

Hawkesbury-Nepean

CMA CATCHMENT MANAGEMENT AUTHORITY



Mr James Cox
Chief Executive Officer
Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB Post Office NSW 1230

22 June 2005

Dear Mr Cox,

Re: Investigation into Water and Wastewater Service Provision in the Greater Sydney Region

The Hawkesbury-Nepean Catchment Management Authority (the Authority) is meeting with you on the 24th June. We have previously made submissions on Metro and bulk water pricing, but have not made a specific submission on your latest inquiry into water and wastewater provision in the Sydney Basin. We therefore think it may be useful to outline some of the issues relevant to this inquiry that we would like to cover.

The specific interest of the Hawkesbury-Nepean Catchment Management Authority

As you are aware, the Hawkesbury-Nepean provides an essential role in water and wastewater services in the Sydney Basin. It is because of the catchment's implication in both these aspects of water services that the Authority welcomes this inquiry.

Nearly all the water used in the Sydney Basin is taken from the Hawkesbury-Nepean River. Currently the Northern, Southern and Western suburbs of Sydney rely on the Hawkesbury-Nepean River for the discharge of their wastewater. The Authority considers that the essential services provided to the community and industries of the Sydney Basin by the River can be better understood and addressed through a more holistic and integrated approach to water services.

The Hawkesbury-Nepean Catchment Management Authority is responsible for setting and reporting on standards and targets for the Hawkesbury-Nepean catchment. These targets must reflect the state-wide standards and targets set by the Natural Resource Commission. These targets will be set out in the Authority's Catchment Action Plan and should guide all natural resource planning and management for the catchment

**Hawkesbury-Nepean Catchment Management Authority
Locked Bag 2048 Goulburn NSW 2580**

The Authority has been directed by the Minister for Infrastructure, Planning and Natural Resources to develop a strategy for restoring the health of the Hawkesbury-Nepean River, and consequently this is a key focus for the Authority. The strategy has identified that the management of water and wastewater services will be a key determiner of the success or otherwise of delivering river health targets.

Integrated water cycle management

An integrated water cycle management approach is essential to capture and address key issues challenging the sustainable management of the Hawkesbury-Nepean River.

Consistent principles of integrated water cycle management (IWCM) are needed to guide the different agencies to interpret IWCM on a natural system basis, rather than an institutional one. The Authority considers that sustainable water use can only be assessed in the context of the natural system, its capacity, needs and dynamics. The Authority considers that the work of the Hawkesbury-Nepean River Management Forum has to a large extent outlined this context.

To date, the water storages and the water supply for Sydney have been regarded as the city's water asset, rather than the natural systems that provide that supply. This has helped to thwart a water cycle management approach by:

- Not linking water extraction and waste water disposal as parts of the same management cycle.
- Not requiring an integrated planning and regulatory framework applying to all policy and practice influencing water.
- Creating a distortion in the water market through water pricing not acknowledging the impact and cost of the water deficit in the river system or the increasing cost on the river system of the discharge of waste water.

As detailed in our previous submissions, the Authority considers that a shift to regarding the total water cycle rather than just the delivery bodies would encourage appreciation of the wide range of services provided by that water. In the Hawkesbury-Nepean these services include:

- environmental flows, necessary to maintain fish populations and fish breeding to support the commercial and recreational fishing industry
- town water supplies for Sydney, Illawarra and Blue Mountains, Gosford/Wyong, Moss Vale/ Mittagong, Richmond/Windsor, Lithgow and Goulburn
- irrigation water required to support agricultural and horticultural production, with over \$600million of irrigated product each year
- a clean and ecologically healthy river system that supports recreation and tourism expenditure of over \$1 billion a year
- electricity generation that supplies 23% of the state's supply
- social and environmental amenity for the growing urban areas of Western Sydney

The Authority submits that the IWCM principles need to be clearly set out in a Water Management Plan for the greater Sydney region and this Plan used as the overarching policy for all participants in the water cycle.

Roles and responsibilities of participants in the industry, both Government and private sector

The Authority is not unduly concerned about the unbundling of the water service delivery so long as there is a strong 'bundling' of the water planning, regulation and management policy to drive it.

As previously mentioned, the policy framework for water needs to be set out in a Water Management Plan which clearly sets the context, the objectives and the mechanisms for overall monitoring, reporting and review. This overarching policy will set in the broader resource context for the water industry and only then can the different roles and responsibilities be adequately identified and integrated.

Current arrangements are unable to deal with the very limited number of participants in the delivery of water and wastewater services in the Sydney Basin and the Authority considers this must be addressed before any additional participants are entertained. The inadequacy of the current arrangement is exemplified by the following case:

The allocation of water to irrigators in the Hawkesbury below Penrith, in the Nepean below Matahill Creek, and in South Creek is drawn mainly from treated sewage effluent flows. These flows are having a deleterious effect on river health. They are constant flows in a river that requires variable flows, and they contain too many nutrients. The flows are having an adverse effect on the environment of the river and on the commercial operations based on the river. The tourism, recreation, irrigation and fishing industries rely on a healthy river.

The simplest method of dealing with the constant flows and nutrients associated with STP discharges is to remove the discharges. However, the flows have been allocated to irrigators even though action by another regulator, DEC, may reduce their volume by diverting the water to reuse schemes. Such action would benefit river health, but affect adversely some irrigators unless the reuse was allocated to them through DEC.

DIPNR water sharing plans, DEC pollution licensing, IPART pricing policies, and DIPNR extraction licenses and water supply authority operations all impact on these river conditions. There is currently no regulatory framework which takes these interrelationships into consideration across the different service delivers.

The principles for pricing, including pricing for recycled water, that should be associated with existing and alternative industry structures

The Authority considers that the current system for determining water-pricing focuses on the supplier and does not place the supply of water in context. A supplier-driven approach tends to minimise a consideration of the overall costs of supply and then reflect

the result of these lower costs in pricing. It does not focus on the overall demand for water from a catchment or the impact on a catchment of the supply of that water. The Authority submits that an important principle for price setting for water must be to identify the true cost of supplying water, the total demand for the water and the wider costs associated with supplying that water.

In determining the appropriate pricing of water, the needs of all the beneficiaries and users needs to be considered, if the price is to support ecologically sustainable development. For example; this would require the cost of remediating the environmental damage caused by the loss of flow, for example, to be reflected in the cost of water. The lack of environmental flows is one of the key factors contributing to the poor quality of the health of the Hawkesbury-Nepean River and is a direct contributor to the recent outbreak of aquatic weed that has had a direct impact on other users and services. This will be an on-going need while there is insufficient flow to allow periodic flushing of the river. The cost of clearing the river of this weed needs to be reflected in the price of water. The Authority also supports the view that water pricing should better reflect the value and scarcity of the resource and thereby help to manage demand.

In determining the appropriate price for recycled wastewater, a total water cycle approach would suggest that recycled water should be delivered at a lower price from first use water. Differential pricing between first-use and recycled water would reflect the environmental costs that have been averted by not discharging constant flows of nutrient rich water to the river and would encourage its use in preference to first-use water thus signalling the more sustainable source.

The costs of treating water to a standard that will not harm the environment through excessive pollutants or constant flow discharges should be included in the costs of sewerage services. There must be a balance between deciding if the transport of that treated water to an acceptable reuse as against another form of disposal should be included in the costs of recycled water or in the costs of sewerage services.

The principles for access that should be associated with alternative industry structures

Rules for town water access to water supply should not only apply to the volume of water extracted. When water is accessed via run of stream (as it is on the Mangrove River or at the North Richmond Treatment Plant) time and place also need to be taken into account in order to allow for environmental flows to pass.

With natural river flows already over allocated, water sources will need to be sought elsewhere to service the South Western and North Western growth areas in the Sydney Basin. Stormwater harvesting and effluent recycling would appear to be the most logical new source options. The introduction of the Growth Centres Commission as a new entrant in the provision and oversight of water services to these areas provides an opportunity to manage water services as a more closed loop. The Authority submits that any impacts projected outside this loop need to be managed by the overarching IWCM policy framework applying to the larger area.

Access to treated effluent by third parties (as exemplified by the Services Sydney proposal) introduces another scenario, and highlights the need for the overarching IWCM policy framework. For example, the proposal by Services Sydney to use treated effluent to provide environmental flows to the rivers appeared to be merely using the rivers as receptacles for disposing of the treated effluent they are unable to sell. This demonstrated a need to have clear policy guidelines – in the case of environmental flows – to outline what they are and what they need to achieve.

Any impact on the environment.

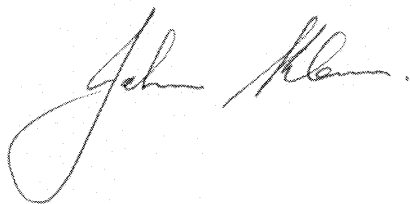
The Authority considers that the environment provides the context for the sustainable use and management of water. It is concerned that the reliance of Sydney on the Hawkesbury-Nepean environment for its wellbeing has been largely overlooked in the rapid expansion of the metropolitan area.

A number of all too obvious environmental impacts - such as the aquatic weed and algal blooms – can be directly contributed to the volume of water extracted and the substantial changes to river flow regimes by water services. Others, such as the degraded water quality, slow build up of sediments and loss of biodiversity, are more insidious. Achieving river health in the Hawkesbury-Nepean is dependent on the integration of common objectives and policy and the recognition of key environmental processes such as the inter-relationship of water cycle management and nutrient cycle management.

The Authority is responsible for instigating and guiding investing in catchment and river health. It is determined that the investment will be strategic, effective and not eroded by unresponsive and poorly integrated actions. To this end, the Authority will be guiding investment to where it has confidence that it will be sufficiently protected to deliver real benefits.

The Authority welcomes the opportunity for our Directors Bob Wilson and Jenny Smith to meet with you to discuss these matters further.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Klem', written in a cursive style.

John Klem
Chairman Hawkesbury-Nepean Catchment Management Authority