

REVIEW OF RECYCLED WATER PRICES FOR PUBLIC WATER UTILITIES

HUNTER WATER'S RESPONSE TO
IPART'S DRAFT REPORT

APRIL 2019





TABLE OF CONTENTS

1	Introduction	3
2	Form of regulation	4
3	Cost recovery framework	4
4	Cost offsets – avoided and deferred costs	6
5	Cost offsets – external benefits	7
6	Pricing principles for recycled water	9
7	Recycled water developer charges.....	10





1 INTRODUCTION

Hunter Water welcomes the opportunity to respond to IPART's Draft Report (Draft Report) Review of recycled water prices for public utilities – Sydney Water Corporation, Hunter Water Corporation, Central Coast Council and Essential Energy, April 2019.

We support the vast majority of the Draft Decisions set out in IPART's Draft Report as they are likely to promote cost-effective investment in and use of recycled water, for the benefit of customers. IPART has made astute and workable changes to the 2006 Guidelines on recycled water pricing, without locking the regulator into prescriptive or detailed positions on key funding and pricing matters. IPART's approach is administratively simple to implement and more likely to promote efficient investment in and uptake of recycled water.

IPART's Draft Report contains a number of significant changes from the proposals outlined in its Issue Paper aimed at placing "recycled water on an even footing with other services" to "recognise that recycled water schemes can meet multiple objectives within an integrated urban water system beyond water supply, such as increasing liveability and improving environmental outcomes."

Hunter Water welcomes the thrust of these changes which it believes are likely to provide considerably stronger incentives for recycled water schemes to be considered as an alternative to business as usual servicing solutions.

Hunter Water also supports IPART's decision to harmonise pricing and funding arrangements for mandatory and voluntary recycled water schemes (e.g. common pricing principles, same order of applying cost-offsets and direct user charges). This will significantly simplify the regulatory framework for recycled water schemes.

Hunter Water supports the approach of responding to uncertainty with flexibility because an overly prescriptive approach could stifle a fledgling market. There are several places in the report where IPART indicates a willingness to refine elements of its approach over time, as we all gain more experience in emerging issues. For example, we note that IPART intends for its guidance to evolve over time as IPART and the public water utilities gain more experience in the implementation of the framework, and in particular in the development and assessment of claims for avoided and deferred costs, and in demonstrating customer willingness-to-pay for the external benefits of recycled water.

Hunter Water supports IPART's proposed approach of providing contemporary and more definitive positions on the regulatory treatment of cost offsets and external benefits in non-binding assessments between price reviews and when IPART publishes updates to its guidelines for water agency pricing submissions.

Hunter Water has identified two issues which it considers are worthy of further consideration:

- Clarifying when public water utilities can add recycling schemes to the regulatory cost base for water if the scheme forms part of a least-cost package of measures to provide a reliable water supply.
- Clarifying the proposed approach for calculating avoided and deferred costs net of revenue forgone, particularly when those cost offsets are calculated using the long-run marginal cost of water or wastewater as the proxy value.





This submission adopts a structure consistent with the Draft Report.

- Form of regulation
- Cost recovery framework
- Cost offsets – avoided and deferred costs
- Cost offsets – external benefits
- Pricing principles for recycled water
- Recycled water developer charges

2 FORM OF REGULATION

In its Draft Decision IPART has proposed to adopt a more responsive and flexible approach to regulating prices for recycled water, sewer mining and stormwater harvesting services by making decisions to:

- Refine the definition of mandatory recycled water schemes to refer to a customer's level of effective choice (i.e. ability to opt-in to and out-of recycled water).
- Defer regulating maximum prices for all recycled water, sewer mining and stormwater harvesting services, and only step in and determine maximum prices for these services when there is a need to do so:
 - For voluntary recycled water schemes, sewer mining and stormwater harvesting, IPART encourages unregulated pricing agreements and would step in when warranted to set prices under scheme-specific reviews when requested to do so by either customers or the public water utility.
 - For mandatory recycled water schemes, IPART will monitor prices and decide to step in and set a scheme-specific price during the course of a broader price review where it deems that a public water utility's pricing approach is inconsistent with the pricing principles.

Hunter Water supports this lighter-handed approach to regulation whereby pricing principles are set to guide public water utilities whilst affording appropriate customer protections and supporting efficient outcomes. This less prescriptive approach reduces the risk of unintended consequences that could otherwise occur if all recycled water scheme arrangements are not readily foreseen at the time of the review.

3 COST RECOVERY FRAMEWORK

IPART proposes a number of significant changes to the cost recovery framework for recycled water, sewer mining and stormwater services.

Where a recycled water scheme is a least-cost servicing solution, IPART proposes to treat recycled water schemes on an equivalent basis to traditional network schemes whereby the scheme costs would be included in the regulatory cost base and then recovered through developer charges (where they apply) and periodic charges to the broader customer base.

Hunter Water supports the revised cost recovery framework proposed by IPART for such schemes and considers it will remove a significant disincentive for investment in and uptake of recycled water which existed under the previous ring-fencing arrangements.



Least-cost schemes in the regulatory cost base for water

IPART's Draft Report recognises least-cost recycling schemes where there is a need to comply with regulatory obligations, noting the example of EPA licence requirements. IPART is more circumspect about water recycling schemes that may form part of a portfolio of measures in the Lower Hunter Water Plan. We accept that this plan is not a regulatory requirement in its current form. However, our Operating Licence 2017-2022 (clause 1.2) does require Hunter Water to provide, construct, operate, manage and maintain efficient, coordinated and commercially viable systems and services for supplying water services in our area of operations.

Hunter Water is of the view that IPART should consider including water recycling schemes in the regulatory cost base for water. Hunter Water would need to demonstrate to IPART that those schemes form part of a least-cost package of demand and supply measures to 'provide' the supply of a secure and reliable water service in the Lower Hunter. We accept that we would need to support this case with evidence of robust hydro-economic modelling showing the costs and benefits of different investment options, including an assessment of the economic merits of any particular recycled water scheme.

Higher-cost recycling schemes

Where a recycled water scheme is not a least-cost servicing solution, IPART proposes a cost recovery framework based on the following hierarchy:

- In the first instance, any cost offsets arising from the scheme (avoided or deferred costs, and/or external benefits) are funded by the broader customer base through periodic prices for water, wastewater and stormwater services.
- Any residual costs that make up total scheme costs are to be ring-fenced and recovered through periodic charges to recycled water customers (i.e. usage and fixed charges) and charges levied to developers (recycled water developer charges), where applicable.

Hunter Water also supports the revised cost recovery framework proposed by IPART for such schemes. This approach ensures recycled water schemes are considered within the context of the system-wide outcomes.

IPART has also made a Draft Decision to extend its cost offset framework to sewer mining and stormwater harvesting customers. Under the proposed arrangements:

- Avoided or deferred costs directly arising from the sewage mined or stormwater harvested can be funded by the broader customer base through periodic prices for water, wastewater and stormwater services.
- Public water utilities may enter into unregulated agreements with sewer miners and stormwater harvesters concerning arrangements for sharing some, or all, of the avoided or deferred costs with the sewer miner or stormwater harvester.
- For the portion of the net avoided or deferred costs retained by the public water utility, it is to be shared equally with the public water utility's customer base (i.e. a notional disposal of 50 per cent of the net avoided or deferred costs retained by the public water utility in its regulatory cost base).



Hunter Water considers that these arrangements will enhance the incentive for it to explore opportunities for stormwater harvesting and sewer mining arrangements which could generate significant avoided or deferred costs.

4 COST OFFSETS – AVOIDED AND DEFERRED COSTS

IPART proposes a number of significant changes to the framework for establishing avoided and deferred costs for the purposes of the cost recovery framework.

One of the key changes is to remove the post-adjustment mechanism for claims for avoided and deferred costs. As outlined in Hunter Water's submission to IPART's Issue Paper, the scope for a post-adjustment review created an unmanageable risk of asset stranding and constituted a significant disincentive for investment in prospective recycled water schemes. Hunter Water therefore strongly supports IPART's reconsideration of this provision.

IPART has also specified that claims for avoided and deferred costs will be required to:

- in the first instance, be based on long-run marginal cost estimates which, among other things, must reflect location-specific system limitations,
- in-lieu of robust long-run marginal cost estimates, be calculated as the difference between long-term system-wide costs for potable water, wastewater and/or stormwater services with the recycled water scheme(s) and without the recycled water scheme(s) (but excluding the cost of the scheme(s) itself),
- be net of revenue forgone as a result of the recycled water scheme(s) (ie, from both developer and periodic charges).

In its submission to IPART's Issue Paper, Hunter Water supported the use of LRMC estimates for water for the purposes of valuing expected changes in water demand or costs to underpin calculation of avoided/deferred costs as it would:

- provide a transparent, consistent and administratively simple way of calculating avoided/deferred costs,
- reduce the need for scheme-specific reviews,
- be useful in other parts of the regulatory arrangements.

However, because of various complexities in calculating LRMC for wastewater, Hunter Water recommended that, on balance, 'with and without' analysis continue to be undertaken for each project for the purposes of calculating avoided/deferred costs.

In response to IPART's Draft Report, Hunter Water acknowledges the increasing importance placed on LRMC estimates in economic regulation and overlapping uses of LRMC.

We concur that while there are technical challenges in developing reasonably robust and useful LRMC estimates, particularly for wastewater, we would welcome the opportunity to resolve those issues in collaboration with IPART.

Hunter Water supports a coordinated approach to development of a common methodology for all relevant LRMC estimates, involving utilities, IPART, relevant government departments and other interested stakeholders.





We agree with IPART's view "that it is appropriate that IPART takes a leading role in the development and application of these LRMC estimates" (p. 93). It is important that PWUs are involved in the process, to ensure that there is a common understanding of practical challenges and all parties can work together to overcome these challenges (e.g. data availability and interdependencies between catchments).

We agree the best approach would be a stand-alone review, rather than as part of a retail price review or other review (Draft Report, page 33). Our preferred timing would be in 2020-21, after Hunter Water's and Sydney Water's next price reviews.

Accounting for foregone revenue

Hunter Water still has reservations about IPART's proposal that claims for avoided and deferred costs should be net of revenue forgone as a result of the recycled water scheme(s). In particular, we are not yet convinced that this will facilitate efficient investment in and uptake of recycled water as it may not fully recognise the system-wide benefits that recycled water can provide to the broader customer base.

We also consider that estimation of foregone revenue will be more complex than suggested by IPART as it is likely to vary by type of recycled water scheme and the structure of tariffs.

We are concerned that the foregone revenue may offset the avoidable costs resulting in little to no net avoidable costs. This may not encourage Hunter Water to invest in recycled water even though it may be providing significant value to the broader customer base. For example, if IPART uses an LRMC proxy of our water supply to calculate cost offsets that was the same as the LRMC estimate used to set Hunter Water's water usage price, it appears as though the foregone revenue adjustment would cancel the total cost offset. We do not think this was IPART's intent.

We would welcome further discussion with IPART on this issue prior to finalising the report.

5 COST OFFSETS – EXTERNAL BENEFITS

In its Draft Decision, IPART has made a significant change to its framework to recognise external benefits to the public water utilities' broader customer base in the cost offset framework.

Hunter Water supports the proposal that external benefits should be identified and treated similarly to avoided and deferred costs, with the value of external benefits recovered from the broader customer base where a water utility is able to demonstrate their existence through evidence of the broader customer base's willingness-to-pay. This will correct an anomaly with the treatment of recycled water schemes vis-à-vis traditional water and wastewater investments.

IPART has deliberately adopted taking a less prescriptive approach to providing guidance to public water utilities on the identification of external benefits, and simply defines external benefits to be those additional to any health, environmental, or liveability outcomes already mandated by Parliament and/or Government, and specific to recycled water and the recycled water scheme in question.

Hunter Water supports this approach and concurs that claims for external benefits should demonstrate a clear causal link between the recycled water investment and the external benefit.





IPART has decided not to distinguish between localised benefits and other external benefits. Hunter Water supports this position. As it argued in its submission to the Issues Paper, attempting to distinguish between what is a 'localised' versus a 'wider' external benefit would raise problematic definitional issues, which would add administrative complexity and risk. Demonstration that the broader customer base is willing to pay for an external benefit should in itself be sufficient to establish the link to the broader customer base.

Before such external benefits can be incorporated in the cost offset framework, IPART's Draft Decision requires a public water utility to demonstrate the broader customer base's willingness-to pay for these external benefits: for customers to contribute to the costs of delivering external benefits beyond required service levels, IPART considers a mandate from those customers should be required where customers agree to pay for them and agree on how much they will contribute. This will require willingness-to-pay studies involve surveying a representative sample of customers and determining the maximum amount those customers would be willing to pay for the non-use values of recycled water.

Hunter Water supports this approach. This will better align the treatment of external benefits attributable to recycled water investments with those already applied to traditional water and wastewater investments.

As noted by IPART, it is important that willingness-to-pay studies are conducted robustly. In this regard, Hunter Water recently undertook a community survey of willingness-to-pay for discretionary liveability and environmental services. It commissioned a survey of almost 700 Hunter Water residential customers in the first half of 2018 undertaken by Marsden Jacob Associates. The customer survey was designed to meet best-practice requirements and recommendations of IPART and the NSW Government, including around customer consultation.

However, to assist public water utilities, IPART has provided general guidance on best practice principles for measuring willingness-to-pay including a set of best practice principles. It also notes that in future, IPART may develop additional guidance through its Guidelines for Water Agency Pricing Submissions and could make available practical examples from successful applications for cost offsets comprising external benefits made by utilities could be made available to assist public water utilities. Hunter Water supports IPART's willingness to adopt a flexible approach and to refine its approach over time as more experience is gained in this area.

We note that IPART specifically cautions against the use of benefits transfer for calculating external benefits for recycled water (Draft Report, page 61). However, in our view, benefit transfer may be appropriate when assessing the economic value of external benefits, provided it is applied appropriately rather than mechanistically. Moreover this is a separate issue to demonstrating the willingness to pay of the broad customer base to fund these investments.

IPART has also flagged that it will assess external benefit claims at the time of the public water utility's broader price review, but that within a regulatory period, it may provide preliminary guidance and advice to water utilities on the identification and calculation of external benefits (Draft Report, page 61). In Hunter Water's view, being able to get early guidance is an important improvement to the current approach because of the time and money that public water utilities could invest in willingness to pay studies, as well as the potential to raise customer expectations through such studies.





6 PRICING PRINCIPLES FOR RECYCLED WATER

As part of its regulatory framework, IPART has developed some draft pricing principles which are intended to be followed by utilities in setting prices for mandatory schemes, guide negotiations for unregulated pricing agreements and set expectations for scheme specific reviews.

In doing so however it has proposed to rationalise the previous pricing principles by establishing a common set of pricing principles to apply to both mandatory schemes and voluntary schemes:

- In the case of mandatory recycled water schemes, public water utilities must set their prices in accordance with the pricing principles and make their calculations of recycled water prices for mandatory schemes publicly available. IPART would monitor water utilities' compliance with these principles by reviewing their prices for mandatory schemes alongside the water utilities' broader pricing reviews. If IPART found a public water utility's approach to be inconsistent with its pricing principles, it would set scheme-specific prices in accordance with the pricing principles.
- In the case of voluntary recycled water schemes, as these schemes are subject to unregulated agreements in the first instance, public water utilities and their customers are not bound to follow the pricing principles, but if the parties are unable to reach an agreement, IPART would set prices under a scheme-specific review having regard to the pricing principles.

Hunter Water supports IPART's decision to take a less prescriptive approach to pricing principles and in particular to adopt a common set of pricing principles for mandatory and voluntary schemes. This will significantly simplify the regulatory framework for recycled water schemes.

IPART's pricing principles are designed to ensure that appropriate price signals are sent to recycled water users with the aim of balancing supply and demand while having regard to customer willingness-to-pay for recycled water by setting out:

- The maximum cost that should be recovered from a recycled water scheme. That is, the total 'efficient cost' of the scheme (including total capital costs, operating costs and a share of joint costs).
- The total cost that can be recovered from recycled water customers. The total efficient cost of each recycled water scheme (net of any cost offsets) is recovered from users of that scheme through recycled water charges (usage and fixed).
- How costs should be recovered through the structure of prices. Some constraints are imposed on recycled water usage and fixed charges (such as the need to have regard to the price of substitutes and willingness-to-pay) to protect customers and balance supply and demand.
- How remaining costs are to be recovered via developer charges.

While these pricing principles appear broadly appropriate and are sufficiently flexible to allow for a range of circumstances, Hunter Water has some concerns as to how they would apply to legacy schemes such as Gilleston Heights and Chisholm, where there has been a deliberate policy decision to under-recover costs.





IPART has also decided not to establish pricing principles for stormwater harvesting and sewer mining customers due to the unique nature of these services which are well suited to unregulated pricing agreements. Hunter Water supports this approach.

7 RECYCLED WATER DEVELOPER CHARGES

IPART's Draft Report has made a significant departure from previous practice by proposing to apply the methodology used for calculating water, wastewater and stormwater developer charges (and related procedural requirements) to calculating developer charges for least-cost recycled water schemes, on the grounds that as the least-cost means of providing water, wastewater and/or stormwater services to a new development, these schemes should be treated on an equivalent basis as traditional network servicing solutions. As observed by IPART, this means that while the NSW Government's policy on zero developer charges is in place, recycled water developer charges would be set to zero in Hunter Water's area of operation, and these schemes would be funded by the broader customer base.

As observed by Hunter Water in its submission to the Issues Paper, the imposition of recycled water developer charges while there are zero water and wastewater developer charges (as a matter of government policy) represent a significant disincentive to recycled water projects.

This approach will ensure developers make the same contribution to fund water, wastewater and/or stormwater services to new developments, whether they are provided by a least-cost recycled water scheme or traditional network servicing solution.

For higher cost recycled water schemes, IPART proposes to generally maintain its approach to setting the methodology for recycled water developer charges, with some refinements and updating of parameters.

Hunter Water supports these amendments. It also supports IPART's Draft Decision to allow public water utilities and developer to opt-out of the determination through voluntary agreements. This will allow developers to deliver additional infrastructure that may benefit their development/or the wider community and encourage public water utilities to understand and better meet customer needs.



