

**Review of Sydney Water Corporation's  
Stormwater Charges and Expenditure**

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL  
OF NEW SOUTH WALES**

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Stormwater Charges and Expenditure**

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## FOREWORD

Stormwater management is a major issue in the Sydney area. Stormwater collects waste and pollutants before discharging into natural water systems (harbour, oceans, and rivers). It can also infiltrate the sewerage system, causing overflows. Responsibility for stormwater management is shared by the Sydney Water Corporation, local government, and various other government agencies (eg Roads and Traffic Authority).

Following a study of Sydney Water's proposal to construct a stormwater tunnel from Lane Cove to North Head, the Premier requested the Tribunal to review Sydney Water's stormwater revenues and expenditures.

This review focuses only on Sydney Water's current obligations to operate its existing stormwater system. It also focuses only on that part of Sydney Water's area over which it has control of stormwater. At issue is whether adequate expenditure is planned by Sydney Water to achieve the community's expectations for improved stormwater management. A catchment-based stormwater planning process is presently underway under the auspices of the Environmental Protection Authority. This should provide a future work program for SWC and other stormwater managers, including local councils.

This review considers the scope of and expenditure on Sydney Water's stormwater drainage services. Key findings of the review include:

- There is considerable disagreement about the extent to which Sydney Water is fulfilling its stormwater responsibilities.
- Current institutional structures are a barrier to the resolution of the problems associated with stormwater.
- The current basis of Sydney Water's charges for stormwater is inappropriate. Charges should, as far as possible, be catchment based and linked to environmental impacts.
- It is inappropriate to reduce the level of stormwater revenue received by Sydney Water at this time.
- Most participants in the review, other than Sydney Water, believe there should be a broad equivalence between the money raised from stormwater charges and the amount spent on stormwater services.

As announced in its Report on the mid-term review of Sydney Water, the Tribunal has determined that stormwater charges will not change ahead of the implementation of stormwater management plans. The Tribunal will review the charges again when setting the next medium term price path for Sydney Water. As the role of the various bodies and the work program required by the community are clarified, it will become easier for the Tribunal to set these charges on a sustainable, medium term basis.

Thomas G Parry  
*Chairman*  
August 1998

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## GLOSSARY and ACRONYMS

AAV	Assessed annual value. Used in Sydney Water's property-value based charges, AAV relates to the rental value of the property determined by the NSW Valuer General at a base date of 1 July 1980.
BOO	Build-Own-Operate
CMA	Catchment management authorities
COAG	Council of Australian Governments
CSO	Community Service Obligations
EIC	Environment Improvement Charge
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
HWC	Hunter Water Corporation
IPART	Independent Pricing and Regulatory Tribunal of NSW
kL	Kilolitre
LBL	Load based licensing
ML	Megalitre
MUIM	Ministry of Urban Infrastructure Management
NCC	National Competition Council
NCP	National Competition Policy
NMU	Non-metropolitan urban water authorities
NSOOS	Northern Suburbs Ocean Outfall Sewer
OFWAT	Office of Water Services, the UK water services regulator
RTA	Roads and Traffic Authority
RWA	Rural water authorities
SCI	Statement of Corporate Intent
SEL	Special Environmental Levy
SIA	Stormwater Industry Association
SMP	Stormwater Management Plan
STP	Sewage treatment plant
SVA	Shareholder value added
SWC	Sydney Water Corporation
TEC	Total Environment Centre

# 1 INTRODUCTION

## 1.1 Background

In December 1997, the Premier, under section 12(1)(a) of the *Independent Pricing and Regulatory Tribunal Act*, referred to the Tribunal a review of Sydney Water Corporation's stormwater charges and expenditures. The Terms of Reference for this review are set out in Attachment 1.

This report discusses a range of issues relating to stormwater which were raised in the Tribunal's Information Paper<sup>1</sup> and in submissions. The Tribunal's review of the medium term price path for Sydney Water Corporation's water, sewerage and drainage services includes a *price determination* for stormwater.<sup>2</sup>

## 1.2 The review process

In January 1998, the Tribunal advertised terms of reference and released an Information Paper for the review. Submissions were received from the Sydney Water Corporation (SWC), individuals, and organisations. Attachment 2 provides a summary of submissions.

A public hearing was held on 2 April 1998 in the Tribunal's hearing room. Presenters at the hearing are listed in Attachment 3. Copies of all submissions and a transcript of the hearing are available for inspection at the Tribunal's offices, Level 2, 44 Market St, Sydney. Copies of these documents may also be obtained from the Tribunal's website at [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)

The Tribunal members who considered the review of Sydney Water Corporation's stormwater charges and expenditures are:

*Dr Thomas Parry, Chairman*

*Mr James Cox, Full-time Member*

*Ms Liza Carver, Permanent Member.*

## 1.3 SWC submission

The following is a brief summary of SWC's submission.

- Sydney is located within a natural drainage basin. Sydney Water has neither total responsibility for stormwater management in any particular catchment, nor overarching responsibility across all catchments. SWC shares its responsibility with local government councils and the RTA.
- Historically, stormwater service provision has been concerned with the mitigation of flooding. However, over the last decade the focus of stormwater management has broadened to include pollution abatement.
- The Environment Protection Authority (EPA) has received Cabinet endorsement to issue directions to stormwater managers (including councils, the Roads and Traffic Authority

<sup>1</sup> IPART, *Review of 1996 Medium Term Price Path Determinations for Sydney Water Corporation and Hunter Water Corporation, Review of Sydney Water Corporation's Stormwater Charges and Expenditures, An Information Paper*, DP-24, January 1998.

<sup>2</sup> IPART, *Sydney Water Corporation, Review of medium term price path and determination from 1 July 1998*, Determination No 3, June 1998.

(RTA) and Sydney Water) to prepare or assist councils to prepare catchment based stormwater management plans (SMPs).

- Sydney Water's operating costs for stormwater services are currently \$4.8m. Sydney Water's 1996/97 stormwater revenue was \$20.1m. The estimated gross operating surplus from the stormwater business in 1996/97 was \$15.3m. Sydney Water has reported depreciation of its stormwater assets in 1996/97 to be \$5.3m. This implies a profit before interest and tax of \$10m.
- Property taxes constitute nearly 65 percent of stormwater revenue. Almost 33 percent of all stormwater revenue comes from businesses located in the Sydney CBD. Yet, these represent only 3 percent of total stormwater properties.
- The RTA and local councils who own roads are not currently stormwater customers of Sydney Water and hence are not required to pay stormwater charges on these roads. However, stormwater flowing from roads is a significant contributor to flooding and pollution problems. The costs incurred by Sydney Water in managing these flows are currently recovered from its existing stormwater customers. The Tribunal maintains that owners of roads which discharge into Sydney Water's stormwater systems should be required to contribute stormwater charges to Sydney Water.
- There are obvious practical problems associated with a pricing system which requires stormwater flows to be measured. As an initial step, land area could provide a suitable surrogate for potential stormwater generated.
- An important component of any charging system for stormwater based on land area would be to introduce a standard set of rebates or concessions for consumers who undertake measures to reduce the demands they place on stormwater systems.
- Sydney Water proposed to eliminate the full \$12.8m worth of remaining property value based stormwater charges from 1 July 1998.
- The major driver for future investments in stormwater would be completion of the SMPs. SWC does not envisage that it would be required to spend significantly on stormwater prior to then but it would seek to recover costs of future investments in stormwater through appropriate pricing mechanisms.
- If compliance with SMPs or other factors increase the costs of stormwater service provision in the future, maintenance of financial viability will depend on the ability of the Corporation to appropriately pass these costs through into stormwater prices.

## 2 SCOPE OF SWC'S STORMWATER ACTIVITIES

### 2.1 Context

Stormwater is water that flows into drains and waterways during and after rainfall that cannot soak into the soil. It flows into surface drains and underground pipes and ultimately into creeks, rivers, the harbour and the ocean. In cities, the proportion of stormwater run-off is higher than in the natural environment due to the presence of hard surfaces such as roads and roofs.

#### 2.1.1 The problem of stormwater services

By collecting and transporting animal wastes, fertilisers, pesticides, oil and refuse, stormwater pollutes urban waterways and estuaries. Studies undertaken by the Environment Protection Authority (EPA) and Sydney Water indicate that stormwater contributes to the visual, pathogenic and toxic pollution of waterways and is the major cause of pollution at a number of beaches. The Cooperative Research Centre for Catchment Hydrology has released a report that explains the processes influencing urban stormwater quality, and provides methods for estimating stormwater run-off and pollution loads.<sup>3</sup> Stormwater pollution problems have been highlighted in recent inquiries by the Healthy Rivers Commission, and the Inquiry into the Management of Sewage and Sewage By-products in the NSW Coastal Zone.

In its submission, SWC categorises the impacts of run-off as:

1. flooding of low lying areas
2. transportation of pollutants into receiving waters.<sup>4</sup>

Reductions of these problems could be achieved by:

- changing community behaviour; eg by encouraging people to pick up their litter and clean up after their pets
- improving litter collection practices
- improving the integrity of the sewerage system by discouraging illegal connections of rainwater flows and reducing seepage through breaks and leaks
- improving the capacity of existing stormwater systems in order to prevent local flooding
- providing retention basins to reduce stormwater flow rates
- treating stormwater
- land use planning changes, eg on site requirements for developers and property owners.

If stormwater pollution is to be reduced, key problems to be addressed are that:

- current institutional arrangements do not provide clear standards or appropriate incentives for the providers of stormwater services to reduce the pollution problems

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<sup>3</sup> Cooperative Research Centre for Catchment Hydrology, *Urban Stormwater Pollution*, Industry Report, Report 97/5, July 1997.

<sup>4</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 4.

- the pricing system does not provide any incentive for users to modify their behaviour to reduce run-off problems and associated pollution
- community behaviour should be modified through public education.

Many factors contribute to stormwater problems, complicating their resolution. Unlike for water and sewerage, there is no overarching responsibility for the provision of stormwater services within the Sydney basin. SWC, local councils and government departments (eg Roads and Traffic Authority<sup>5</sup>) share responsibility for the provision of stormwater services.

The effects of poor stormwater management are mainly evidenced in the lower areas of a catchment. Where different stormwater managers control the upper and lower catchments, the nexus between causation and pricing is often broken. This is because those residents in the upper catchment who contribute to the stormwater problems are not currently required to meet the costs incurred by the agency which is managing the lower catchment which currently funds the remedial measures.

This inequality of responsibility impedes co-ordination and effective management to achieve desired quality and quantity outcomes. The current divisions are essentially arbitrary and do not relate to physical catchments, which are the units at which stormwater management planning would be most effectively carried out.

Stormwater is currently unregulated in terms of public health requirements. Standards of flood protection are diverse, and environmental objectives are being established as receiving water body objectives, rather than stormwater discharge objectives.

### 2.1.2 Responses to the stormwater problem

In its initial *Inquiry into Water and Related Services*,<sup>6</sup> the Tribunal considered stormwater and drainage services and recommended that the relevant authorities should:

- establish environmental standards for stormwater and urban run-off and integrate these with the standards for other discharges
- coordinate decision-making within stormwater catchment areas
- clarify accountabilities and responsibilities for the provision of stormwater services
- incorporate stormwater infrastructure costs into developer charges and ensure accountabilities for stormwater services are transparent.

In May 1997, the Government announced the Waterways Package. This package proposes ways of improving the quality of the State's waterways. A key concern of the package is to improve the management of urban stormwater quality. This is to be achieved by requiring local government councils to prepare stormwater management plans (SMPs). The Government has committed funding of up to \$60m over three years for a Stormwater Trust Fund. The fund is intended to assist with the implementation of stormwater commitments made in the Waterways Package. The Stormwater Trust<sup>7</sup> manages this fund. The objective

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<sup>5</sup> RTA is responsible for stormwater systems on freeways and state roads under their control.

<sup>6</sup> Government Pricing Tribunal, *Inquiry into Water and Related Services*, Final Report, October 1993.

<sup>7</sup> Trust members are: Director General, Environment Protection Authority; Director General, Department of Land and Water Conservation; Director General, Department of Local Government; Chief Executive Officer, Ministry of Urban Infrastructure Management; President, Local Government and Shires Association; Executive Director (Budget Strategy), NSW Treasury.

of the Trust is to encourage and support improved quality management practices to improve the condition of the state's urban waterways. This is to be achieved by a combination of public education, urban stormwater management planning, innovation and remedial action. Of the \$60m funding, \$4.1m has been allocated to help local councils prepare stormwater management plans.

### 2.1.3 Northern Suburbs Ocean Outfall Sewer

A major concern has been the pollution of Sydney Harbour following storms. Wet weather sewage overflows make many harbour beaches unsuitable for swimming after heavy rain and raise public health concerns for recreational use of the harbour. Untreated sewage from overflow points can increase the numbers of infectious organisms in the waterways as well as increasing odours and the presence of sewage matter. SWC plans to improve the quality of Sydney Harbour by constructing a tunnel from Lane Cove to North Head Sewage Treatment Works. The proposed tunnel is known as the Northside Storage Tunnel (NST). It will store and transport sewage that flows from the four largest overflow points to the harbour in wet weather. Captured overflow will be treated at the North Head treatment plant before being discharged through the deepwater ocean outfall. Costed at \$375m, the project is scheduled for completion in June 2000, ahead of the Olympic Games. SWC has indicated that it could fund this project within the bounds of the current price determination.

In May 1997, the Premier established a Waterways Panel to report on whether the NST proposal should proceed, and, if so, under what conditions. In its report, the Panel reported:

... the proposal ... is effective in addressing sewage contamination. However, stormwater problems have not been adequately addressed by Sydney Water nor has there been adequate co-ordination with stormwater management by local government.<sup>8</sup>

The Panel noted that there has been insufficient funding for stormwater. In light of this the Panel recommended:

- a) (iii) that Sydney Water make every effort to complete the transport and storage tunnel for less than the estimated cost of \$375 million, and that any savings be applied to stormwater management;
- d) all revenues raised by Sydney Water from stormwater charges be expended on stormwater management.<sup>9</sup>

Neither of these recommendations was adopted by Government.

## 2.2 Institutional structure

Responsibility for stormwater management in Sydney is fragmented across over 40 local government areas, with each council controlling stormwater within its own area. SWC provides stormwater services over an area that is significantly smaller than the region to which it provides water and sewerage services. Only about one quarter of properties in Sydney physically drain to SWC's stormwater channels. SWC has mainly large trunk channels to which the smaller stormwater reticulation networks drain. Local councils are the primary providers of stormwater services in the Sydney basin, through both reticulation

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<sup>8</sup> Waterways Advisory Panel, *Report to the NSW Government on the Proposal by Sydney Water Corporation for Sewage Overflow Abatement in Sydney Harbour*, August 1997, p 16.

<sup>9</sup> Waterways Advisory Panel, *Report to the NSW Government on the Proposal by Sydney Water Corporation for Sewage Overflow Abatement in Sydney Harbour*, August 1997, p 17.

networks and also major trunk drains and channels. SWC's responsibility is confined to some major trunk channels, mainly in older established areas. A small number of catchment management trusts have varying involvements in localised stormwater issues.

### 2.3 Legislative requirements

There appear to be no specific regulatory requirements of Sydney Water Corporation other than to maintain the hydraulic capacity<sup>10</sup> of the stormwater system as it was at the date of its transfer to the Sydney Water Corporation. *The Water Board (Corporatisation) Act* and the SWC Operating Licence establish a the legislative framework for SWC's involvement in stormwater. However, the statutory requirements are very broad.

#### 2.3.1 Water Board (Corporatisation) Act

The *Water Board (Corporatisation) Act* states:

... the operating licence must require SWC to ... provide, operate, manage and maintain a stormwater drainage system within the capacity of the stormwater drainage system included in the business undertaking ...<sup>11</sup>

These requirements appear to be very loose. However, SWC puts a contrary view that the legislative requirements are quite specific. Therefore, SWC has chosen to adopt a maintenance role in managing the stormwater assets under its control:

In terms of service delivery, the key objective has been to maintain the existing hydraulic capacity of the channels. In catchments where development is increasing stormwater flow, the standard of service provided by that hydraulic capacity can diminish and more frequent flooding may occur.<sup>12</sup>

Although there are no statutory requirements to meet specific service standards, the EPA believes that the framework for SWC's stormwater responsibilities stems from the principal objectives specified in the *Water Board (Corporatisation) Act*:<sup>13</sup>

- to exhibit a sense of social responsibility by having regard to the interests of the community in which it operates
- to protect the environment by conducting its operations in compliance with the principals of ecologically sustainable development.

The EPA believes SWC has a duty under the special objectives:

- to reduce risks to human health
- to prevent degradation of the environment.

The Tribunal considers that the legislation imposes a minimum requirement on SWC in relation to stormwater.

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<sup>10</sup> Hydraulic capacity refers to the amount of water that can flow through the channel.

<sup>11</sup> *Water Board (Corporatisation) Act*, section 14(1)(b).

<sup>12</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 15.

<sup>13</sup> EPA, Submission, p 17.

### 2.3.2 Compliance with the operating licence

In the Information Paper, released ahead of this Review, the Tribunal notes the findings of the 1996 audit and subsequent Ministerial directives to SWC. The 1996 Operating Licence Audit for Sydney Water shows that SWC had complied with its operating licence.<sup>14</sup> However, the Tribunal notes the audit found that SWC had achieved only partial compliance on stormwater because the requirements to minimise the consequences of flooding had not been fully addressed.

In a combined submission, the Nature Conservation Council (NCC) and the Total Environment Centre (TEC) state that appropriate performance standards should be part of SWC's licence:

...without a regulatory driver, SWC will take no initiative in this area. We direct you to our recommendation in our WaterPlan 21 report (pp 25-26) concerning the need to meet quantitative performance targets for both the volume and quality of stormwater through its drains, and that these should be set out in the Operating Licence. SWC's standard of service should be based on the hydrological capacity of each catchment rather than the designed hydraulic capacity of its drains.<sup>15</sup>

Appropriate service standards should be integral to any stormwater planning process. Performance measures should be developed and included in the licence.

## 2.4 SWC's stormwater activities

In its submission, SWC notes that it controls 407 kilometres of stormwater channels which make drainage available to 380,200 properties.<sup>16</sup> However, SWC owns less than 2 percent of Sydney's metropolitan stormwater systems. SWC's drainage system is shown in Attachment 4.

Key facts and statistics of SWC's stormwater activities are summarised in Table 2.1.

**Table 2.1 Sydney Water Corporation's stormwater activities**

<i>Description</i>	<i>Quantum</i>	<i>Context</i>
Stormwater channels	407 kilometres	<2% of metropolitan stormwater systems
Asset values (written down replacement cost)	\$614.8m	5% of SWC's infrastructure assets
Properties serviced	380,200	25% of SWC's customer base
1996/97 operating costs <sup>1</sup>	\$4.8m	0.9% of SWC's total operating costs
1996/97 capital expenditure	\$1.6m	Less than 0.5% of SWC's capital spending
1996/97 stormwater revenue	\$20.1m	1.8% of SWC's tariff incomes
Average operating cost per property	\$12.60	

Source: SWC, Submission p 9.

<sup>1</sup> Excludes customer service cost, depreciation and capital costs.

<sup>14</sup> Mr D Lambley, Submission to Stormwater Inquiry, referring to SWC Operating Licence Audit Report, 1996 (p 3.22), 19 February 1998, p 5.

<sup>15</sup> NCC/TEC, Submission, p 4.

<sup>16</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 9.

Although SWC controls 407 km of stormwater channels, many were not funded by SWC. Stormwater drainage assets constructed by the Department of Public Works during the Great Depression were transferred to local councils during the 1940s.<sup>17</sup> Where drains traversed council boundaries, to avoid disputes between councils, Public Works vested selected trunk drains in the then Water Board. Others channels have been funded by developer contributions.

The majority of the remaining assets were constructed up to as recently as the late 1980s by the then Metropolitan Water Sewerage and Drainage Board, as part of an urgent flood mitigation program of the government of the day. In addition, various governments have provided funding to SWC for stormwater works as part of their stormwater programs. The most recent funding was provided in the 1980s under the Drainage Action Program. Few stormwater assets have been added since the late 1980s. This, in part, reflects the fact that SWC's stormwater services are provided in the older parts of Sydney where no new infrastructure is required for expanding urban development.

The written down replacement cost of SWC's stormwater system is \$614.8m.<sup>18</sup> This represents 5 percent of SWC's infrastructure assets.

SWC admits that its "current stormwater program is essentially one of maintenance rather than expansion".<sup>19</sup> Capital expenditure has generally been confined to:

- repairs where sections of the existing channels have failed;
- provision of fencing along open channels, or other measures where public safety is a consideration.<sup>20</sup>

SWC indicates that there has been some expenditure on the installation of gross pollution traps, trash racks and booms. However, most of the funding for this expenditure has come from the Special Environmental Levy (SEL).<sup>21</sup>

Much of the expenditure required to address Sydney's stormwater problems relates to areas and assets outside the control of SWC. Logically, SWC has questioned its capacity to spend money on assets that it does not own. As noted at the hearings:

If I understand what Sydney Water is saying ... there are constraints on their spending money outside their system; to spend money on council stormwater issues is something they can't do.<sup>22</sup>

It can be argued, however, that SWC should be spending more on the stormwater assets it does own. In its submission, the EPA suggests that drainage expenditures should include:<sup>23</sup>

- undertaking investigations, including any routine and/or event-based stormwater or associated environmental monitoring
- planning, construction, installation, commissioning, operation and maintenance of stormwater infrastructure

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<sup>17</sup> The history of Sydney Water Corporation's involvement in stormwater is outlined more fully in the SWC submission.

<sup>18</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 9.

<sup>19</sup> Ibid, p 11.

<sup>20</sup> Ibid, p 15.

<sup>21</sup> Ibid, p 16.

<sup>22</sup> IPART, Transcript of public hearing, 2 April 1998, p 65, question by Dr T Parry.

<sup>23</sup> EPA, Submission, p 21.

- depreciation and replacement of stormwater infrastructure
- specific environmental restoration programs relating to stormwater impacts on waterways or bushland
- undertaking local public education and extension programs relating to stormwater management
- costs of actions included in stormwater management plans.

This would provide a reasonable list of activities for SWC to undertake as part of its stormwater program. From the information provided to the Tribunal it is not evident that SWC is doing this. Aware of the difficulties associated with the current institutional arrangements, the Tribunal has nevertheless set prices on the basis that there may be scope for additional spending on SWC's stormwater assets.

SWC can also provide grants to local councils to implement actions within the council stormwater system that will benefit SWC's stormwater system. This approach has been recently implemented in Randwick.<sup>24</sup>

## **2.5 Conclusion**

SWC has an important role to play in stormwater management in the Sydney Basin. The EPA and the Licence Regulator question whether SWC is currently fulfilling its stormwater responsibilities. The Tribunal believes that SWC should improve its reporting of its stormwater activities. It must develop appropriate performance measures.

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<sup>24</sup> EPA, fax dated 3 August 1998.

### 3 SOURCES OF REVENUE AND NATURE OF EXPENDITURE

SWC is an integrated organisation providing water, sewerage and drainage services. Internally, SWC has separated its businesses into a holding company and two subsidiary companies: Utilities and Transwater.

Although SWC imposes a separate and identifiable charge for stormwater, it does not report its stormwater business as a separate entity. Costs are not attributed to each of the business activities. SWC advocates that this is because costs, in many cases, are not separately attributable.

The Stormwater Industry Association (SIA) has suggested that SWC should ringfence<sup>25</sup> stormwater costs.<sup>26</sup> Even though SWC's stormwater business represents a small component of its total operations, the Tribunal concurs that ringfencing is essential to ensure that prices reflect the costs of producing a particular service. The Tribunal has endeavoured to obtain information on this basis. In its annual return of information to IPART, SWC is required to attribute costs to water, wastewater and stormwater services.

In its most recent annual return, that for 1996/97, SWC was required to provide notional financial statements for its water, wastewater and stormwater businesses. This was the first year that the Tribunal required this information to be provided. In analysing the information, the Tribunal has observed that the numbers in the information return do not reconcile with the numbers provided in the submission. This has made it hard for the Tribunal to make use of the detailed information at this stage.

The SWC submission comments that it is difficult to allocate costs, particularly joint and common costs, to individual business segments. However, the Tribunal anticipates, that in its forthcoming annual return for 1997/98, SWC will report the costs of the individual business segments.

***The Tribunal requires that SWC identify and appropriately ringfence its stormwater expenditure in its reporting.***

#### 3.1 Revenue

In 1996, the Tribunal set a medium term price path for SWC's charges. As shown in Table 3.1, for stormwater, these charges comprise a fixed component (service availability charge) and, in the case of non-residential customers, a property value based charge. The fixed component remains constant throughout the medium term price path. However, in line with SWC's commitment to reduce property based charges, the property value based charge reduces over the period of the price path.

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<sup>25</sup> Ringfencing refers to the physical or accounting separation of business activities to enable the costs and revenues of one activity to be differentiated from another.

<sup>26</sup> SIA, Submission, p 2.

**Table 3.1 Sydney Water's Drainage areas - stormwater charges (\$ of year)**

	1996/97	1997/98	1998/99	1999/2000
<b>Service availability charge</b>				
- Residential and vacant land	\$16	\$16	\$16	\$16
- Non-residential	\$42.60	\$42.60	\$42.60	\$42.60
<b>Property value based charges (cents in the AAV dollar)</b>				
Non-residential (on AAV > \$2,500)	0.327	0.322	0.317	0.313

Source: IPART, Medium Term Price Path from 1 July 1996.  
AAV = assessed annual value.

Recently, the Tribunal conducted a mid term review of the price path. As a result of that review, and in conjunction with the considerations outlined in this report, the Tribunal has determined that the price path for stormwater established in 1996 will continue.

SWC has reported that its total stormwater revenue in 1996/97 was \$19.2m (see Table 3.2).<sup>27</sup> The bulk of the revenue, \$12.2m, comes from property based charges. As such, the charge is unrelated to either the quantity of stormwater run-off from a property or the content of that run-off.

**Table 3.2 Source of stormwater revenue**

	Revenue (\$000)
<b>Residential</b>	\$5,165
<b>Non-residential</b>	
Service Availability charges	\$1,859
Property based charge	\$12,200
<b>Total Stormwater charges</b>	<b>\$19,224</b>

Source: SWC, Information Return, 1996/97.

## 3.2 Expenditure

In its submission, SWC indicates that its operating expenditure in 1996/97 was \$4.8m, its capital expenditure was \$1.6m, and depreciation was \$5.3m.<sup>28</sup> SWC states that this level of expenditure is typical of the expenditure likely to be required in future to provide the current level of service.

Table 3.3 shows how operating costs have been calculated.

<sup>27</sup> This differs from the quoted \$20.1m in the submission. However, it has been used here as it provides a basis for disaggregating the revenue.

<sup>28</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, pp 16-17.

**Table 3.3 Components of 1996/97 operating costs**

<b>Component of operating costs</b>	<b>Cost (\$000)</b>	<b>%</b>
Preservative civil maintenance	1,374	29
Mechanical and electrical maintenance	130	3
Salaries and support	890	18
<i>Total direct operating costs</i>	<i>2,394</i>	
Customer support & corporate overheads	2,394	50
<i>Total Stormwater Operating Costs</i>	<i>4,788</i>	<i>100</i>

Source: SWC Submission, p 18.

SWC has based its calculation of operating costs on an allocation of joint and common costs. The Tribunal is concerned about the high proportion of customer support and corporate overheads in SWC's total operating costs.

### 3.3 Revenue requirement

Revenue from stormwater substantially exceeds expenditure on stormwater. In its submission, SWC proposed removing the property based stormwater charges. This would have reduced revenue by some \$12m per year.

Environment groups believe that the excess revenue should be identified and spent on stormwater activities. NCC and TEC state:

The environment groups have been suggesting for some time that SWC was receiving greater revenue from its stormwater charges than it was spending. ... It is our view that the extent of this excessive revenue over the years should be assessed and quarantined directly to implementing stormwater improvements ...<sup>29</sup>

Further, NCC and TEC are:

... extremely concerned that the high profit levels are merely being dragged off as dividends rather than being used internally within SWC to shift to appropriate levels of water use and reuse and to meet higher environmental standards.<sup>30</sup>

These groups suggest that IPART should postpone the reduction in revenue until an appropriate pricing and regulatory structure is in place.

The EPA is concerned that:

- SWC's current level of operating expenditure does not appear to be adequate to meet its statutory obligations, particularly those relating to public health and environmental management; and
- based on COAG principles, SWC should consider seeking a fully commercial rate of return on existing as well as future assets given the importance of those assets and significant replacement values.<sup>31</sup>

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<sup>29</sup> NCC & TEC, Submission, p 4.

<sup>30</sup> NCC & TEC, Submission, p 1.

<sup>31</sup> EPA, Submission, p 21.

NSW Treasury argues that SWC's financial position and shareholder value would be eroded if the property based charges were removed. Treasury recommends that the existing price path for stormwater be retained pending a full review of any remaining cross subsidies within SWC's pricing structure. Treasury suggests that this review be conducted as part of the next major pricing determination.<sup>32</sup>

In its submission, the Local Government and Shires Associations of NSW (LG&SA) indicates that it would not be opposed to a restructuring of the stormwater charges as SWC suggests.<sup>33</sup> However, the LG&SA is concerned that this may mean transferring assets to local government without the accompanying resources to upgrade and maintain this infrastructure. Consequently, LG&SA states:

... any changes to Sydney Water's revenue base will need to have regard for the expenditure which may be required to improve their stormwater assets in the implementation of those stormwater management plans.<sup>34</sup>

The Tribunal accepts the view that it may be desirable for SWC to devote more resources to stormwater, even under the present imperfect administrative arrangements. The planning process may reveal the need for additional spending. In that case, it would be better to retain the already determined level of stormwater revenue until the situation is clarified rather than to reduce the revenue as SWC suggests.

***The Tribunal has determined that, for the period to 30 June 2000, property value based charges for stormwater services should remain as determined in the medium term price path which commenced 1 July 1996.***

### 3.4 Conclusion

SWC's stormwater costs have not been clearly defined. However, it is clear that SWC's revenue from its stormwater customers is significantly greater than its estimated costs. The Tribunal is concerned that SWC may not be spending sufficient funds to fulfil its obligations. Furthermore, the Tribunal is concerned that SWC has not responded appropriately to the issues raised by the EPA and others concerning the adequacy of its stormwater expenditure.

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<sup>32</sup> NSW Treasury, Submission, p 10.

<sup>33</sup> That is, reduce the stormwater charge for commercial premises to \$56.80 per year, abolishing the current land value based charging system, and retaining the residential charge for those residential premises served by SWC stormwater infrastructure at \$16 per year.

<sup>34</sup> Local Government and Shires Associations of NSW, Submission, p 2.

## 4 ALTERNATIVE PRICING ARRANGEMENTS

### 4.1 Pricing principles

The Council of Australian Governments (COAG) has endorsed a national framework for improved wastewater reuse and stormwater management in Australia. The framework provides recommendations for broad policy positions and guidance for the harvesting of stormwater. It views stormwater in terms of its potential as a resource that could have an impact on the natural environment. The framework recommends that:

- the principles of full cost recovery be applied to stormwater management
- water supply licensing regimes allow entry for wastewater and/or stormwater projects
- the roles and responsibilities of councils, utilities, Department of Land and Water Conservation and the community be defined
- the use of whole of catchment management approaches be encouraged.<sup>35</sup>

In 1994, the EPA established the Urban Stormwater Pollution Taskforce. This taskforce considered the desirable features of charging for stormwater. In its submission, the EPA suggests that a stormwater charge would ideally:

- reflect the relative contribution of a property to stormwater flows and stormwater quality in a particular catchment
- provide incentives to encourage runoff reduction and improve stormwater quality through innovative management techniques
- be equitable and accepted by those paying the charge, while not excessively penalising those with a limited capacity to pay
- ensure developers pay for an equitable share of the costs of new stormwater facilities
- fully recover improvement and operational costs of stormwater management
- be simple to administer at an acceptable cost
- take account of the value of stormwater assets already in place and the value of assets yet to be provided under any capital improvement program within each catchment.<sup>36</sup>

### 4.2 Why charge for stormwater?

The major benefits of stormwater management are public health and safety and benefits to the environment. These benefits are a public good in the sense that many individuals receive these benefits jointly, and it is impossible to prevent any individual from enjoying these benefits. Community benefits enjoyed by one person do not reduce those of another. To the extent that each individual is enjoying benefits or imposing costs that cannot be individually identified, a flat charge across the community may be an appropriate response.

However, behaviour by individuals and councils can affect the extent of stormwater problems. This behaviour can be modified by better pricing and allocation of property rights.

The Australian Business Chamber believes that stormwater works should be charged as a levy against the general community based on usage of the system. It recommends:

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<sup>35</sup> National Framework for Improved Wastewater Reuse and Stormwater Management in Australia, cited in SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 42.

<sup>36</sup> EPA, Submission, p 23.

... there should be only one basis for charging the non-residential sector for stormwater charges, and this should be on usage and be paid as a levy. The use of land value based charges should be eliminated.<sup>37</sup>

The main problems of stormwater have been cited as flooding and pollution. As noted by the EPA, the current charges do not provide incentives to reduce run-off or improve stormwater quality<sup>38</sup> Because stormwater discharge is not metered it is difficult to determine any sort of usage charge.

### 4.3 Options for reforming pricing

The EPA's Urban Stormwater Pollution Taskforce has considered ways of charging for stormwater.<sup>39</sup> The options considered include charges based on:

- property value
- land use
- property area and land use
- property area and intensity of land use
- property area, intensity of development , pollution potential and incentive rebates.

The taskforce's report recommends that charges for stormwater be based on land area, land use and development intensity or pollution potential. The taskforce considers this to be:

... more equitable, better reflect the likely contribution of a property to stormwater pollution and would provide direct incentives for improvement. The determination of "pollution potential" may, however, be difficult.<sup>40</sup>

SWC supports a charging mechanism based on land area:

... (a) pricing system could be one based on land area, with rebates for on-site pollution and volume reduction measures.<sup>41</sup>

SWC proposes that the rebates relate to anticipated reductions in stormwater run-off as a result of

- the characteristics of a property
- the nature of measures undertaken by the property owners to reduce stormwater flow.

The Tribunal believes that a stormwater charge would provide incentives to reduce the amount of flow, and would be easy to implement. The Tribunal does not support property value based charges as a long term option for stormwater pricing. Instead, the Tribunal favours a charge based on land area, permeability, sensitivity of local (catchment) environment, and measures taken to reduce impact. However, before this approach can be implemented, work is needed to assess whether a pricing strategy of this nature could be put into practice.

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<sup>37</sup> Australian Business Chamber, Submission, p 2.

<sup>38</sup> EPA, Submission, p 22.

<sup>39</sup> *ibid*, p 23.

<sup>40</sup> *ibid*, p 24.

<sup>41</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 34.

***The Tribunal requires SWC to present a pricing strategy consistent with the principles outlined in this report for the next major review.***

#### **4.4 Run-off from roads**

As roads have impervious surfaces, they have a significant impact on flooding and the quality of stormwater. As SWC notes in its submission:

Stormwater flowing from roads is, a significant contributor to flooding problems and generally contains higher concentrations of pollutants such as oil and grease. The costs incurred by Sydney Water in managing these flows are currently recovered from its existing stormwater customers.<sup>42</sup>

Neither the RTA nor local councils pay SWC a stormwater charge for roads. Recently, the UK Department of the Environment, Transport and the Regions (DETR) issued a consultation paper entitled *Water Charging in England and Wales – A New Approach*. The report advocates charging for sewerage and surface water drainage on the basis of property value. This is partly because of the difficulty of allocating costs to highway authorities.

Nevertheless, SWC suggests the owners of the roads should be required to contribute stormwater payments to SWC.

The Tribunal acknowledges that the road system makes a significant impact on the quantity and quality of stormwater run-off. The Tribunal believes that road owners should contribute towards the costs of managing stormwater flows.

#### **4.5 Catchment based charges**

Catchment based charging receives considerable support in submissions. The EPA states that stormwater charges would be most effective if they were based on land area, land use, impervious area, and were catchment based. However, the EPA notes that catchment based charges would require stormwater management plans to be completed before charges could be allocated. In its submission, SWC suggests:

Catchment based charging essentially provides a way of removing geographical cross subsidies between drainage catchments. The principle underlying the calculation of prices for each catchment is to link the costs of stormwater management to the beneficiaries of stormwater services within the catchment.<sup>43</sup>

SWC also notes that the emphasis has shifted in recent years from a primary concern for flooding towards a more balanced approach that takes into account the quality aspects (pollution) of stormwater.<sup>44</sup> In SWC's view, a conflict arises between the quality and quantity aspects which makes it difficult to determine the most appropriate catchment unit on which to base a stormwater charging system.

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<sup>42</sup> *ibid*, p 27.

<sup>43</sup> *ibid*, p 36.

<sup>44</sup> *ibid*, p 37.

On catchment based charging, the SIA suggests:

... a proportion of the charge should vary by catchment but not the full charge. A broad mix of price charges will provide the safety nets and adjustment mechanisms.<sup>45</sup>

Finally, the combined NCC and TEC submission notes with interest that:

... SWC in its submission is proposing the desirability of introducing pricing arrangements predicated on point source control and charging stormwater on the basis of runoff leaving the property. The environment groups have favoured an investigation of this approach for some time and submit that this definitely warrants further consideration by the Tribunal.<sup>46</sup>

On the other hand, the Australian Business Chamber does not favour catchment based charges:

All users should be made subject to the same charge for stormwater, regardless of the catchment they are within.<sup>47</sup>

The Tribunal notes that catchment based charges give scope for providing a link between the amount of work required in a catchment, the cost of that work, and the source of funds.

In its *Inquiry into Water and Related Services*,<sup>48</sup> the Tribunal suggested that catchment basins for stormwater be clearly defined, decisions be taken on a catchment area basis, and prices be set to recover costs on an area basis. The Tribunal also expressed the view that the benefits of catchment based pricing in existing urban areas may be modest and that it is more important to get the setting of standards and the allocation of responsibilities right. The stormwater planning process may provide further information on these aspects.

## 4.6 Conclusion

Stormwater charges should provide incentives for landowners to reduce the amount of stormwater discharged from their property. Current charges do not provide these incentives. An alternative approach that has merit is one that relates charges to impervious land area. This approach advocates that rebates be given for actions taken to reduce the amount of run-off from a property relative to a similar property where such action has not been taken.

Whilst this approach may reduce run-off, they will not improve the quality of that run-off. Given the lack of measures for quality, it is difficult to improve stormwater quality through pricing. Other mechanisms may be required to improve quality.

The Tribunal still maintains that stormwater charges should be catchment based. A catchment based charge provides an overall framework for decision making, needs, and charges on property owners. The case for catchment-based pricing, and how this can be implemented, should be reconsidered once the stormwater planning process has been completed.

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<sup>45</sup> SIA, Submission, p 2.

<sup>46</sup> NCC/TEC, Submission, p 5.

<sup>47</sup> Australian Business Chamber, Submission, p 2.

<sup>48</sup> Government Pricing Tribunal, *Inquiry into Water and Related Services*, Final Report, October 1993, pp 184-185.

## 5 THE NEED FOR NEW INFRASTRUCTURE

As noted earlier, most of the SWC's capital expenditure program involves repairs, provision of fencing, and other measures related to public safety. In addition, gross pollution traps and trash racks have been constructed. The SEL program has funded much of this work.

Most new infrastructure is constructed in the new urban development areas. Only a few of these areas are within the stormwater service area of SWC, eg Rouse Hill. However, in those areas, the cost of construction of stormwater infrastructure is either met directly by developers or recouped through charges imposed on developers by SWC..

Many submissions (eg EPA, SIA and MUIM) have expressed the view that SWC needs to increase its expenditure on stormwater infrastructure. SWC does not appear to share that view. However, SWC's capital expenditure requirements may change as a result of the stormwater management planning process. For example, in its submission, the Local Government and Shires Associations of NSW states:

Councils throughout the metropolitan area will be preparing stormwater management plans during the next 12 months in consultation with other stakeholders, including Sydney Water. These plans will undoubtedly reveal the magnitude of the problem and identify works (that) will be required to upgrade stormwater assets held by councils and Sydney Water.<sup>49</sup>

Earlier in this report, the Tribunal recommended that SWC review its operating activities with respect to stormwater. The Tribunal would like SWC to review its capital expenditure on stormwater too, particularly as the stormwater planning process is further advanced.

***The Tribunal requires SWC to provide the next major review with a capital expenditure program for stormwater that is consistent with its stormwater management plans.***

SWC's construction of new infrastructure is limited. Many respondents have indicated that SWC should increase its expenditure on new infrastructure. However, no planned projects have been identified.

SWC, and its predecessor, the Sydney Water Board, prepared a number of stormwater management plans in the early 1990s as part of the Special Environmental Levy (SEL) program. The EPA notes the actions contained in these plans have generally not been implemented.<sup>50</sup> These could provide a source of interim actions until the Stormwater Management Plans required by the EPA have been completed.

As stormwater management plans develop, the need for additional infrastructure expenditure will become evident. The Tribunal expects that, upon completion of the plans, SWC will have a much clearer indication of its capital expenditure requirements.

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<sup>49</sup> LG&SA, Submission, p 1.

<sup>50</sup> EPA, fax dated 3 August 1998.

## 6 INSTITUTIONAL ARRANGEMENTS

In its 1993 report *Inquiry into Water and Related Services*,<sup>51</sup> the Tribunal recommended that:

- environmental standards for stormwater and urban run-off be set and integrated with the standards for other discharges
- decision-making be based on or co-ordinated with a stormwater catchment area
- accountabilities and responsibilities for the provision of stormwater services be clarified
- reform of stormwater focus on the incorporating stormwater infrastructure costs in developer charges and aligning charging structures with defined accountabilities for stormwater services.

The situation has changed little in five years. In 1997, the Waterways Panel recognised that:

... the current split of responsibilities for infrastructure development and operation between councils and Sydney Water may not be optimal for cost-effective stormwater management.<sup>52</sup>

This view is supported in a number of submissions, eg MUIM, SIA and the EPA. Their views are best summarised by MUIM:

It is clear that the institutional arrangements for stormwater hinder the effective management of the system. Sydney Water's trunk drainage system conveys water and water borne pollutants which generally have entered the system in parts of the catchment outside Sydney Water's control or influence. The general thrust of stormwater management approaches is to treat the problem at its source, ie to reduce run-off and pollutants at source, which in many cases will be upstream of Sydney Water's drainage system. The optimum solutions will need to be resolved on a catchment basis.<sup>53</sup>

Where stormwater managers differ between the upper and lower catchment, the nexus between causation and pricing will often be broken. This is because those residents in the upper catchment who contribute to the stormwater problems, are not currently required to meet the costs incurred by the stormwater manager for the lower catchment. It is left to this latter manager to fund any remedial measures.

Because the residents of the upper catchment do not meet these costs, there can be a lack of incentives for investment in preventative measures or source control in the upper catchment, and incentives for over-investment in remedial stormwater measures in the lower catchment. The implementation of stormwater management planning is unlikely to fully eliminate such distortions. The reluctance of stormwater managers to increase expenditure in the interests of a more co-ordinated approach to stormwater management will persist because of ongoing budgetary constraints and pressure from residents for expenditure on other priorities.

The Government recently introduced a program to improve stormwater management by requiring stormwater managers, eg local councils, to prepare stormwater management plans. The EPA comments:

<sup>51</sup> Government Pricing Tribunal, *Inquiry into Water and Related Services*, Final Report, October 1993.

<sup>52</sup> Waterways Advisory Panel, *Report to the NSW Government on the Proposal by Sydney Water Corporation for Sewage Overflow Abatement in Sydney Harbour*, August 1997, p 15.

<sup>53</sup> MUIM, Submission, p 6.

The stormwater management plans will facilitate the co-ordinated management of urban stormwater in a catchment to ensure that an appropriate and cost-effective mix of management actions, both non-structural and structural, is developed to suit the specific priorities of a catchment.<sup>54</sup>

Local government is best placed to ensure that locally relevant solutions are devised to address specific stormwater management issues within each catchment. Local councils are the appropriate body to prepare and implement the stormwater management plans.

The EPA has stated<sup>55</sup> that a primary objective of the requirement to prepare catchment based stormwater management plans is to encourage a more effective and complementary relationship between Sydney Water and local councils in relation to their respective stormwater management responsibilities. The planning process will provide clearer definition of roles and responsibilities, and linkages between various managers.

The stormwater management planning process provides for a catchment based approach which will account for different ownership patterns. However, SWC has indicated to the Tribunal that the SMPs are meant to address quality issues. In its submission, SWC notes:

It would appear, that there are some problems of coordination which the plans do not address. In a number of instances there will be several stormwater managers active within the same catchment. This has the potential to create distortions in the way stormwater expenditure and charges are applied.<sup>56</sup>

As the EPA suggests, in the long term, government may need to consider providing consistency of ownership for trunk drainage across catchments.<sup>57</sup>

The EPA suggests postponing a review pending the completion of stormwater management plans for the Greater Metropolitan Region.<sup>58</sup>

***The Tribunal concurs that the Government should review the need for changes to the institutional arrangements once the stormwater planning process has been completed.***

### 6.1 A separate stormwater authority?

In its submission,<sup>59</sup> SIA indicates that in the United States catchment based stormwater utilities are making inroads in stormwater management. SIA believes that this option should be explored. At the public hearing SIA states:

Stormwater costs and charges must be ring-fenced. The most effective way to do this is to transfer the Sydney Water Corporation stormwater assets to a new body. This will allow Sydney Water to get on with its normal and traditional businesses. The new body ... must be given a specific charter to operate. ... It has to build, to manage, to maintain and to coordinate.<sup>60</sup>

SIA proposes that the new body take over Sydney Water's assets as well as any local government assets offered to it. The Tribunal regards the key problem as being

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<sup>54</sup> EPA, Submission, p 14.

<sup>55</sup> EPA, Submission, p 20.

<sup>56</sup> SWC, Submission to the Independent Pricing and Regulatory Tribunal of New South Wales' Review of Sydney Water Corporation's Stormwater Charges and Expenditures, March 1988, p 24.

<sup>57</sup> EPA, Submission, p 20.

<sup>58</sup> EPA, Submission, p 20.

<sup>59</sup> SIA, Submission, p 3.

<sup>60</sup> IPART, Transcript of Public Hearing, 2 April 1998, pp 77-78.

management of Sydney's entire stormwater network. A single stormwater management authority could not be effective unless it managed all infrastructure assets.

Further to this, UDIA noted at the hearings that:

We have an existing model and in the next couple of months we may well manipulate it to make the world a better place. As a stormwater manager, I would like to see a stormwater utility, but I would expect it to take over all major stormwater assets so it could be truly that. As a developer's representative, I could never suggest that there be another government department from which we (had to seek) approval.<sup>61</sup>

The Tribunal believes that the current stormwater problems stem primarily to a lack of co-ordination between agencies and clear accountabilities. The Tribunal notes that SWC has little say, if any, in land use planning. This is key to addressing stormwater issues. The Tribunal accepts that there should be a body with overarching responsibility for the management of stormwater. At this stage, the Tribunal is not convinced that this should be a separate stormwater authority.

***The Tribunal views the requirement to establish stormwater management plans for catchments as a step in the right direction. The Tribunal considers that the creation of a separate stormwater authority should be investigated by Government only when it can be considered in the light of experience gained with the stormwater management planning process.***

## 6.2 Conclusion

The lack of co-ordination in existing institutional arrangements has allowed agencies to sidestep their responsibilities. The EPA recently introduced a requirement for councils to prepare stormwater management plans. These plans should result in co-ordinated approaches within each catchment. To achieve this, it is essential that all stormwater managers within a catchment participate in the development of plans. One area of a catchment should not be adversely affected by the actions, or inaction, of upstream or downstream stormwater managers.

In themselves, stormwater management plans should not be seen as the remedy for all stormwater problems. It maybe necessary for a single authority to be vested with overarching responsibility for stormwater management. Some respondents have suggested that a separate stormwater utility be created. The Tribunal believes that the case for establishing a separate stormwater authority or further implementing institutional change should be considered by the Government in the light of experience gained through the current stormwater management planning process.

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<sup>61</sup> IPART, Transcript of Public Hearing, 2 April 1998, p 86.

## 7 MATTERS CONSIDERED UNDER SECTION 15 OF THE IPART ACT

Under Section 15 of the *Independent Pricing and Regulatory Tribunal Act 1992*, the Tribunal is required to consider certain matters and to communicate its decisions. These matters may be grouped as follows:

- **Consumer protection**
  - *Establishing/safe-guarding prices, pricing policies and standards of service.*
  - *Monitoring general price inflation.*
  - *Analysing social impact of decisions.*
- **Economic efficiency**
  - *Achieving greater efficiency in the supply of services.*
  - *Measuring effect of functions carried out by another body.*
  - *Emphasising the need for competition.*
- **Financial viability**
  - *Ensuring rate of return on public sector assets.*
  - *Analysing impact of borrowing, capital and dividend requirements.*
- **Environmental and other standards**
  - *Ensuring protection of environment by appropriate pricing policies.*
  - *Considering demand management.*
  - *Maintaining standards of quality, reliability and safety.*

### 7.1 Consumer protection

Current prices provide for two standard charges, one for all residential customers and another for all non-residential customers. Non-residential customers also pay a charge based on the value of their property. However, SWC has moved progressively from a property based charging system to a usage based system. On 1 October 1995, all property based charges were removed from residential customers' bills. Non-residential bills have had the property based component gradually reduced over the same period. The property value based charges for stormwater for non-residential customers will reduce further over the remainder of the medium term price path. There have been no increases in the fixed element of the stormwater charges over the period of the medium term price path.

An area based charge would have varying impacts on customers. The Tribunal would need to consider the impacts on individual customers, prior to endorsing the introduction of an area based charge.

### 7.2 Efficiency

SWC has not separated the costs of the stormwater business. It is therefore difficult for the Tribunal to reach any conclusions about how efficient SWC is in supplying stormwater services.

The Tribunal is aware that Australian Water Technologies (AWT), an unregulated subsidiary of SWC, contracts to undertake work on behalf of SWC. The Tribunal is also aware that AWT undertakes other work in the marketplace. AWT is free to compete with other organisations for this work, but the Tribunal would be concerned if SWC customers were being asked to support the commercial activities of AWT. At the next major review,

the Tribunal will be seeking detailed analysis of any work undertaken on behalf of SWC and the payments for this work.

### 7.3 Environmental issues

A major focus of the process preceding the Tribunal's determination of stormwater charges has been to seek to attain the objectives of ecologically sustainable development (ESD).<sup>62</sup> In this regard, the Tribunal must consider the implications for total water management of institutional arrangements and policies for stormwater.

In its submission, the EPA notes:

The ESD principles against which SWC is to conduct its operations are defined in the Protection of the Environment Administration Act, ie:

- the precautionary principle
- inter-generational equity
- conservation of biological diversity and ecological integrity and
- improved valuation and pricing of environmental resources.<sup>63</sup>

With respect to meeting its obligations to public health and the environment, stormwater related activities that Sydney Water could be undertaking include:

- stormwater treatment to reduce inputs of pathogens, sediment, nutrients, litter and other pollutants to receiving waterbodies
- flood mitigation by construction of retarding basins or by increasing the capacity of stormwater channels; and
- community education and other source control activities (including stormwater reuse).<sup>64</sup>

In response to the SWC submission, the EPA has commented on a number of concerns in relation to stormwater related activities.<sup>65</sup> In particular, the EPA has asked that the Tribunal seek assurances from SWC that:

- the lower than projected capital expenditure of SWC has not impacted on any commitment to improve its environmental performance
- funding for the Northside Tunnel will not reduce SWC's ability to meet licence conditions or environmental standards and commitments in other spheres of its operations.

The submission from the Nature Conservation Council of NSW (NCC) and Total Environment Centre (TEC) echoes the EPA's concerns regarding the priority given to construction of the Northside Tunnel.

The Tribunal has asked SWC to provide the requested assurances. In response,<sup>66</sup> SWC advocates it is committed to meeting environmental requirements and, by the end of the price path, expects to realise the environmental outcomes projected in 1996. With regard to the Northside Tunnel, SWC has stated that the Tunnel will not reduce its ability to meet licence conditions or other environmental standards and commitments.

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<sup>62</sup> ESD has been defined as requiring *the effective integration of economic and environmental considerations* and the implementation of *improved valuation and pricing of environmental resources*.

<sup>63</sup> EPA, Submission, p 17.

<sup>64</sup> EPA, Submission, p 18.

<sup>65</sup> Environment Protection Authority, Submission to IPART, *Mid-Term Review of SWC 1996 Price Path Determination*, March 1996.

<sup>66</sup> Letter from SWC, 7 August 1998.

At the public hearing,<sup>67</sup> SWC responded to questions regarding concerns over reductions, deferrals and diversions of capital expenditure and the potential effects on meeting obligations and agreed outcomes. SWC assured the hearing that all desired outcomes will be achieved, and all requirements fulfilled.<sup>68</sup>

SWC explained that the issue of overflows was subject to new regulation and therefore the outcomes had not been fully defined. Nonetheless, SWC did not expect that the expenditure projected in the SWC business plan would need to be exceeded in the last two years of the price path.

### 7.4 Standards

Whilst efficiency gains are commendable, increases in financial efficiency should not be achieved by lowering service standards below acceptable levels. In its submission, the EPA expresses concern that the under expenditure may have impacted, or will impact, on SWC's environmental performance.

The Tribunal believes that monitoring the level of service provided is an important element of price setting. The Tribunal will closely monitor the standard of service that SWC provides for stormwater. In addition, appropriate measures of service provision need to be developed. These could be incorporated in the stormwater management planning process and the operating licence.

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<sup>67</sup> Copies of transcripts of presentations can be obtained from the Tribunal's website, [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au) or from the Tribunal's offices at Level 2, 44 Market Street, Sydney.

<sup>68</sup> See Transcript, Hearing Volume No 1, April 2, 1998, p 16.

## 8 ISSUES FOR THE NEXT MAJOR PRICING REVIEW

The medium term price path for SWC's water, sewerage and drainage services remains in place until June 30 2000. Ahead of that date, the Tribunal will conduct a major review of SWC's prices. At that review, the Tribunal will address issues arising from the current inquiry, including the need to:

1. identify and ringfence stormwater expenditure
2. compile a stormwater capital expenditure program consistent with the stormwater management plans and linked to environmental standards and quality of service
3. develop a pricing strategy consistent with the principles outlined in this report, and with the expenditure program, both operating and capital.

The Tribunal expects SWC and others, to address each of these issues prior to the review.

## ATTACHMENT 1 TERMS OF REFERENCE

### **REVIEW OF SYDNEY WATER CORPORATION'S STORMWATER CHARGES AND EXPENDITURES**

The Independent Pricing and Regulatory Tribunal (IPART) is to conduct a review of Sydney Water Corporation's stormwater charges and expenditures. This review will be undertaken in conjunction with the mid term pricing review for Sydney Water in 1998. The stormwater review has been referred to IPART by the Premier under Section 12(1)(a) of the Independent Pricing and Regulatory Tribunal Act 1992 (Matter SRD/98/1.)

#### *Final Terms of Reference*

In conducting this review and determining maximum prices for Sydney Water's stormwater services, the Tribunal will have regard to the matters listed in Section 15 of the IPART Act. The Tribunal will investigate and report on the following:

1. The scope of and expenditure on Sydney Water's stormwater drainage services.
2. Sources of revenue and alternative pricing structures for Sydney Water's stormwater drainage services, including base charges and property based charging, having regard to impacts on user groups and economic, environmental, social and urban development impacts.
3. The impact on pricing policies of any need to renew or increase stormwater infrastructure.
4. The effect of the existing operating framework for stormwater management on the efficiency of Sydney Water's stormwater drainage services.

The review is to have regard to the Government's policy on stormwater issues, catchment planning, and the implications for total water management. The review may need to consider the interface between Sydney Water's and local councils' stormwater systems.

## ATTACHMENT 2 SUMMARIES OF SUBMISSIONS

Summaries of submissions by organisations and individuals to this review of stormwater expenditures and revenues are presented below. Copies of the submissions may be viewed during normal business hours (8:45 am – 5:15 pm, Monday to Friday at the Tribunal's offices, Level 2, 44 Market Street, Sydney, or at the Tribunal's website, [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)

### ***Organisations***

#### ***Australian Business Chamber***

- Stormwater works should be paid for by imposing a levy on members of the general community based on usage of the system.
- The beneficiary of improved environmental amenity should contribute financially to the stormwater system. Since stormwater services are a public good, the community as a whole is receiving the benefits, and pricing of this service should be level across all catchments. Costs incurred should be based on the quantity of stormwater discharged.
- There should be only one basis for charging the non-residential sector for stormwater charges; it should be based on usage and paid for as a levy. Land value based charges should be eliminated.
- All users should be subject to the same charge for stormwater pricing, regardless of catchment.
- The drive to eliminate cross-subsidies should continue with the next stage of subsidy removal taking place immediately.

#### ***Environmental Protection Authority***

- The EPA is facilitating a catchment based stormwater management planning process.
- Stormwater management plans will facilitate co-ordinated management of urban stormwater in each catchment, ensuring that an appropriate and cost-effective mix of management actions, both non-structural and structural, is developed to suit the specific priorities of that catchment.
- Local government is best placed to ensure that extraneous solutions are devised to address specific stormwater management issues within a catchment. Local councils are therefore the appropriate bodies prepare stormwater management plan of SMPs. Relevant state agencies need to co-operate in their preparation.
- Sewer overflows generally discharge into stormwater drainage systems, during wet weather. A separate process for managing sewer overflows is currently underway. This involves the preparation of environmental impact statements for the overflows, and the subsequent licensing of the overflows by the EPA, with a pollution reduction program incorporated into each licence.
- The EPA does not license urban stormwater drainage systems. Urban stormwater is not licensed in any Australian state or territory. In the US, the National Pollutant Discharge Elimination Scheme uses regulatory permits to require urban stormwater managers to prepare stormwater management plans.
- Stormwater discharges will not be subject to the new load based licensing system.

- In its survey, the EPA found that the community has identified water quality in rivers and creeks as the principal environmental issue in NSW.
- SWC's approach to stormwater management needs to be consistent with its statutory or stated commitments. This involves SWC's playing an active role in protecting public health and the environment in the stormwater sector of its operations.
- The EPA considers that targets for stormwater management should focus on achieving an improved environmental outcome. SWC should specify more appropriate targets or performance indicators for its stormwater business.
- Stormwater activities that SWC could be undertaking include:
  - stormwater treatment to reduce inputs of pathogens, sediment, nutrients, litter and other pollutants to receiving waterbodies
  - flood mitigation, by constructing retarding basins or increasing the capacity of stormwater channels
  - community education and other source control activities (including stormwater reuse).
- Stormwater Management Plans (SMPs) will centre on environmental protection. Councils within the Greater Metropolitan Region will have 12 months to complete these plans. The plans will identify appropriate management objectives, issues, options and cost-effective actions to be implemented by each stormwater manager within a catchment.
- The EPA recognises that the presence of a number of stormwater managers within a catchment presents a challenge for effective stormwater management.
- The stormwater planning process will enable appropriate long-term funding mechanisms to be developed, particularly by local government.
- Inconsistencies in ownership of and responsibility for stormwater infrastructure have hindered effective, co-ordinated, catchment based management of urban stormwater in the past.
- A primary objective of catchment based SMPs is to encourage a more effective and complementary relationship between SWC and local councils.
- In respect of a review of the institutional arrangements, the EPA considers that any review should not be considered until after the completion of SMPs for the Greater Metropolitan Region.
- IPART should examine whether SWC's stated operating costs are accurate.
- The EPA is concerned that the SWC's current level of operating expenditure does not appear to be adequate to meet its statutory obligations, particularly those relating to public health and environmental management.
- The EPA is also concerned that, based on COAG principles, SWC should consider seeking a fully commercial rate of return on existing as well as future stormwater assets, given the importance of those assets and significant replacement values.
- SWC's long term requirements for stormwater management are to be determined as part of the stormwater management planning process.

- It is likely that the outcomes of this process will require some increases in stormwater related expenditure. These plans will not be completed until April 1999. However, SWC could be undertaking related activities in the interim.
- The EPA supports separate financial reporting for SWC's stormwater services.
- Current charging mechanisms provide no incentives for landowners to reduce run-off or improve stormwater quality.
- Charges could be estimated on the basis of: property value, land value, property area, land use, intensity of land use, pollution potential, or incentive rebates.
- The EPA concludes that in the long term, stormwater charges will provide the greatest incentives to reduce stormwater run-off and pollution if they are based on land area, land use (or zoning) and impervious area, and are catchment based.
- A catchment based approach to charging using SMPs defining the actions and responsibilities of stormwater managers for each catchment will be useful, but completion of the plans is necessary before charges can be developed.
- In the long term it is desirable that SWC work with councils to develop a single, catchment based charge to fund the actions agreed under the SMP for that catchment.
- SWC's proposed reduction in revenue of \$13m per annum is inappropriate, given that current expenditures do not meet SWC's current obligations. A reduction in charges will also send the wrong signals to users. The EPA recommends that stormwater charges be maintained at their current levels.
- In the medium term, the EPA recommends creating a tighter link between a user's contribution to the problem and stormwater charges.
- The EPA also recommends that SWC:
  - ensure that its environmental obligations relating to stormwater management are met
  - spends its stormwater income on stormwater management actions
  - adopt separate financial reporting for its stormwater services
  - develop a transparent and priority based mechanism for providing any grants to councils where more cost effective stormwater measures can be employed
  - develop a collection mechanism for information on impervious areas and start collecting such data to enable a more equitable charging mechanism to be developed in the longer term
  - incorporate, in the short term, stormwater discharge improvements into its wastewater management strategies for catchments for which it has stormwater responsibilities
  - integrate, in the long term wastewater and stormwater management planning into the planning process for developing action plans to meet water quality and river flow objectives.

#### ***Local Government and Shires Associations of NSW***

- We are not opposed to restructuring stormwater pricing.
- Transferral of trunk stormwater assets and responsibilities to local government should be considered only if it is accompanied by resources to upgrade and maintain this infrastructure.

- 25 percent of Sydney's residential customers are in catchments served by SWC's stormwater infrastructure. This highlights the scale and importance of Sydney's infrastructure. It also highlights the potential cost of maintenance if these assets are to be upgraded.
- Councils' SMPs will reveal the magnitude of the problem and identify works required to upgrade stormwater assets held by councils and SWC.
- Changes to SWC's revenue base will need to have regard for the expenditure which may be required to improve stormwater assets when implementing of SMPs.

### ***Ministry of Urban Infrastructure Management***

- The Government's Urban Infrastructure Management Plan has identified the reduction of pollution from stormwater as a key response required to meet the environmental goals of the Government.
- We note the recommendations of the Waterways Advisory Panel, particularly in relation to stormwater.
- A clear objective of the Panel's recommendations is to ensure that more funding is directed to reducing pollution of the harbour from stormwater systems. The findings also suggest that SWC should be making a greater contribution to meeting its legislated objectives in relation to stormwater.
- Recommendations (a) (iii) and (d) were not accepted by the Government. The Government decided to refer SWC's revenues and expenditures to IPART.
- The Panel concluded that stormwater pollution is not restricted to a few locations. It is a diffuse and persistent problem throughout the harbour catchment. The challenge is to identify and prioritise action to repair leaking and overflowing stormwater drainage systems, and to progressively address the pollution which urban stormwater run-off contributes to the harbour.
- The Early Action Stormwater Program (EASP) is being managed by the Board of the Stormwater Trust. The EPA has established a unit to service the program. The program has the following components:
  - high priority projects that can be advanced quickly
  - projects arising from SMPs
  - funding of SMPs councils
  - a statewide education and community awareness campaign.
- The EPA is to issue notices requiring councils to prepare SMPs.
- Local government has the major responsibility for stormwater throughout NSW.
- The Panel recommends undertaking a review of the institutional arrangements for stormwater. It is clear that the institutional arrangements for stormwater hinder effective management of the system.
- Optimum solutions to stormwater management will be catchment based.
- Concrete channels are no longer regarded as an appropriate means of managing stormwater and SWC should be encouraged to be far more proactive in improving its channel assets. The regulatory mechanisms appear to be inadequate.
- In framing the outcomes of the review the Tribunal should consider:

- NSW Government's commitment to reducing pollution of waterways as set out, Urban Stormwater and Urban Infrastructure Management Plan presented in the Waterways Package
- the notices to be issued to SWC by the EPA, requiring its participation in SMPs and their implementation
- the finding of the Licence Regulator in its 1996 Report that SWC complies only partially with its operating licence in relation to its stormwater business
- the need for a substantial injection of funds to rectify the problems relating to the management of stormwater. This applies equally to SWC and local government.
- the recommendation of the Panel that SWC apply all its stormwater revenues to stormwater management.

#### ***Nature Conservation Council of NSW***

- Requests IPART to compare the costs to SWC's customers of constructing northside storage tunnel compared with the costs of instituting a range of measures to devolve the system. These include repairing of private sewer lines, accelerating SWC's existing income/expenditure program, and improving pollution management of SWC-owned stormwater drains.
- Asks that IPART investigate why SWC is reluctant to charge customers for identifying and reducing the source of stormwater pollution.
- It is clear from SWC's submission that it is not obliged under its operating licence to provide environmental improvements in stormwater quality. No revenue from charges has been spent in that way. Water quality devices have been installed. They were paid for by a special environmental levy.
- The extent of excessive revenue over the years should be assessed and directed to implementing stormwater improvements.
- Investigate the proposal to charge on the basis of point source control and on the basis of run-off leaving a property.
- IPART should consider deferring any reduction in revenue until an appropriate pricing and regulatory structure is in place.

#### ***NSW Treasury***

- SWC's legislation requires it to provide, operate and maintain its stormwater drainage system.
- SWC's expenditure on stormwater relates mainly to maintaining the system in accordance with its legislated obligations.
- We regard as appropriate SWC's focus on maintaining its existing stormwater system in accordance with its legislative requirements. Current institutional arrangements limit the effectiveness of any significant initiatives in this area. Initiatives would be unlikely to meet SWC's commercial investment criteria.
- We support the elimination over time of any cross subsidies. However, in the absence of any offsetting increases, this would result in a lessening of SWC's return on assets and destruction of shareholder value.

- We recommend that the existing price determination for stormwater be retained over the remainder of the price path.
- We note the Government's rejection of two of the recommendations contained in the Waterways Advisory Panel Report, namely, that:
  - SWC make every effort to complete the sewage transport and storage tunnel for less than the estimated cost of \$375m and that any savings be applied to stormwater management
  - all revenue raised by SWC from stormwater charges be expended on stormwater management.

### ***Property Council of NSW***

- Supports the fee structure proposed in SWC's submission and urges the Tribunal to adopt this structure.
- Notes that the fee structure does not appear to account for costs associated with providing the NSOOS.

### ***Public Interest Advocacy Centre***

IPART should:

- Break new ground by undertaking an inquiry into capital expenditure on stormwater facilities and the impact this could have on shareholders' equity.
- Examine the extent to which stormwater service provision can be considered a public good and its implications for pricing.
- Closely examine a resource approach to stormwater prior to its next inquiry.
- Consider the possibility of SWC's sharing with customers the bulk of the gains from efficiency improvements, and a price stream which would result in bills rising more than inflation.

### ***Rockdale City Council***

- It is important to provide an effective drainage service to our residents for the benefit of their health and amenity, and to ensure that flooding is controlled.
- Responsibility is a joint matter between SWC and Council. A close partnership is needed to effectively implement a catchment based service.
- Appropriate mechanisms need to be in place, including:
  - defined and agreed objectives, and an organisational commitment to ensuring objectives are achieved
  - suitable administrative arrangements in both organisations to provide internal resources for the development of policy, strategies, programs and action plans, and to ensure accountability
  - suitable financial arrangements for the implementation of the services.
- SWC owns trunk drainage in three of our 10 drainage catchments.
- Our actions in reducing stormwater pollution are manifold and cover the types of activities widely practised in local government.

- Our involvement in treatment has been limited to the construction of two sediment traps.
- SWC's charter needs to be widened to include:
  - acting in partnership with local government to identify the required level of stormwater services to best serve the local community
  - ensuring adequate capacity of the stormwater systems to serve existing conditions and implementing mitigation measures to address flooding problems in accordance with floodplain management plans
  - ensuring stormwater discharged from its system is of an adequate ESD standard.
- Prices for drainage need to increase to ensure these objectives are met.
- A uniform charge for residential properties should continue. There is likely to be a greater variation in costs within a catchment than between catchments. The charging system needs to be simple.
- Non-residential charges should be commensurate with residential charges. There should be a simple formula based on site area, run-off, and imperviousness.
- All income should be tied to drainage expenditure.
- The cost of treating stormwater should be borne by the general community. It is reasonable that stormwater treatment should be defined as a community service obligation.
- We accept the pooling of stormwater revenue across all systems. However, the process should be transparent.

### ***Stormwater Industry Association***

- The statement in the information paper that “standards of flood protection are diverse, and environmental objectives are often not clearly specified or regulated” does not seem to recognise that flooding is supposed to be managed according to the Government's Floodplain Development Management Manual. The manual steers away from fixed flood standards and seeks to have projects based on merit.
- As well as considering upstream impacts on downstream properties, one should consider what restrictions downstream development might impose on upstream development.
- Stormwater managers should have the ability to manage or at least strongly influence land use zoning in their catchment.
- Contaminated water will always enter the harbour, we can only reduce it and its impacts.
- Flood damage results from development in the wrong place, that is, on the floodplain, or from upstream development producing higher peak flows by increasing impervious areas and by quickly transporting run-off downstream.
- Does SWC have a stormwater business or a stormwater obligation?
- The existing operating framework is inadequate in that it does not relate to planning issues and does not attempt to use planning tools to make improvements. SWC is powerless to manage stormwater. It can fix only symptoms, not causes.

- Given its limited role, SWC manages to maintain the concrete asset reasonably well, but it is not using capital where it is needed.
- SWC's relationship with local councils is ill-defined and somewhat ineffective.
- SWC has not been required to ensure that for the bulk of the funds it raises from stormwater charges are spent on stormwater. The SIA would like to see these funds spent on stormwater related projects. SWC should ringfence its stormwater costs.
- Environmental costs should be included in SWC's stormwater costs.
- Infrastructure renewal needs to be co-ordinated with general urban renewal in large projects by using planning tools and long term plans. Funds should not be wasted on short term, quick fix, end of pipe engineering.
- Stormwater is a public good that is best paid for as a mix of tax on land or income, ability to pay, a catchment base rate, petrol tax, connection fee and management fee. A mix will provide safety nets and adjustment mechanisms.
- Charges should be reformed to reflect the fact that no-one has the right to increase discharges or pollute waters.
- A proportion of the charge, but not all, should vary by catchment.
- US catchment based stormwater utilities are making progress in stormwater management.

### ***State Emergency Service***

- Management of flash flooding is an important element of stormwater management.
- SWC has not fully addressed the requirement to minimise the consequences of flooding.
- SWC needs to do more than ensure that “current areas of high risk are identified and customers in those areas are made aware of mitigation measures they can apply to minimise the consequences of flooding”. As far as we are aware, this is not being done.
- In our view, responsibility for actual mitigation definitely lies with SWC.
- Maintenance of the stormwater system needs to be examined. It is unclear what the responsibilities of SWC and local councils are.
- A portion of stormwater revenue should be directed to the prevention or mitigation of flooding. Sydney has given this low priority.

### ***Urban Development Institute of Australia***

- We support catchment based stormwater management solutions.
- We believe that the NSOOS storage and transport facility is clearly intended to rectify a fault in SWC's sewerage scheme, not the stormwater system. Funding for stormwater management should not include expenditure associated with NSOOS, sewerage failures and their elimination.
- We endorse the second recommendation of the Waterways Advisory Panel, that “all revenue raised by SWC from stormwater charges is to be expended on stormwater management.”
- We recognise that SWC, while probably the largest single stormwater operator, is not the owner of all assets in any catchment (excluding Rouse Hill). Accordingly, its ability to

wholly manage any catchment is severely constrained. Similarly, Councils own assets within their own catchments but are also unable to solely determine stormwater management issues.

- We are perceives that SWC is an efficient maintenance manager of the existing system but has done little to improve the system (excepting expenditure from the environmental levy).
- We are particularly concerned that SWC has surplus revenue of around \$13m per annum and has not yet made any improvements, or apparently, even planned any improvements.
- We are unable to comment on the relationship between SWC and councils. However, we note that councils are at best poorly-funded whereas SWC has had the benefit of substantial surpluses. It is not evident that SWC has used its position to take a leadership role in bringing interested parties together.
- We believe it is imperative that SWC , in conjunction with the councils which share its catchments, develop and implement improvements to the entire stormwater system.
- Overall funding should remain at current levels pending determination of catchment-based SMPs and commensurate expenditure schedules.
- We are aware that IPART will not support *ad valorem* based charges. However, we recommend that the current charging regime remain in place for one year to give SWC time to develop a new charging regime and a program of scheme improvements.
- SWC's overhead charges seem unreasonably high and seem to have little relationship to measured expenditures.

### **Individuals**

#### **Mr Noel Dalton**

- Councils in the greater Sydney area do not carry out regular or satisfactory maintenance of gutters and gutter culverts. Gutter culverts are primary lodgement points of all road gutter waste. This accumulated waste is washed into the waterways when it rains.
- Generally, cleaning out does not occur because rubbish is out of sight, neighbouring councils do not carry out maintenance, money can be spent on other high profile projects, culvert grates are difficult to remove and there has been no budgeting of funds for cleaning culverts.
- The only solution is to make it mandatory for councils to carry out regular maintenance of gutters and culverts.
- The additional cost of mandatory cleaning could be funded from an environmental levy sent with the rate notice. Such a maintenance levy would have widespread acceptance.

#### **Mr D Lambley**

- I am concerned about the poor representation in the information paper about SWC's focus on its stormwater responsibilities. Operating licence compliance audits have been incorrectly quoted suggesting a positive image.
- Customers have cause to be suspicious of SWC's motives and honesty when it is shown that the close nexus with AWT results in subsidisation funded in part by stormwater charges.

- IPART must expose the deception which is obscuring the real cost structure and overheads.

## ATTACHMENT 3 LIST OF PRESENTERS AT PUBLIC HEARING

A public hearing was held at the Tribunal's offices, level 2, 44 Market Street, Sydney, on Thursday 2 April 1998. This hearing was held in conjunction with hearings for the mid term review of the Sydney Water Corporation and Hunter Water Corporation medium term price paths. Copies of the transcript can be viewed between 8:45 am to 5:15 pm Monday to Friday at the Tribunal's office, or at the Tribunal's website, [www.ipart.nsw.gov.au](http://www.ipart.nsw.gov.au)

Organisations that made presentations at the public hearing and their representatives are listed below. The organisations marked with an asterisk (\*) were relevant to this inquiry into SWC's Stormwater charges and expenditure.

<b>Organisation</b>	<b>Representatives</b>
Sydney Water Corporation*	Mr Chris Pollett Mr Arthur Butler Mr George Bawtree
Hunter Water Corporation	Mr David Evans Mr Don Audet Mr Andrew Amos
NSW Institution of Surveyors	Mr Peter Price
Environmental Protection Authority*	Ms Lisa Corbyn
Stormwater Industry Association*	Mr Peter Higgins Mr John Wood
UDIA*	Mr Laurie Rose

ATTACHMENT 4 MAP OF SYDNEY'S STORMWATER AREA