

Submission to Independent Pricing and Regulatory Tribunal on:

**Draft Report:
Bulk Water Prices from 1 October 2001
Department of Land and Water Conservation**

A Submission prepared jointly by the:

World Wide Fund for Nature (WWF) – Australia

Australian Conservation Foundation (ACF)

Nature Conservation Council of NSW (NCC)

Inland Rivers Network (IRN)



Professor Tom Parry
Chairman
Independent Pricing and Regulatory Tribunal
Level 2, 44 Market Street
SYDNEY NSW 2000

Dear Professor Parry,

This submission on the Draft Determination by IPART of Bulk Water Prices has been provided by the combined environment groups of the World Wide Fund for Nature (WWF), the Australian Conservation Foundation (ACF), the Nature Conservation Council of NSW (NCC-NSW), and the Inland Rivers Network (IRN). The combined groups appreciate the opportunity to comment on the draft report.

We recognise that the Tribunal has moved forward in terms of improving the efficiency of bulk water charging through this round, and commend the Tribunal on moving towards an impactor pays definition of cost allocation and increasing the level of water resource management costs considered. However, we have significant concerns about many issues related to the new approach which adopts the recommendations of the ACIL and PWC/DPWS consultancies. We also have some outstanding concerns from our previous two submissions to IPART, which we consider require further resolution.

Specifically, our submission addresses issues related to:

- The definition of impactor pays;
- The concept and implementation of the legacy costs approach;
- The approach towards community standards;
- Water resource management costs;
- Costs incurred by other agencies;
- Full cost recovery issues;
- Price path issues;
- Structural adjustment issues;
- Environmental expertise of IPART and the approach to ESD

In addressing these issues, the submission puts forward a range of recommendations. Some of these recommendations could be addressed in the current determination, while others could be addressed in the period between this determination and the next. The major recommendations include the following:

Rec 1: That IPART adopts a simplified definition of impactor pays based on the polluter pays principle.

Rec 2a) That IPART does not apply the legacy cost approach, and current and future costs are allocated to users on a predominantly impactor pays definition as provided above;

Rec 2b) If the legacy cost concept is applied in the short term, that:

- i) The definition of legacy cost is restricted to poor maintenance only, with environmental compliance costs treated as a current cost.

- ii) A sunset date is established where the legacy cost concept will no longer be applied;
- iii) The percentages of legacy costs allocated to water users increase over time to reach impactor pays percentages at the time of the sunset date.

Rec 3: That, should IPART adopt the legacy cost approach, a 0% legacy should not be applied where the community standard was clearly higher than performance in 1997.

Rec 4: IPART should commission research to determine the appropriate level of water resource management (WRM) costs based on the best available science.

Rec 5: That IPART sends a clear signal that the 93% cost recovery level in the regulated rivers is an over-estimate and that the level of cost recovery will need to increase in the future.

Rec 6: That IPART directs DLWC to ensure that all costs of the NSW Government in managing water resources is included in the cost base for determining cost recovery from users.

Rec 7: That IPART allows water charges to increase more rapidly, so that full cost recovery can be achieved over a shorter period, and seeks assurance from the NSW Government that sufficient structural adjustment measures are in place to assist marginal farmers

Rec 8: That IPART introduces environmental expertise into its determination process, and develops a means of analysing the environmental costs and benefits of its determinations.

The details related to the above comments and recommendations are provided in the following submission. Should you require further clarification of any of the points made, please do not hesitate to contact us. We look forward to seeing the final determination.

Yours sincerely

Warwick Moss
Economic Policy Officer
World Wide Fund for Nature (WWF)
Ph: 8202 1219

On behalf of:

Stuart Blanch
Healthy Rivers Campaign Coordinator
Australian Conservation Foundation
Ph: 9247 8564

Jen Guice
Water Policy Coordinator
Nature Conservation
Council of NSW
Ph: 9279 2522

Greg Williams
Coordinator
Inland Rivers Network
Ph: 9247 6267

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1 Introduction:

The combined environment groups generally support the direction of the water reforms and the role of the National Competition Council and IPART in assessing and reviewing implementation principles. We recognise that the draft Determination by IPART represents a significant step forward in improving the efficiency and equity of the bulk water pricing process. There are however uncertainties as to how the newly proposed pricing model will operate in practice, and the environment groups have reservations which will be outlined in this submission. Further, the environment groups consider there are matters that we contend have not been adequately resolved by the tribunal's deliberations. We are worried that various recommendations on cost recovery and cost sharing proposed in the Tribunal's draft report will substantially inhibit progress towards improving river management and rehabilitation during the next three years. These will be outlined, with recommendations for future action, in this submission.

In brief, the environment groups commend IPART's decision to accept the Water Resource Management expenditure submitted by DLWC. As with ACIL, the combined environment groups contend these are likely to be understated at present, and certain to increase in the future. The environmental groups concur with IPART in that the impactor pays approach provides a preferred method of allocating WRM costs to users. We are however, uncertain on the impact of applying the total allocation methodology proposed by ACIL and accepted by IPART at the catchment management level. It is important that WRM costs are sufficient to meet environmental requirements and are allocated fairly to users and the community.

The environment groups are not convinced the increases in prices are sufficient to meet water resource policy requirements, as documented in our original submission, and do not believe that sufficient cost-recovery is being achieved from unregulated or groundwater users. A major concern in relation to the draft submission relates to the definition and treatment of legacy costs. It must be stated up front that we do not fully understand the ACIL report on this issue, and can not support the approach. In particular, we are uncertain as to what the implications of locking in this approach will be over time.

The environment groups believe that this pricing round made progress in moving towards an improved basis for achieving full-cost recovery, with appropriate signaling of the importance of achieving sustainable water use. We consider it vital that over the next three years further progress is made to ensure the next determination is an even greater improvement. Specifically the issues of concern, and our recommendations for future action, are outlined below:

2 Definition of the Impactor pays principle:

As stated in previous submissions, the combined environment groups support the application of predominantly (with recognition of the need for cost-sharing) the impactor pays principle. The environment groups are pleased by the acceptance of this principle by IPART and the ACIL consultancy.

The definition of impactor pays in the draft determination is ambiguous and excessively complicated. We consider that completely opposing arguments can be presented under the definition provided, which means it does not achieve its aim of simplifying the decision making process. The ambiguity of the definition is demonstrated in the legacy costs discussion below.

We propose a simplified definition based on the principle of polluter pays (certainly for regulated rivers). The impactor can usefully be seen as the owner or manager of water assets, and the extractive users of water related to those assets. This recognises that no matter what other uses are made of water and the water assets (eg environmental or recreational uses), the assets are in place to provide water users with water. This in no way prevents the broader community from sharing costs with water users, however it establishes a simple and basic definition as a starting point for cost allocation.

Recommendation 1:

That IPART adopts a simplified definition of impactor pays based on the polluter pays principle.

3 Legacy Costs:

The combined environment groups do not support the concept of legacy costs as recommended by ACIL, or incorporated into the draft Determination.

The reasons for our objection are as follows:

- 1) The concept is confusing, difficult to implement, and would require extensive resources to be applied by all stakeholders to consultation on the appropriate cost shares at the sub-product level. We do not consider the concept of ‘legacy costs’ has a sound basis in economics theory, or at most it is tenuous and has no clear precedence in other areas of public policy.

We recognise the attempt by ACIL to move the process forward, but consider that the approach is too complicated and fails in providing clarity and relative simplicity. For example it does not help resolve a conflicting issue about whether a structure should be modified. For example, consider the case where a structure is causing thermal pollution or restricting fish passage, and requires a modification on the basis of “increased community standard”. Why should the community prefer to pay the full cost of this modification over an extended period, when it could possibly pay less, once-off, to remove the asset. Clearly then, if water users wish to retain the asset, and the level of “service” provided by this asset, they would prefer to contribute to keeping the asset. A further example would relate to health and safety requirements. Why would the community wish to pay all the costs of an upgrade for health and safety purposes when it would be cheaper to lower the amount of water stored by the

asset? If the water users wish to retain a higher level of water storage surely they would wish to contribute to its retention.

Our understanding of 'legacy costs' is that it is a combination of the more conventional economics principles of 'sunk' and 'ongoing' costs that verges on being arbitrary. We feel that the application of these two principles of economics is more applicable and easily applied. Whilst we do not agree with the '1997 line-in-the-sand' and the associated 'write-off' of physical assets, as stated in our previous submissions, because of the huge windfall and perverse subsidy to water users, it only applies to the costs that have been sunk into the infrastructure. All ongoing costs associated with the operation, maintenance and upgrading of physical assets irrespective of whether they are the result of increasing community expectations or whether they were altogether new standards, these costs must be borne significantly by the water users.

We are concerned that the definition of legacy costs is far too broad, and can theoretically apply to almost any current and future cost. Subject to the above point, the only definition we would be comfortable in supporting would relate to poorly maintained assets. Even in this case it is not clear that the reason for the poor maintenance has been Government failure to undertake appropriate maintenance, but partly at least relates to the political pressure to keep water prices too low.

- 2) There is no phase out, or "sunset" provision for the legacy cost definition to apply: the legacy cost concept should be seen, if it is accepted, as providing a means of transition to a predominantly impactor pays principle applied to all current and future costs. The period of the transition needs to be clearly stated. We propose that the approach be phased out by 2004/05 when the Tribunal will prepare its next report on bulk water delivery costs. The percentages applied to legacy costs need to be increased through the transition period: the environment groups cannot accept a 0% apportionment to water users of legacy costs (in the majority of cases) continuing permanently into the future. The inappropriateness of this approach is highlighted by the acceptance by many irrigation and commodity group representatives of the need for a financial contribution towards environmental compliance costs by their industry. The percentages need to increase over time to the impactor pays percentages over the defined period to signal the "phase-in" effect and the associated "sunset" provision.
- 3) "Rough justice" principle: the environment groups continue to maintain that the 1997 line in the sand on physical assets has provided an enormous windfall gain to water users through extensively subsidized water prices. This windfall gain has not been formally recognised. We consider that any inequity caused by application of impactor pays principle to all current and future costs (due to a legacy component) is more than adequately compensated by the line in the sand on the physical assets. On this rough justice principle, there is no need to apply a legacy cost definition.

Recommendation 2:

The combined environment groups recommend, in order of preference, the following in relation to legacy costs:

- a) That IPART does not apply the legacy cost approach, and current and future costs are allocated to users on a predominantly impactor pays definition as provided above;
- b) If the legacy cost concept is applied in the short term, that:
 - i) The definition of legacy cost is restricted to poor maintenance only, with environmental compliance costs treated as a current cost.
 - ii) A sunset date is established where the legacy cost concept will no longer be applied;
 - iii) The percentages of legacy costs allocated to water users increase over time to reach impactor pays percentages at the time of the sunset date.

4 Community standards:

The environment groups maintain that the community standards were much higher in 1997 than the environmental condition provided by the assets in 1997. No rationale for establishing this benchmark, other than consistency with that for physical assets was presented by IPART. The 1979 gazettal of the EPA Act provides a much stronger legislative basis for a “line-in-the-sand” benchmark than 1 July 1997. It is also important that the level of resource management costs necessary to reach the July 1997 benchmark not be considered the basis for determining the “appropriate” level of expenditure.

We are concerned however that the legacy cost approach exempts water users from any responsibility to share in the meeting of the “past” community standards. In this case, we consider the community has had to bear significant un-measured costs in relation to a degraded environment below the community standard. By forcing the community to pay the full “legacy cost” on that basis, means the community is paying twice: firstly through the damage suffered, and secondly by bearing the full cost of modification of dams. Water users are not paying in either circumstance.

To consider how arbitrary this is, consider the implementation of fishways on weirs and dams. If DLWC had implemented fishways pre 1997, these would have been included in the DLWC submission and shared between water users and the community. Under the ACIL approach, because DLWC has not put the fishways in place by 1997, it becomes a legacy cost because of poor maintenance or restoration costs pre 1997. Otherwise it becomes a changed community standard requirement because it is only now recognised post-1997. In other words, what would generally have been considered a shared responsibility is now, under all arguments, fully borne by the community. Again, from a broader community perspective, removing the asset would have to appear a more attractive option for reintroducing fish passage than paying entirely for fish passage ways on structures owned and used by others. Without shared approaches to these costs, the real loser is likely to be the environment, because the appropriate activity will not take place. If the full cost is borne by water users, they will resist paying. If the full cost is borne by the community, the community or Treasury will resist paying. In these cases, it is only through shared approaches to these costs that the environment will be protected through the appropriate actions.

Recommendation 3:

That, should IPART adopt the legacy cost approach, a 0% legacy should not be applied where the community standard was clearly higher than performance in 1997. These costs need to be shared, and IPART should allow a proportion of pre-1997 WRM costs and asset costs to be allocated to users.

5 Water resource management costs

The environmental groups agree with ACIL's conclusion that the current level of DLWC's WRM costs are likely to be understated, possibly quite substantially. We feel therefore that IPART should have forecast some increase in these costs as a more accurate estimate of their future level.

The ACIL report accepted by IPART did not define the appropriate level of resource management expenditure by DLWC to be allowed for price determination. It concluded that the planning process, under the recently enacted Water Management Act (WMA), would form the basis for determining the future level of WRM costs. As a consequence, IPART has accepted DLWC's estimated 2001/02 WRM costs of \$42.1M and forecasted them to remain constant over the three-year period. ACIL consultants have noted that these costs are likely to be conservative.

The report by PricewaterhouseCoopers (PWC) has indicated that more capital expenditure on dams may be required to address the environmental impacts of water extraction than is allocated by DLWC. However they judged that insufficient information is available to estimate expenditures required. Capital expenditures have been increased to improve fishways and upgrade drop boards on regulators and weirs however this remains below NSW Fisheries' recommendations.

The environment groups consider that it is essential that the appropriate level of resource management costs is determined. Priority should be given to funding of adequate scientific research to establish base-line data and assure that resource management decisions are not only cost effective but provide effective environmental outcomes. We consider it impossible for the NSW Government to appropriately manage the water resources of the State without determining what is required to be spent to ensure sustainable water management.

The environmental groups have some concern that the planning process under the recently enacted Water Management Act, which is at early stages of implementation, may result in resource management initiatives determined primarily on a cost efficiency basis that do not provide adequate environmental outcomes. The lack of consideration of non-market values for environmental quality, the lack of knowledge of the environmental externalities associated with water use and the lack of willingness to attribute these external costs to water users will threaten appropriate levels of environmental management. Further, the lack of a means of capturing the community's willingness to

pay for environmental protection being crowded out by cost sharing through the water price is a major stumbling block to achieving socially optimal outcomes.

It must be noted that the task required of ACIL to determine the appropriate level of costs required is still outstanding. Although it may be accepted that in the time available, ACIL could not undertake that task, and focussed on the process for identifying and allocating costs, it does not mean this important activity should not be undertaken, as required under the terms of reference of the consultancy. The combined environment groups request IPART to continue the process of determining the appropriate level of water resource management costs. This may best be achieved by a requirement during the next three years for agencies with river management responsibilities to establish acceptable levels of service against which the adequacy of DLWC's water resource management costs could be assessed. This approach would permit IPART a greater level of confidence in assessing the true cost of water resource management in bulk water delivery and would be largely analogous to service provision standards established in other publicly owned utilities.

A major concern is that the draft determination still sends a very confusing signal in relation to the achievement of full cost recovery and providing some relative stability in the "goal posts". We consider that the 93% full-cost recovery level on regulated rivers is misleading. If it is recognised that the level of water resource management costs is understated, as outlined above, then the "true" forecast recovery level is likely to be significantly below the level estimated.

It should be flagged that we will not be at 100% at the end of the 3 year price path, and until we have the appropriate estimates of environmental costs, the current level does not achieve full cost recovery. This provides a very important signal to water users. At present, they will interpret the determination to signal that the full costs are being paid, and that there should be no real change in the future. This will mean they will resist future changes on the basis that the "goal posts" are shifting. IPART can avoid this misconception by indicating clearly in its determination that full-cost recovery is not yet achieved on these rivers, and the costs will be increasing further. The legacy costs concept confuses this matter even further, by signalling to users that a wide range of costs will be borne by the broader community, and not by them. This distorts the signal even further. (Issues related to full-cost recovery are expanded upon in the section headed "full cost recovery and subsidies" below).

Recommendation 4:

That IPART ensures that the unanswered questions related to the ACIL consultancy are resolved during the 3-year period of the determination. In particular, IPART should commission research to determine the appropriate level of water resource management (WRM) costs based on the best available science.

Recommendation 5:

That IPART sends a clear signal that the 93% cost recovery level in the regulated rivers is an over-estimate and that the level of cost recovery will need to increase in the future.

6 Costs incurred by other agencies related to water resource management:

The combined environment groups do not support the approach to the exclusion of the costs incurred by other agencies in water resource management. The approach is illogical given that DLWC is not the sole agency with statutory responsibilities for river management. If all the environmental agencies were in one department, it would be a matter of course for all of those costs to be included in a submission by that department. As the costs are spread across agencies, failing to include them leads to an inefficient water user charge. We do not feel the Tribunal has given this argument full consideration.

At present, it may be that IPART does not have the mandate to consider the costs of other agencies, or have the resources to assess whether the costs provided by other agencies are efficient. However, we request IPART to require DLWC/State Water to undertake a process of interagency consultation where costs incurred by other agencies can be included in the TAMP or the DLWC water resource management costs. This will require the agreement of agencies such as NSW Fisheries, the Environment Protection Authority, the National Parks and Wildlife Service and NSW Agriculture to agree on priorities and costs for asset modification, environmental information and monitoring, and compliance costs. These are all valid cost components of managing the water resource for water users.

Under the revised Capex IPART has allowed \$5.9M for construction of fishways on weirs and regulators. This is considerably below the \$18.5M requested by NSW Fisheries. NSW Fisheries has also nominated five dams on which they recommend the construction of fishways at a cost of \$24M. The environmental groups support the NSW Fisheries' recommendations.

Recommendation 6:

That IPART directs DLWC to ensure that all costs of the NSW Government in managing water resources is included in the cost base for determining cost recovery from users. DLWC should coordinate with other agencies to agree the level of resource costs to be included.

7 Full Cost Recovery and subsidies:

IPART has accepted the impactor pays approach in combination with no legacy costs to users as its preferred method of allocating costs to users. IPART considers that this approach is likely to send appropriate economic signals for minimising overall future costs. IPART considers the role of pricing in the environmental context as providing DLWC with adequate funding to cover its resource management costs and to encourage demand management (p.65). The IPART determination results in 63% of costs being

allocated to users versus 68% under the DLWC proposal with a reduced proportion of costs recovered from users.

IPART's Draft Determination 2001 represents the final step in setting prices for bulk water in NSW for the next 3 years. IPART proposes a three-year price path with price increases limited to a maximum of 15% (real) per year on regulated rivers and 20% (real) on unregulated rivers. Under IPART cost definitions, this will result in the majority of regulated rivers achieving full cost recovery by 2004. The total annual subsidy to water users will equal 27% of costs or \$16.2M in 2004, an improvement on the estimated \$22.3M in subsidies in 2001. Under DLWC's pricing proposal, subsidies would have been reduced of \$14.7M or 21% of costs.

We consider that current water prices continue to embody a significant level of subsidies to irrigators at the expense of the general community and encourage ecologically unsustainable diversions of water. Subsidies to water users include both un-recouped costs of water delivery and costs of environmental degradation due to diversion of water for irrigation.

Implementation of the current pricing proposal will result in a significant annual subsidy remaining to irrigators in 2003.

	Annual Subsidy (\$M) 2003/04
Unrecovered DLWC costs	16.2
Under-forecast WRM costs-increased @ 10% per annum	5.3
Other agency costs-including capital, 60% allocated	6.1
Allocation of 25% of WRM legacy costs	5.5
	33.1

The above does not include any capital costs on pre-1997 capital assets. With approximately \$2 billion invested in bulk water assets capital costs would be \$100M per year at a 5% cost of capital. Even if only 50% were allocated to users, this would equal an additional cost of \$50M per year.

A further issue is that only a small proportion of the environmental costs relating to water extraction are included in the full costs as defined for pricing decisions. The DLWC's water resource management costs of \$42M are used as a proxy for the environmental cost of river regulation and water use. Damage caused by use of extracted water on land, such as salinity and erosion is not included in these costs. A study by Hassall & Associates (1998) indicated that the cost of river degradation in NSW was in excess of \$300M per year. User share of these costs is estimated at approximately \$200M per year. It is recognised that internalising environmental externalities is a difficult and politically controversial exercise. However, WWF believe that these costs should, at the very least, be made transparent even if they are not recovered.

8 Price Path

No review or adjustment of the price path is anticipated over the three-year period. The environmental groups do not concur with the proposal for a firm three-year price path at present given the uncertain nature of implementation of the Water Management Act 2000 and other key activities related to the water reform agenda. Progress in implementation of the price path should be able to be reviewed annually and adjusted if there is a significant change in costs. As considered previously, environmental compliance costs have been identified as likely to increase over the period due to the need to adequately implement the new licensing and approvals system under the WMA Act. Alternatively, underestimates of costs over the 3-year period need to be recoverable in future submissions.

The environmental groups accept that progress has been made in increasing pricing to recover the costs of water. Full-cost recovery is not however going to be achieved by the end of the 3 year price path. The environmental groups consider that full cost recovery (however defined) should be achieved as soon as possible. Retention of assets in valleys that are not expected to achieve full cost recovery should be justified based on their social benefits.

It is recognised that in regulated rivers the cost recovery is stated to reach 100% for most rivers at the end of the 3 years. As considered in relation to water management costs, this still fails to take into account that the 100% cost recovery level as stated is likely to be an underestimate, with significant externalities not factored in. Further, the rate of recovery on unregulated rivers and ground water remains extremely low, with no indication of the transition path to full cost recovery. There is also no indication of why the rate of increase on the unregulated rivers and groundwater levels needs to be kept at the same rate as the regulated rivers. There does not appear to be any obvious reason on equity grounds why this needs to be the case.

9 Structural adjustment

The environment groups support IPARTs recognition that prices should not be used to meet structural adjustment goals. However we do not consider IPARTs draft determination to be fully in line with this principle. Keeping prices restricted to a 15% to 20% annual increase does not take into account that this reduces the signal for the need for structural adjustment. Further, it applies equally to all farmers whether marginal or profitable. Marginal farmers should be able to apply for structural adjustment assistance and the price should not be restricted for all farmers on the basis of impact on marginal farmers alone.

Subsidised water encourages its uneconomic and inefficient use. If IPART believes that subsidies to irrigators are justified for equity reasons they should be paid directly to irrigators rather than passed on through low prices. Over a limited transition period, increased water revenue could be used to fund existing or new structural adjustment

programs to assist a shift by irrigators to other activities or for investments in water conservation. This could also provide opportunities to implement a “water dividend” and return water for environmental purposes. The current level of structural adjustment funding in NSW is significant, and rivals the costs of water supply management as a whole. The IPART Draft Determination, by keeping prices at a lower than a socially optimal level contradicts its own statement that “...the underlying (farm) problem is one of low profitability, and is best addressed through targeted measures and not through water prices” p.63. Low water prices restrict this structural adjustment process from occurring as painlessly as possible, by encouraging marginal farmers to remain at the margin and not move to improve their situation through structural adjustment assistance.

Recommendation 7:

That IPART allows water charges to increase more rapidly, so that full cost recovery can be achieved over a shorter period, and seeks assurance from the NSW Government that sufficient structural adjustment measures are in place to assist marginal farmers.

10 Environmental Expertise and ESD:

The environment groups commend IPART for seeking the input of ACIL and PWC/DPWS on the important issues of water resource management costs and the efficiency of operations. However it is considered that these consultancies do not fully meet the need for environmental expertise either to be present within IPART, or to inform IPART deliberations. It must be noted that neither the ACIL nor PWC/DPWC consultancy employed staff with significant environmental management experience in natural resource management agencies – surely an essential requirement given the importance of assessing the adequacy of DLWC’s water resource management costs. We would request IPART to engage further environmental expertise in working towards the next determination. Further, we would request IPART to undertake further analysis on the environmental impact of its decisions. For example, what is the environmental cost of extending the time to reach full cost recovery? How are the social impacts of meeting environmental costs balanced with the environmental costs of meeting social objectives? It is only through such analysis that IPART will be able to fully demonstrate it is complying with the ESD requirements of its charter.

Recommendation 8:

That IPART introduces environmental expertise into its determination process, and develops a means of analysing the environmental costs and benefits of its determinations.