baulkham Hills area with property value based charges <sup>(3)</sup>
Potable water	191	275	298
Recycles water usage charge	26	-	-
Sewerage	252	252	312
Drainage	-	15	24
Rouse Hill charge	105	-	-
<b>Total (excluding sewerage buy-in charge effect)<sup>(2)</sup></b>	<b>574</b>	<b>542</b>	<b>634</b>
<b>Total (including sewerage buy-in charge effect)<sup>(2)</sup></b>	<b>638</b>	<b>542</b>	<b>634</b>

Note:

- (1) Based on 300 kL total water consumption a year (170kl potable water and 130kL recycled water in Rouse Hill).
- (2) Assuming a risk free discount rate of 6.96, the annualised effect of the initial sewerage buy-in charge of \$887 is equivalent to a \$64 annual payment for the next 30 years.
- (3) The property value based charge is \$92 for comparable established properties in the adjacent Baulkham Hills area. (Based on land value of \$46,000 as at January 1980).

The total water bills for a Rouse Hill household consuming 300 kL will be \$574 a year (6% higher), compared with \$542 for other new areas without property value based charges. When the annualised effect of the once-off sewerage buy-in charge (\$887) is taken into account, the "adjusted annual water bills for an average Rouse Hill household will be about \$638. (Note that developers in the Rouse Hill area would already have paid a charge to recover capital costs. This charge may be passed on to purchasers.)

Rouse Hill residents with a recycled water connection will be able to save money by using recycled water rather than potable water where appropriate. For example, a household consuming 170kL of potable water and 130kL of recycled water a year would pay \$38 (14%) less for water than others who consume 300kL of potable water. At higher water consumption levels, greater savings from using recycled water may be available to Rouse Hill households.

The Tribunal anticipates that over the medium term when the property tax is phased-out, the Rouse Hill residents will pay higher water bills than other parts of Sydney.

Because those most directly affected by the determination will be the future land purchasers in the RHDA, special transitional assistance is not thought to be necessary. The current pensioner rebates and special assistance measure for low income families will continue to apply where relevant.

## **5. Other Matter Considered**

### **5.1 Affordability and rate of development**

The charges proposed by the SWB were considered to be untenable by developers because they considered that housing affordability and development rates within RHDA would be adversely affected.

Property values are very sensitive to market forces. The possible impact of the Rouse Hill charges on land prices will be subject to the cyclical movement of the property market. Overall, the Tribunal believes that its determination should support the basic premise upon which the development proceeded, that is, charges should reflect full cost recovery to provide potential land purchasers with the appropriate signals of location and environmental impacts.

### **5.2 Existing areas**

Some existing properties in the Kellyville village area will eventually be served by the new sewage treatment plant and drainage infrastructure. It is not expected that these properties will have recycled water services because of the high cost of retro-fitting water pipes.

Developers have submitted that these residents should pay the new rates upon the decommissioning of the Kellyville plant. The Tribunal considers that new infrastructure will be built to enable development but will not greatly benefit the people of Kellyville. Savings in operating costs from closing down the Kellyville plant will be utilised to reduce the Rouse Hill sewerage charges.

The Tribunal has accepted the SWB's proposal that existing properties should continue to pay the same charges as in the rest of Sydney. New rates will apply if the nature of existing improvements changes due to redevelopment (eg medium density residential development).

### **5.3 Specific issues related to drainage**

The questions of who is responsible for drainage and which areas will be subject to the SWBs new charges are raised in some submissions. On investigation:

- The drainage component of the "RouseHill charge" will not apply to:
  - i Northwest Business Park and
  - ii those areas which drain to Cattai Creek.
- The SWB will be responsible for the maintenance of its trunk drainage system within the Rouse Hill area. Councils will be required to operate and maintain the lead-in mains and the street reticulation system. Maintenance costs for those areas which are used for both drainage and open space will be shared between Council and the SWB.

### **5.4 Regulation of recycled water use**

The use of recycled water depends on regulation (eg to ensure that public health concerns are met) and public acceptance. Some environmental groups have submitted that use of recycled water should be compulsory in general outdoor and toilet flushing applications. Whether the SWB has the legal power to compel such use is however unclear. In any event, the Tribunal believes that every effort should be made to promote the use of recycled water.

The fixed access charge for the availability of recycled water as part of the Rouse Hill charge will be paid by all properties. This approach, together with a usage charge of 20 cents/kL (vs 65 cents/kL for potable water) is believed to provide adequate incentives for the Rouse Hill residents to maximise the use of recycled water where applicable.

### **5.5 Other financial matters in section 15 of the Act**

It is not expected that the reduced charges recommended by the Tribunal will have any significant negative effect on the SWB's revenue. The reduced charges are based on efficient costs which are capable of achievement by the SWB. As a consequence, the SWB's financial performance and its capacity to pay dividends should not be affected.

### **5.6 Implementation issues**

The Tribunal recommends that the SWB should provide full details of the charges to all developers and prospective land purchasers. In particular, the prospective land purchasers should be fully informed that a once-off sewerage buy-in charge and the recurrent charges that are different from other parts of Sydney will be levied.

*Sewerage buy-in charge*

- The sewerage buy-in charges will be raised on registration, in the SWBs records, of the plan of subdivision.
- This buy-in charge will be a liability to the land owner at the time of subdivision. Whether this charge is to be paid by the first owner (eg developers) or subsequent owner(s), ie land purchaser(s), will be a matter for negotiation between the two parties in the process of land sales.
- Interest will not be charged on overdue buy-in charges in the first year after subdivision.
- Overdue buy-in charges will be adjusted after one year. The adjustment will be indexed according to the Sydney CM.

*"Rouse Hill" charges*

- The combined base charges for drainage and recycled water will be clearly identified as a "Rouse Hill charge" in the section 41 certificate, which contains property account information. This is normally provided to purchasers by their lawyers between exchange of contracts and final settlement.
- The combined base charges for drainage and recycled water will apply to vacant land and all properties within the Rouse Hill Recycled Water and Drainage Service Area.
- Only the recycled water component of the access charge will be applicable to properties lying outside the Rouse Hill Drainage Service Area, eg a portion of the Norwest Business Park and areas along the Cattai Creek.
- All properties lying within the Rouse Hill Recycled Water Service Area will be subject to the recycled water component of the combined base charges.
- The combined base charges will be levied on all individual dwelling units including medium density development such as flats and units. Whether residents in such developments will be potentially disadvantaged by this pricing arrangement is yet to be reviewed. As it is uncertain to what extent such developments will occur in the RHDA, the Tribunal intends to reconsider this issue in the future.

*Recycled water*

- The SWB will provide advisory services to new land purchasers in Rouse Hill in regard to the use of recycled water.

Thomas G Parry  
Chairman

6 December 1993

## **Schedule 1**

### **GOVERNMENT PRICING TRIBUNAL OF NSW DETERMINATION UNDER SECTION 11(1) OF THE GOVERNMENT PRICING TRIBUNAL ACT, 1992**

#### **Determination No 7, 1993 (Matter SRD/92/07)**

**Maximum prices to be charged for government monopoly water, sewerage and drainage services (as declared in Government Pricing Tribunal (Water Services) Order 1992, No 1, dated 12 December 1992) supplied by the Water Board within the Rouse Hill Development Area, applicable from 8 December 1993.**

This Determination shows the maximum prices to be applicable from 8 December 1993 for declared monopoly services supplied by the Water Board (SWB) within the Rouse Hill Development Area (RHDA). Within the RHDA the SWB operates a water, sewerage and drainage infrastructure to provide water supply (both potable and recycled water), sewerage and drainage services. Different prices are determined for properties within the RHDA that are not within the service area for the supply of recycled water and those properties which do not fall within the catchment area of the drainage or sewage treatment infrastructure for the RHDA.

Separate prices are also determined for existing properties in the Kellyville Village area which falls within the RHDA.

Reference to standard prices refers to maximum prices determined by the Tribunal covering Water Board services to all other consumers, as currently specified in Determination No.5, 1993 and in any future determinations with the same coverage.

### **Rouse Hill Development Area - all services**

#### **1. Residential Properties**

##### **(a) Water supply**

###### *Potable water*

- i. Water base charges - standard prices.
- ii. Water property value based charges - not to be levied.
- iii. Water usage charges - standard prices.

###### *Recycled water*

- i. Water base charges - covered by the Rouse Hill Charge - see l(c) below.
- ii. Water usage charges - 20 cents per kilolitre. (b) Sewerage

- (b) Sewerage
- i Sewerage base charges
- An initial once-only charge of \$887 ("buy-in charge") to be paid in respect of each property, and each additional property created by subdivision. This charge is to be indexed annually according to movements in the All Groups Consumer Price Index for Sydney.
  - Annual sewerage base charges - standard prices.
- ii Sewerage property value based charges - not to be levied.
- (c) Drainage land area charges on new catchments and water base charges for recycled water - "Rouse Hill charge"
- A base charge of \$26.25 per quarter.

## 2. Non-residential Properties

(a) Water supply

*Potable water*

- i. Water base charges - standard prices.
- ii. Water property value based charges - not to be levied.
- iii. Water usage charges - standard prices.

*Recycled water*

- i. Water base charges - covered by the Rouse Hill Charge - see 2(c) below.
- ii. Water usage charges - 20 cents per kilolitre.

## (b) Sewerage

## i Sewerage base charges

- An initial once-only charge based on meter size is to be paid in respect of each property and each additional property created by subdivision ("buy-in charge").

Unmetered	\$887
<i>Meter Size</i>	
20 mm	\$887
25 mm	\$1,386
30 or 32 mm	\$2,271
40 mm	\$3,548
50 mm	\$5,544
80 mm	\$14,192
100 mm	\$22,175
150 mm	\$49,894
200 mm	\$88,700
250 mm	\$135,594
300 mm	\$199,575

This charge is to be indexed annually (rounded to the nearest \$) according to movements in the All Groups Consumer Price Index for Sydney.

- Annual sewerage base charge - standard prices.
- ii Sewerage property value based charges - not to be levied.
- iii Sewerage usage charges - standard prices.
- (c) Drainage land area charges on new catchments and water base charges for recycled water - "Rouse Hill charge"
- For non-residential properties occupying not greater, than 1,000m<sup>2</sup> a base charge of \$26.25 per quarter.
  - For non-residential properties occupying greater than 1,000m<sup>2</sup>, the base charge of \$26.25 per quarter will be adjusted in proportion to the number of equivalent 1,000m<sup>2</sup> lots occupied.

### 3. Vacant Land

Vacant land will be subject to the same charges for residential and non-residential properties.

**Properties within the Rouse Hill Development Area that are not within service areas for sewerage, recycled water or drainage**

- (a) Properties within the RHDA where the sewerage services are not available from the Rouse Hill Sewage Treatment Plant.

The initial once-off sewerage base charge (buy-in charge) will not apply.

- (b) Properties within the RHDA that are not within the service area for the supply of recycled water.

The same charges will apply as for the Rouse Hill Development Area except for the Rouse Hill charge which will be \$21.25 per quarter for residential and non residential properties occupying not greater than 1,000m<sup>2</sup>. For non-residential properties occupying greater than 1,000m<sup>2</sup>, the charge will be calculated in proportion to the number of equivalent 1,000m<sup>2</sup> lots occupied.

- (c) Properties which do not fall within the catchment area of the drainage infrastructure for the RHDA.

The same charges will apply as for the Rouse Hill Development Area except for the Rouse Hill charge which will be \$5.00 per quarter for residential and non residential properties occupying not greater than 1,000m<sup>2</sup>. For non-residential properties occupying greater than 1,000m<sup>2</sup>, the charge will be calculated in proportion to the number of equivalent 1,000m<sup>2</sup> lots occupied.

- (d) Properties in both categories (b) and (c).

The Rouse Hill charge will not apply.

**Existing Properties in the Kellyville Village Area**

- (a) The existing properties in the Kellyville village area will continue to pay standard water and sewerage charges, including property value based charges and any standard SWB drainage charges that may be applied to the properties.
- (b) The charges applicable to the Rouse Hill Development Area will be applied only on redevelopment of land through subdivision, or construction of strata-titled dwellings on existing blocks as permitted under current zonings.

Thomas G Parry  
Chairman

6 December 1993