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SUBMISSION

ECONOMIC REGULATION AUTHORITY

INQUIRY ON URBAN WATER AND WASTEWATER PRICING

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INTRODUCTION

The Conservation Council of Western Australia welcomes this opportunity to comment on the pricing of water and wastewater in urban Western Australia.

When the Premier launched the State Water Strategy in February 2003 he announced that although the average Perth household consumes 350kL a year the only price increases would be for households that consume more 550kL. This was a disappointing decision. There is a need to use the pricing mechanism to encourage all consumers to be more careful with our precious water resources.

The Conservation Council is pleased that the Economic Regulation Authority is undertaking this review, and notes that the ERA has an obligation to consider all aspects of the public interest, including environmental outcomes.

URBAN WATER AND WASTEWATER PRICING

To date water extraction and provision has come at an environmental cost that has not traditionally been factored into the prices the consumer is charged. The Conservation Council is heartened that the ERA is seeking public comment on the subject of urban water and wastewater pricing. In doing this, it is acknowledging that the community must be involved if we are to move towards a more sustainable future. However, we are concerned that the decision making process to be used to arrive at water pricing recommendations is grounded in economic theories that assign no value to services provided by the environment (fresh water, clean air, etc). The process as outlined in Section 2 (p. 3) states that the approach involved the following:

- Considering first the water supply and demand situation and why government regulates the price of water
- Then considering the revenue requirements of each water service provider and how this should translate into pricing structures
- Reconsidering the initial recommendations on pricing if they are likely to have adverse impacts on, for example, social or environmental outcomes.

We consider that the process of setting prices should be grounded in sustainability, examining all factors – social, environmental and economic – BEFORE, not after determining pricing.

The principles on which decision-making should be based must be outlined clearly and the process must be transparent and based on community involvement.

The principles could include:

- The need for prices to include the true costs of environmental impacts of water extraction and use, reflecting the scarcity of the resource
- Fair and just prices for all sections of society
- The need to create incentives for water to be conserved, reflecting its scarcity.
- The need to reward those who conserve water
- The need to include incentives for the use of greywater

p. 23 – Environmental externalities

We agree with the Victorian and ACT approaches that will see providers and consumers contributing to the cost of water resource management in the form of environmental charges to reflect environmental costs. Licence fees for water users such as mining companies, irrigators, local government in WA, would assist in bringing the State in line with changes in other States where licence fees, to contribute to the cost of water resource management, are already levied.

Licence fees must be accompanied by increased Government funding for water resource management, which has declined over the past five years.

Pricing Structures

Tariffs should reward water conservation efforts by consumers. Signals to consumers about their water consumption must be more frequent than the twice yearly statements now received in WA. Water bills must be made smarter with increased information provided to consumers on usage, incentives to switch to monthly bills and a free auditing service and water saving action plans for large users. Visual and more frequent bills will provide a more direct relationship between usage and cost and will serve to reduce consumption. The Victorian rising quarterly block consumption levels serve to reward efficient users and penalise excessive water use. They also introduce a seasonal element into the pricing framework.

The present Perth metropolitan tariffs are unacceptably low. We are advised that the price of water consumed between 550-950 kilolitres is only $1.20 per kilolitre, and that for water consumed above 950kl the price increases to $1.50 per kilolitre.

It is noted that for most consumers Perth's water is cheap when compared with water in other Australian cities. Given the precarious nature of Perth's water supply Perth should have Australia's most expensive water pricing structure.

Maintaining present water restrictions

The average Perth household consumes approximately 350kL per year. In most households more than half of the water (175kL per year) is used to maintain gardens with exotic species that require high levels of watering. The present water restrictions are considered a first step in sensitizing the Perth community to the need to convert their existing gardens to water wise gardens. Well designed gardens, that contain locally indigenous native species, can be both aesthetically pleasing and extremely water efficient.

Ensuring protection for vulnerable groups – eg large families, pensioners.

We recommend the development of a series of water savings packages providing alternatives for those who apply with genuine cases of hardship. Packages could include caps on water charges, water saving products such as low flow AAA rated shower heads, water flow constrictors etc.

Water Quality

Where possible water quality should match the purpose for which it is used. Fully treated water for instance is not necessary to water the garden. Industrial users often use water of a quality much higher than that needed. The use of greywater and rainwater must be encouraged and pricing differentials will assist in this process.

Responses to specific questions raised in the issues paper

Are the demand projections for the IWSS reasonable?

The projections show a slight decrease in per capita water demand. When combined with population growth the projection suggests a slight increase in total annual water demand to 2010. Given Perth's present water usage trends these figures appear to be overly optimistic.

What level of security should be incorporated into future supply (i.e. what level and frequency of water restrictions is acceptable?)

Water restrictions should be applied so that the community is directed towards greater water use efficiency.

What is the most efficient future water source option for meeting the projected demand?

Well implemented demand management. Desalination that uses renewable energy but not discharging into shallow protected waters such as Cockburn Sound.

Is it appropriate to use water pricing to achieve all of the purposes that are outlined above? Would it be more efficient to use other approaches to achieve these purposes? Is it appropriate to use water pricing to achieve other purposes, such as environmental objectives or water resource management?

Water pricing should be used as a means to achieving better water efficiency and for internalising the external costs of water resource exploitation. Water prices must include a charge to cover the cost of managing them sustainably.

How can pricing policy be used to give water service providers incentives to achieve efficiency gains?

Water service providers could receive bonus payments from government when efficiency targets are met. Unused water quotas could be sold to the Government, but not traded.

How far ahead should prices be set?

They should be reviewed annually by an independent body and adjusted to reflect changes in costs of supply and management. This should be independent of political interference.

How should unexpected revenue variations be shared between customers and shareholders?

Essential services, such as water supply, should not be exposed to the investment requirements of shareholders. Unexpected variations should be covered by the consolidated revenue fund or by the Water Corporation's reserves.

How can water pricing be used to give water service providers incentives to achieve improvements in service standards?

Water service providers could receive bonus payments from government when service standards are met. They should be fined if water quality standards are not met and rewarded for good performance.

Should the price setting approach that is applied to Aqwest and Busselton Water be different to the approach applied to the Water Corporation?

The methodology should be the same but the input costs and charges will differ. If the Government decides to subsidise rural water supplies, this subsidy should come from CRF and be transparent to the public.

How should the value of initial regulatory asset bases be set taking the CoAG pricing principles into account?

The value of our water resources and associated infrastructure must be included in the pricing model. This is not a difficult exercise. The UWA did a costing of the Jandakot groundwater resource and infrastructure for the Water Corporation several years ago. Depreciation of infrastructure and management and enforcement costs should also be included.

How should the regulatory asset base be rolled forward and in particular how should depreciation be valued?

This is simple for the infrastructure. For the resource itself the rental cost of the land set aside for catchment could be used.

What gearing ratio should be used?

The current bank interest rates on large loans.

What cost of debt margin should be used?

The current bank overdraft rate.

What are the pros and cons of adopting a pre-tax versus post-tax approach? If pretax is recommended, which tax rate should be used (an effective tax rate or the statutory tax rate?)

A post tax approach is preferred

What are the pros and cons of adopting a real versus nominal approach?

A nominal approach is acceptable for a trial period, but a real approach should be adopted as soon as possible.

What risk free rate should be used?

This should be set by Government policy.

What level of the market risk premium should be used?

This is also a decision for Treasury.

What level of the equity beta should be used?

Seek advice from Treasury

What financial indicators should the Authority use in assessing the ongoing viability of each water service provider?

Annual turnover, profit margin, loan debt, trends in these indicators over the past decade

Is the level of the Water Corporation's dividend payout ratio and gearing ratio appropriate?

This is a decision for Government, but it should be transparent.

Should Aqwest and Busselton Water be required to pay dividends to government?

No, but they should be required to cover all costs including resource rent and depreciation.

Are the standards of service in the operating licences appropriate?

Yes, they should conform to national best practice.

Are customers willing to pay for higher standards than they currently receive? If so, to what extent and in relation to which standards or services?

Some regional water supplies are sub-standard and need to be improved. The Water Corporation's management of the environmental impacts of source development and sewerage extension is poor and more needs to be spent on this area. The desalination plant must use renewable energy, for example, otherwise it is just contributing to global warming.

Are there any issues not already identified in relation to the management of water resources in environmentally sensitive areas that should be considered by the Authority in this inquiry?

The Water Corporation needs to spend more on the management of its water resources and in repairing the damage it has done to the environment in the past. It has incurred a huge environmental debt by damming rivers and digging up parks for pipelines and this damage must be repaired. This is a large external cost which must be internalised and paid via water charges as soon as possible. Wastewater treatment plants should not be allowed to discharge into the ocean and this waste water should be completely recycled

and reused as it is in many other countries. The cost of doing this is currently externalised but it must be internalised if the water industry is to become sustainable.

Are there any matters for consideration by the Authority relating to the standards that are required in licences issued by the CEO of the Department of Environmental Protection?

Yes. Sustainability must be the basic principle of all of these operations. The licences must address all of the key technical, economic, social and environmental issues raised by the operation in order to ensure that it is sustainable.

How efficient are each of the water service providers' operations?

The Water Corporation's operations are not efficient at present in an economic, social or environmental context. Pricing does not reflect true costs and does not provide incentives for efficiency. Social and environmental costs are mostly externalised and this is inappropriate.

What opportunities are there for efficiency gains to be made?

This is a great opportunity to address the WA water crisis by developing an efficient pricing model that will facilitate sustainable management of the State's water resources. The resource rental, depreciation and external costs must be calculated and included in the model. All subsidies must be transparent and contestable.

Are the capital expenditure programs of each service provider appropriate?

No. The Water Corporation spends too much on new source development and not enough on water conservation and network maintenance (especially the sewerage network). More funding should be devoted to finding and repairing leaks and in replacing inefficient equipment such as older water using appliances.

What other matters should the Authority consider in making recommendations on required revenue?

The need to address sustainability seriously.

Should prices play a greater role in reducing demand when water is in short supply?

Yes. Pricing is one of the most efficient ways of achieving efficiency, but not the only way. Education, market reforms and regulations are also important policy levers, but in

times of scarcity, pricing should reflect the real value of the resource, as it does to a greater extent with fuel pricing.

Should the water usage charge make up a greater amount of the total water bill?

Yes, if the full costing indicates this. The water supply, sewerage and drainage charges all need to be reassessed on a sustainability basis.

Should the number of steps in the progressive tariff scale be reduced?

Steps are not necessary. The tariff should be exponential, not linear and the steps should by eliminated. This will discourage water wastage more effectively.

Should usage charges reflect the cost of developing the next most efficient water source?

Yes, along with other issues noted above.

Should water prices be charged on a seasonal basis?

This would be a good way to stop people wasting water in winter, when it is not necessary to water the garden. However regulation is probably more efficient for this purpose.

Is the low rate for the first 150kL of usage effective? If not, how could a discount to low water using households be delivered more effectively?

An exponential model is preferred, although a threshold has some advantages. 150 kL is too large for a threshold however.

Can the approach to charging residential customers for wastewater services be improved? If so, how?

Yes, it should be based on the number of toilets per residence, not on the property value. Stormwater drainage charges should be based on the cost of the scheme, averaged over all of the beneficiaries. Costs should reflect the real costs as much as possible in order to achieve efficiency and sustainability. Subsidies to disadvantaged groups are acceptable as long as they are determined democratically and transparently.

To What Extent Should Water Pricing Involve Cross-Subsidies?

Cross subsidies should not be involved. All subsidies should be clear and transparent and based on strong arguments which must be reassessed from time to time.

What other matters should the Authority consider when making recommendations on pricing structures?

Billing should be more frequent to achieve educational objectives. The pricing structures need to be reviewed regularly to ensure that they are effective.

How should the Authority assess the impact of the pricing recommendations on social outcomes; environmental outcomes; the level of government funding; borrowing, capital and dividend requirements; and inflation?

This can be done via consultation and public review and by reviewing the reports such as the State of the Environment Report, the EPA reports on various water resources projects and figures on water consumption.

What other impacts should the Authority be aware of?

These have been discussed above. Sustainability must be the overarching objective.

APPENDIX I – PRINCIPLES FOR THE WATER RESOURCES MANAGEMENT REGIME

Principles for the Water Resource Management Charges Regime
Prepared by Conservation Council of WA and WWF Australia
8 April 2002

The Conservation Council of WA and WWF Australia have jointly prepared the following key principles and recommendations for the proposed Water Resource Management Charges (WRMC) regime that the Water and Rivers Commission.

1. The objectives of the WRMC regime should be to :
   1. to ensure a sufficient investment in water resource management to ensure sustainability of that resource and environmental enhancement;
   2. to signal and provide an incentive for efficient water use and distribution.
2. The WRMC regime should be designed to contribute to the 3 following purposes: 1. recovering costs of water resource management and use; 2. redirecting subsidies to water use into generating environmental and social outcomes; and 3. providing an appropriate signal to water users regarding the optimal use of water.
3. The charging framework needs to be developed as an integrated part of the State Water Strategy, since its effectiveness depends on a range of other mechanisms and management systems, such as water trading, property rights, allocation procedures and institutional arrangements.
4. Revenue raised must be in addition to the existing budget for WRC, not used as 'cost shifting' from consolidated funds. The revenue must be placed directly into a Trust Fund dedicated to Water Resource Management expenditure rather than into consolidated revenue.
5. The expenditure of the revenue will need to be transparent.
6. The setting of prices should be performed by an authority independent of the WRC, and must ensure appropriate social and environment outcomes of water pricing.
7. Before the WRMC regime can be designed, we need to determine what the appropriate level of water resource management is for Western Australia, and what performance criteria and benchmarks should be used for determining this. (All stakeholders agree that current levels of funding are insufficient)
8. WRMC regime should be designed to achieve full cost recovery. That is, the costs of operations, maintenance and external costs of water use and a rate of return from relevant water infrastructure should all be recovered, as well as the costs of environmental management and rehabilitation where water use has caused environmental impacts and degradation.
9. A resource rent component should be included as part of the WRMC regime (i.e a charge per volume of water consumed.).
10. The definition of water resource management needs to be set out clearly. This definition should be broad to include all aspects of water resource management, including, amongst other things: water resource investigations; water resource monitoring; water allocation planning; water licensing; water quality protection;

wetland conservation; waterways and catchment management; identifying and managing environmental water flows (ecological water requirements).

11. Principles for appropriate cost-sharing need to be established. The cost-sharing approach to WRMC should be based predominantly on the impactor-pays principle (i.e producers and consumers meet the external costs of their decisions).
12. Current and new water users should contribute to remedying damage from past water use, and contribute to those activities that safeguard the integrity of the environment.
13. Social impacts assessments and environmental impacts assessments of proposed decisions should be undertaken to support the design of WRMC regimes and water pricing decisions.
14. Where the Government believes that subsidies to particular water users (eg. irrigators) are justified for equity reasons, these users should be subsidised directly rather than through reduced prices, which encourages uneconomic and inefficient use of water.

APPENDIX II - PROPOSED WATER RESOURCE MANAGEMENT CHARGES FOR WA

Conservation Council of WA and
WWF Australia
Joint Submission to
Department of Environment, Water and Catchment Protection on
Proposed Water Resource Management Charges for WA
17 January 2003

CCWA and WWF strongly support, in principle, the introduction of a new Water Resource Management Charge (WRMC). As will be outlined in this submission, our support for a specific WRM Charge regime will depend on the details of how the model for the charges is designed and how they are proposed to be implemented. This submission will outline principles on a range of issues directly related to water pricing, but also to the context of pricing within a broader water resource management framework.

The issues to be covered are as follows:
1. Separation of pricing regulator and functional regulator;
2. The purpose of water pricing;
3. The definition of water pricing;
4. Full cost recovery and the determination of a full-cost recovery level, including the determination and treatment of externalities;
5. Determining cost-shares related to water resources management and the difficulty of applying principles;
6. Structural adjustment and the role of pricing versus other mechanisms
7. The relationship between water pricing and overall water resource management

Prior to discussing these issues in detail it is important to consider the need for appropriate funding of water resource management, and the role pricing should play in determining funding.

CCWA and WWF, and many others, recognise the Department of Environment, Water and Catchment Protection (DEWCP) is severely under-funded to fulfil adequately its legislative responsibilities. It is essential that additional funds are provided by the State for water resource management generally, and to DEWCP specifically for its legislated functions.

CCWA and WWF support the Government in developing a water resource management charge that reflects full-cost recovery from water users so as to reduce the subsidy provided by current WRM arrangements. For example, the low water prices irrigators are currently charged in Western Australia need to be reviewed, and increased. However, cost recovery from water users does not imply that sufficient funds are being invested in

sustainable WRM. New WRM charges must not simply result in 'cost shifting' from consolidated revenue to the separate WRM charges. It is important that the DEWCP budget be sustained so as to focus on its regulatory functions, and not be reduced by the level of cost-recovery.

Each of the issues will now be covered, given that basic position.

Separation of pricing regulator and functional regulator

Our groups support the intention of the WA Government of establishing an independent pricing regulator. This will increase the transparency of the process to the public. From our experience, however, many community and NGO participants are excluded from effective participation because the information considered by the pricing regulator is often overly technical and too narrowly focussed on economic outcomes. It is important to establish the pricing regulator with a sufficiently broad charter, according to ESD principles, and to ensure sufficient skills and expertise to ensure that social and environmental aspects of water prices are given sufficient weighting with the economic. The transaction costs to the Government, irrigators and community groups can be very high in participating in pricing processes, hence the design of the process is very important. The following recommendations are relevant to both the current Economic Regulation Authority Bill 2002 tabled in the WA State Parliament in December 2002, and the current review of the Water Services Coordination Act.

Recommendations:

1.1 That the Government establish a pricing regulator with resources and capacities to ensure appropriate social and environmental outcomes of water pricing;

1.2 That the Government consider different models for designing how the pricing regulator functions, to increase transparency, increase accessibility and minimise costs of participation in the process.

2. Purpose of water pricing

There are several purposes of reforming water prices to be a useful water resource management charge. These include:

- Recovering costs;
- Redirecting subsidies to water use into generating environmental and social outcomes**;**
- Providing an appropriate signal to water users regarding the optimal use of water**.**

In this submission, it is considered that a water resource management charge needs to be designed to contribute to all 3 objectives. That is, we recommend that a WRMC covers cost of service delivery, includes external costs, and has a resource rent component.

There are significant debates as to the success or failure of water charge mechanisms in achieving water use efficiency savings. It is important that the Government analyses and

explains to the community what purpose or purposes the WRMC will have, and the expected outcomes.

It is particularly important for the WRMC to be considered in relation to other aspects of water resource management, such as water allocations, water property rights, water trading and water quality. At present, due to the insignificant levels of water trading in WA, it may seem such an approach is unnecessary, however it would be best for a framework to be developed which is robust enough to deal with changing circumstances. The presentation to the CCWA demonstrates that many issues are covered which are not charging issues as such, but relate to these broader issues. Allocating rights, for example, represents a transfer of wealth, or costs, between parties. The charge for water needs to take such transfers into account.

3. The definition of water pricing

We consider that water pricing must ensure that Government subsidies to water users are removed, or where considered necessary are fully transparent and justified, according to CoAG principles. We agree generally with the definition of cost-recovery stated by CoAG, meaning that water management charges should recover the cost of operations, maintenance and external costs of water use and a rate of return from water infrastructure, with the exception of the approach to "resource rents" to be covered later.

Given our general support for the definitions, we are disappointed however, by the way in which these definitions have been implemented by jurisdictions. Water prices do not reflect external costs as they are either not measured or not effectively incorporated into charges. Externalities have generally been included, if at all, by estimating the proportion of costs of water resource management to be attributed to users. This is flawed because it estimates the cost of rehabilitation and not the cost of the damage associated with water use. Secondly, it assumes that the "right" amount of rehabilitation is being undertaken, which is not a valid assumption when agencies are under-resourced, and environmental problems are growing.

The problem with the definition used by CoAG is that it ignores the potential for a resource rent in relation to water charges. There are many debates about the applicability of a resource rent to water, and this issue is often dismissed as a "wealth transfer" issue between the Government and individuals. However, our groups reject such criticisms of a resource rent and request the Government to consider building this into the WRMC. The low prices for water in Australia have led to inefficient water usage with consequent adverse environmental and social impacts. These low prices have allowed water users to generate profits, where possible, or stay in business inefficiently, where not. A resource rent is an important component of a WRMC where profits from the use of water are provided as a "windfall" to water users. It is more important also in a context where external costs of water use are high, unmeasured, and unaccounted for in current charges. The resource rent component of a WRMC must also be hypothecated, as should the full-cost recovery components. That is, instead of going into consolidated revenue, all the WRMC revenue should be put directly into a Trust Fund or other arrangement that is

established to provide funds solely for water resource management. It is important such hypothecation is designed appropriately, with support from water users and the broader community. Previous failures of such schemes have shown the public wants to be sure that the funds raised would actually be used for their stated purpose.

Recommendations:

3.1 That the Government seek to design an appropriate pricing structure, including full cost recovery, appropriate signalling of the cost of resource use, and a resource rent, to ensure that windfall gains are not generated from low water prices and that charges are used to improve environmental and social outcomes from water use.
3.2 That all WRMC revenue is directly allocated exclusively for water resource management expenditure.

3. Purpose of water pricing

There are several purposes of reforming water prices to be a useful water resource management charge. These include:

- Recovering costs;
- Redirecting subsidies to water use into generating environmental and social outcomes**;**
- Providing an appropriate signal to water users regarding the optimal use of water**.**

There are significant debates as to the success or failure of water charge mechanisms in achieving water use efficiency savings. It is important that the Government analyses and explains to the community what purpose or purposes the WRMC will have, and the expected outcomes.

It is particularly important for the WRMC to be considered in relation to other aspects of water resource management, such as water allocations, water property rights, water trading and water quality. At present, due to the insignificant levels of water trading in WA, it may seem such an approach is unnecessary, however it would be best for a framework to be developed which is robust enough to deal with changing circumstances. The presentation to the CCWA demonstrates that many issues are covered which are not charging issues as such, but relate to these broader issues. Allocating rights, for example, represents a transfer of wealth, or costs, between parties. The charge for water needs to take such transfers into account.

4. Full cost recovery and the determination of a full-cost recovery level, including the determination and treatment of externalities

Experience in other States has shown that there is significant controversy over what comprises full-cost recovery. Water resource management costs are a significant part of the controversy, but such matters as rate of return on assets are a particularly hot issue also. A framework for dealing with these issues, and learning from the other States' experiences, while tailoring an approach best for WA, needs to be developed.

The controversy ends up centering on a question of "Who pays?", but we argue that there are two parts to the question that should be separated. Firstly, what is the total level of cost? Secondly, how should these costs be shared?

It is ideal that external costs are directly estimated, however there is significant literature to suggest this is very costly, as well as technically difficult, in "diffuse" cases such as agricultural water use. However, this should not deter the Government from considering putting in place a process of measurement and management.

In the case that the Government takes resource management costs to be the best estimate of externalities (on the basis of rehabilitation or prevention of damage), these costs must include, among other things:

- the costs of remediating broader environmental impacts;
- rehabilitation of water resources (e.g. catchments, waterways and wetlands);
- ensuring ecological water requirements and environmental water provisions (environmental flows) are established and maintained;
- resource assessment costs;
- water allocation and licensing;
- water quality protection;
- waterways and catchment management.

A particular problem that has emerged in NSW has been in relation to the terms of reference of the price regulator. The price regulator is only enabled to consider price paths from one agency, the Department of Land and Water Conservation, even though other agencies incur WRM costs attributable to water use. The price regulator must be able to determine full cost recovery on the basis of costs incurred by all relevant Government agencies for water resource management to reflect the environmental expenditure of the Government as a whole.

This would require consideration of the costs of development and implementation of relevant state Government policies, such as the:

- Draft State Wide Groundwater Environmental Protection Policy (EPP);
- Swan Coastal Plain Wetlands EPP;
- Wetland Conservation Policy for Western Australia;
- State Water Quality Protection Strategy;
- State wide monitoring programs for waterways, wetlands and groundwater.

Many of these have been long neglected, not completed, and delayed, or implemented too slowly due to lack of Departmental resources to complete them.

The exact structure WRMCs (including any tiered approach to a volumetric component of the charges) would need to be explored and determined carefully to ensure the charges are equitable, especially for low income and more vulnerable water users, and that basic human needs for water are met.

5. Determining cost-shares related to water resources management and the difficulty of applying principles

At this stage, the CCWA and WWF do not support the "beneficiary pays" principle, however this requires explanation.

Our experience suggests that there is general confusion even among experts, let alone the general public, as to the specific interpretation of the particular payment principles, such as beneficiary pays (comprising "user pays" and "beneficiary compensates" and impactor pays).

The principle of user pays (as a sub-principle of beneficiary pays) applies very well to the actual water delivery (operational) components of a water resource management charge. It becomes much more complicated in relation to non-operational matters, such as maintaining wetland quality.

We have observed that, due to a lack of clarity over whether the beneficiary is the water user or the wetland user, widely different interpretations of "beneficiary pays" and "impactor pays" principles have been used. For example, if a wetland is damaged by water extraction, there are a number of ways at looking at who is a beneficiary – and of what:

a) ***The community is the beneficiary***, so the Government pays: the water users disclaim responsibility for the wetland damage since it is downstream of their extraction points and farms; the broader community values the biodiversity, fish and ecological services of the functioning wetland system
b) ***The users and the Government are beneficiaries and cost-sharing is required***: a combination of rehabilitation measures and reduction/ removal of abstraction licences will be required to address the wetland damage. Users wanting to continue to benefit from the water are beneficiaries and should contribute to rehabilitation measures.
c) ***The users as impactors pay*:** continued over-abstraction causes continued damage to the wetland, causing the public to bear the cost of water use. The users, as impactors, would be required to pay the costs associated with the wetland damage, or as a proxy, its rehabilitation.
d) ***The community as impactors pay:*** changed community perceptions are seen to have resulted in new community standards, requiring rehabilitation measures when damage has been accepted in the past. Therefore the community are impactors. We note that our groups strongly disagree with, and oppose the use of, this interpretation of the impactor pays principle.

The above shows that without clear interpretation of the principles, there is ample room for confusion, and the use of the principles to justify any position, thus rendering them useless. In practice, the end result of a sharing of the total costs will be based on judgement, and some combination of the principles. One strength of the NSW approach is the public debate about the cost sharing percentages. It is not desirable to adhere to the principles in a mechanical way, replacing judgement as needed.

In light of the above, in the case of costs associated with the water resource management, the guiding principle we argue should be the impactor pays principle. The productivity commission defines this as requiring "producers and consumers to meet the external costs of their decisions. Thus it generally implies the Government's cost share for conservation is zero (unless the Government is an impacter). This principle is reflected in policy approaches that compel resource users to conduct conservation activities or to refrain from activities or practices that have adverse impacts on biodiversity". This view seems to be the most appropriate in the current circumstances as an aim for policy reform. Further, where the Government is an impactor, through the development of infrastructure etc, this does not mean the Government should pay. It means the costs should be determined in the total costs, and passed on to water users on a predominantly impactor pays basis. One final comment on the proper principle to apply is that while the principle should "predominantly" be impactor pays, this is not to say our groups do not support a cost-sharing with Government where there has clearly been Government policy failure in the past, or where current users are made responsible for problems that are clearly not of their making.

In terms of process, the NSW example highlights a further potential difficulty to be overcome. When the pricing tribunal developed its initial view on cost-shares, the intention was to have a process of debate and discussion as to the appropriate cost-shares over time. However, the water regulator took the cost-shares as "given" and challenged very few of these in the subsequent pricing round. IPART stated this was not their intention. The point to consider is that arbitrary decisions can easily become "set in stone" and the best outcome may not be generated if the debate is stifled or avoided.

Recommendation:

5.1 That the WA Government clearly defines the basis for a cost-sharing approach to WRM charges, based predominantly on the impactor-pays principle.

6. Structural adjustment and the role of pricing versus other mechanisms

Water pricing should in effect be separate from the broader approach to structural adjustment. One practical problem with reforming the water price for water users, especially when including externalities and other cost components formerly not in the price, is that there will be political resistance on the basis of negative social impacts. This is of course a major policy dilemma.

CCWA and WWF argue that the approach to pricing must not be constrained by structural adjustment needs. The essential element in pricing is to determine the price that needs to be charged to ensure the efficiency of the use of water in a way which protects the environment. Currently, water price changes are restricted on the basis that the social impacts are too great. There are few, if any, publicly available social assessments on the impact of water price changes, and the arguments put forward for keeping the price of water low are rarely justified transparently.

This is not to say the social impacts are unimportant, in fact the opposite. Given the fact that water use has been subsidised by the Government in terms of lack of cost-recovery on operational costs, and in lack of inclusion of relevant costs, such as externalities, there is no doubt that increasing the water price will have a negative impact on water users in the short term. However, this is no reason to delay the reforms. It is every reason to ensure that appropriate structural adjustment assistance is in place for those demonstrating hardship in the reform process. This is essential to ensure that the support of water users is not an ongoing activity through the water price, but is in fact a targeted program to assist particular users for a defined period of change to produce a particular outcome.

Recommendations:

6.1 That a methodology for conducting social assessments of the impact of water price increases on users is made available, and assessments are undertaken to support pricing decisions.
6.2 That the pricing regulator specifies in price determinations the level of social impact estimated from price increases, to be addressed by structural adjustment mechanisms separate to the water price. Criteria for eligibility for structural adjustment need to be developed carefully, to, inter alia, ensure that it is only provided in cases where the impacts of price changes result in hardship. The Government would need to allocate the responsibility and resources to implement the adjustment to the appropriate agency.

7. The relationship between water pricing and overall water resource management

In addition to the above point, it is important to consider the relationship of water prices to other aspects of the water resource management framework, given that water pricing has only a part to play in the overall picture.

As the CoAG water reform process reiterates, the water price is part of a water resource management process including issues of water quality, water infrastructure, water allocations and property rights, water trading, institutional arrangements and more.

Our groups are concerned that arguments to reform water prices on the impactor pays principle are often rejected on the grounds that it does not provide a major incentive for change given failure in institutional arrangements in other aspects of the reforms. It is argued also that because prices are so low it will not change water demand or lead to greater efficiencies. None of these arguments presents a strong case to continue subsidising water use. They are in fact arguments to show how reliant industry has become on cheap water.

However, it is true that water pricing is going to be heavily dependent on a range of other initiatives, all of which are controversial and require consultation and participation for them to work.

As mentioned above, water trading presents major windfall gains to users at the expense of the public when water rights are purchased at subsidised prices. This presents an important argument for a resource rent or auctioning entitlements.

A system of water property rights, water trading and water pricing are interdependent, and are totally reliant on metering, monitoring and compliance systems. In practice these are under-resourced and also given low priority because they are costly and controversial. However without such systems, there can be little confidence in the water reform process achieving its environmental objectives.

Our groups believe all private bores, including domestic bores should be licensed and have WRMC imposed on them. This would assist in the monitoring and managing the environmental impact of these bores, and help ensure bore water was not wasted. It would also ensure a more consistent application of WRMC across public water supply customers and self suppliers, and address the publicly perceived inequity of self suppliers getting 'free' water, while scheme water users don't.

Recommendation:
7.1 That the water resources policy framework required to support an effective water pricing reform, based on an impactor-pays approach, be defined and implemented through the State Water Strategy.