# ESC Tariff Issues Paper

## Melbourne Water's response – August 2011

State Government Victoria

Melbourne Water

# Table of contents

# Introduction

Melbourne Water welcomes the opportunity to make a submission to the Essential Service Commission's (ESC) Tariff Issues Paper (Issues Paper) released in preparation for the 2013 Water Plan. This submission focuses on the principles, objectives and approaches that should guide price structures and discusses issues associated with Melbourne Water's bulk water and sewerage prices as well as its waterways and drainage charges and prices for alternative sources, including recycled water.

Melbourne Water provides bulk water and sewerage services to the metropolitan retail water businesses and wholesale water services to several regional water businesses. It also supplies bulk recycled water to several water businesses. Further, Melbourne Water provides waterways and drainage management services to the greater Melbourne community.

Melbourne Water considers that price structures have an important role to play in sending signals to customers that encourage efficient and sustainable usage and investment decisions. These signals should be consistent with Water Industry Regulatory Order regulatory principles and government policy objectives and can be used in conjunction with other non-price mechanisms. Melbourne Water also considers that in any price reform the benefits (e.g. behaviour change) must outweigh the costs and be sensitive to customer impacts, which can be managed through a range of measures.

The current policy environment is important context for the Issues Paper and preparation of the 2013 Water Plans. As noted by the ESC, a Ministerial Advisory Council (MAC) has been established to provide recommendations to the Government about how best to achieve the objectives of its *Living Melbourne, Living Victoria* policy. A central part of these considerations is how best to optimise the existing water, sewerage and drainage assets and systems with existing and new potential use of alternative, and decentralised, sources of supply, such as recycled water, stormwater and rainwater, to support a '*Living Melbourne*'. Any MAC recommendations that are ultimately endorsed by the Government, and included say, in the Statement of Obligations, will significantly inform objectives, and therefore pricing approaches, for these services.

As the ESC also observed, there is currently no active Victorian policy discussion on urban water reform, including from a tariffs perspective.

Another key issue for water businesses, particularly in light of the significant price increases experienced during the 2008 and 2009 Water Plans is affordability. This will also influence future pricing objectives and approaches proposed by Melbourne Water in its 2013 Water Plan. Consultation with customers will therefore underpin the proposals contained in Melbourne Water's 2013 Water Plan around value, price levels and price structures.

## Pricing principles

The ESC's Issues Paper sets out five proposed pricing principles that it intends to use in the context of the 2013 Water Plans to guide its analysis and decisions on proposed prices and/or approaches to calculating prices. Melbourne Water broadly agrees with those principles, as set out below, noting that as they are quite general and high level they provide water businesses with guidance but also some flexibility:

- Price structures, levels and the form of price control should ensure a sustainable revenue stream for water businesses over the Water Plan period
- For each different tariff, the revenue expected to be recovered should be greater than or equal to the avoidable costs of not serving the customers facing that tariff and less than or equal to the standalone costs of serving them
- Price structures should be simple, understandable and cost reflective
- The volumetric price should have regard to relevant marginal costs
- Retail prices and service offerings, and the form of price control, should have regard to: the ability of customers to understand and respond to the price signal, customer preferences and needs, the costs of implementing a price structure and price path stability.

Melbourne Water also considers there should be an additional principle relating to price structures providing incentives for the sustainable use of resources, assets and systems across all parts of the water cycle. This is consistent with the regulatory principles currently specified in the Water Industry Regulatory Order as well as the Government's *Living Melbourne, Living Victoria* policy.

## Bulk water prices

The ESC's Issues Paper outlines Melbourne Water's current bulk water pricing structure and notes that it is consistent with the proposed pricing principles. Melbourne Water agrees with this, although it notes that use of the terminology 'bulk

water resource pricing' is confusing as Melbourne Water's prices are for access to the infrastructure in which water is stored, treated and transferred, rather than for the water resource itself.

A variety of bulk water price issues are raised in the Issues Paper. Melbourne Water's views in relation to the following issues are set out below:

- Locational prices
- Volumetric prices
- Reflecting the value of the water resource in bulk water prices
- Managing supply and demand side uncertainties in bulk water prices
- Decoupling of bulk water and sewerage price paths.

## Locational bulk water prices

As noted in the Issues Paper, Melbourne Water currently has one usage headworks price that it charges all water businesses. This reflects the fact that all businesses benefit from the security of supply provided by the integrated headworks system as a whole, irrespective of their location.[1] It also reflects the pooled nature of the Bulk Entitlements held by the metropolitan retail water businesses. Melbourne Water also currently charges each retail water business a different usage transfer price, taking into account the long run marginal costs (LRMC) in the various supply areas.

In the context of Water Plan 3, the objectives of creating (for headworks) and further disaggregating (for transfer) locational bulk water prices would need to be understood, and the costs and benefits assessed. This will be informed by the policy environment, particularly around urban water reform issues such as integrated water management, competition, trade and third party access. At this stage, no clear conclusions have been reached by Government in relation to these issues. The approach will also need to be informed by the views of Melbourne Water's customers.

Locational usage headworks prices would result in significant differences across Melbourne. For example, in the future south east Melbourne will receive a high proportion of water from the Victorian Desalination Plant and therefore South East Water would be significantly impacted by a locational usage price for desalinated water, even though all retail water businesses will benefit from increased security of supply arising from supply of this water. The location of the plant is based on a range of factors (e.g. engineering and environmental) but South East Water would bear disproportionately more of the burden of the higher costs of this supply. As the ESC notes, in Water Plan 3 the potential costs (e.g. equity issues associated with

[1] Gippsland Water is the exception to this as it only takes untreated water from Tarago Reservoir and does not receive security of supply benefits from the entire system.

higher flow on cost impacts to some end customers) and benefits (e.g. providing signals that will assist with future investment decisions where there is wholesale competition) of such a locational pricing approach will need to be balanced.

In relation to locational usage transfer prices, this could be explored in terms of prices for specific areas of Melbourne, rather than for specific retail water businesses. For example, having East, West and North usage transfer prices (which would broadly align with the supply areas of the metropolitan retail water businesses). This concept is preliminary and will need to be further tested with customers, however, it would improve transparency for any third party access seekers. As above, the potential costs and benefits of further disaggregation would need to be understood, particularly if this reform occurred at the bulk level in isolation from the retail level. For example, this could result in an access seeker 'cherry picking' low cost customers that face a uniform retail water price.

### Volumetric bulk water prices

Melbourne Water currently has two part tariffs for bulk headworks and transfer services, where the usage (volumetric) component is determined with reference to LRMC. This approach is consistent with the ESC's proposed pricing principles.

From an overall perspective, approximately 70 per cent of bulk water revenue is derived from the usage charges, and therefore varies with water demand. This does not align with Melbourne Water's underlying cost structure given it is a largely fixed cost business. It does, however, broadly align with the metropolitan retail water businesses' pricing approach and enables signals to be sent to customers around conserving water and the benefits of deferring future investments. Setting usage prices in the 2013 Water plan will require balancing of different objectives and potential costs and benefits (e.g. revenue variability for Melbourne Water that does not match cost variability and alignment of price structures with retail water businesses).

In its Issues Paper, the ESC notes the Productivity Commission's view in its recent draft report on the urban water sector that all bulk water transfer costs should be recovered through a usage (volumetric) price and not a two part tariff. The Productivity Commission considers this appropriate given bulk transfer system costs are driven by demand volume. While the current usage component of the bulk transfer prices is determined with reference to LRMC, the remainder of the revenue is recovered through service (fixed) prices that are allocated based on forecast demand. Melbourne Water considers this approach is not inconsistent with the Productivity Commission's approach of aligning prices with demands.

Additionally, given the predominately fixed nature of Melbourne Water's bulk water transfer system costs, Melbourne Water does not consider that a single usage price would be consistent with the ESC's proposed pricing principles and the WIRO regulatory principles. The proposed principles recommend a two part charge, that is cost reflective and a usage component that reflects marginal costs. Non cost reflective prices could distort investment decisions.

## Reflecting the value of the water resource in bulk water prices

The ESC's use of the terminology, 'bulk water resource pricing' also raises issues about the value of the water resource. In its draft report on the urban water sector, the Productivity Commission recommended water prices that adjust according to the demand supply balance and, in doing so, reflect the opportunity cost of water. Current thinking on valuing the water resource and reflecting its scarcity in bulk water prices is evolving. Melbourne Water considers that further research into the practical application of this theory and whether its benefits outweigh its costs is needed before it can be implemented. This research should occur over Water Plan 3.

It is noted that the Productivity Commission considered that application of scarcity pricing at the bulk level would facilitate more economically efficient investment decisions. However, Melbourne Water notes that the key issue which must be considered is the responsiveness of the supply side to scarcity prices and how those price signals operate within an investment decision making framework. The impact of such an approach on Melbourne Water's customers (and potentially their customers) would also need to be taken into account.

## Incorporating supply and demand side uncertainties in bulk water prices

As noted by the ESC, in the 2013 Water Plan the actual costs of the Victorian Desalination Plant (VDP) will need to be included in Melbourne Water's bulk headworks prices. The price structure and form of the associated price control will therefore need to take into account the magnitude and uncertainty of these supply side costs.

At its full extent, the magnitude of cost variation due to VDP water orders (ordering nothing, as compared to ordering a full 150GL) presents a significant risk to Melbourne Water's business viability, particularly over 5 years of a regulatory period. While the full extent of this risk is unlikely to eventuate, Melbourne Water considers a flexible pricing approach will be required to ensure the uncertainty can be managed (both by itself and its customers). This will need to take into account the desalinated water ordering process, timeframes and requirements.

This is a key issue for Melbourne Water, its retail water business customers, the Department of Sustainability and Environment (from a security of supply perspective) and the Department of Treasury and Finance (from a returns to Government perspective). The process of consultation with retail water businesses has started in order to understand an appropriate pricing response. A range of possible options have been raised and are currently being considered further, these include:

- An annual pass through mechanism in which the variable portion of the VDP contract costs (that is, the portion of the contract payment based on the VDP water order) is passed on to Melbourne Water's customers. This could be potentially subject to a materiality threshold
- A cumulative, end of regulatory period, pass through mechanism that accounts for changes in VDP water orders from the water orders forecast in the 2013 Water Plan and included in a regulatory determination. This could also be potentially subject to a materiality threshold
- A combination of the above approaches.

Some of Melbourne Water's customers have expressed a preference for an annual pass through mechanism in relation to the variable VDP costs. This would require a hybrid form of price control, where there is an underlying price cap. To the extent that no variable VDP costs are included in the underlying price cap, the cap would need to be adjusted annually to take into account any desalinated water orders and associated variable costs. In this context, Melbourne Water notes the ESC's Issues Paper states that the implications of managing customer impacts from any significant price changes associated with uncertainties will need to be considered.

Managing this supply side, and any demand side uncertainties (e.g. the extent of bounceback in demand), will require a pricing structure and form of price control that balances multiple objectives: aligning prices with underlying costs, allocating risks and uncertainties in an efficient way and minimising the complexity and cost of administration.

Melbourne Water is also considering the need for separate prices for the VDP.

### Unbundling of bulk water and sewerage price paths

In the event that Melbourne Water proposes to continue with its current form of price control (price caps) in the 2013 Water Plan, consideration also needs to be given to the current application of single price cap across water and sewerage services.

The approach in the 2009 Water Plan to bulk water and sewerage price increases was to 'bundle' both price caps and have a single path. Whilst recognising that the bundling of product price paths would have no net effect on bulk water and sewerage

revenues (i.e. there were no cross subsidies), it was intended to reduce price shocks to customers (and end users) resulting from a significant price increase in any one product. In the 2013 Water Plan, unbundled price paths may be more appropriate to ensure that price increases are transparent at a product level. This benefit would have to be considered against the potentially competing objective of minimising price shocks to the end customer in any one product class.

## Bulk sewerage prices

The ESC's Issues Paper outlines Melbourne Water's current bulk sewerage pricing structure and notes that it is consistent with the proposed pricing principles. Melbourne Water agrees with this and proposes to maintain its current structure in the 2013 Water Plan. It will also consider opportunities for, and the associated costs and benefits of, stronger locational signalling for trade waste parameters.

## Waterways and drainage charges

Melbourne Water collects charges to support its role as a regional provider of waterways and drainage services. The Waterways Operating charter, developed in consultation with key stakeholders, provides the targets and programs to ensure an appropriate level of flood protection, to improve health and amenity of our rivers and creeks, manage environmental flows and development, and engage stakeholders and the community. While managing stormwater quality is a significant part of the waterways and drainage service, the general residential and non-residential charges are not levied to specifically manage stormwater services.

The ESC's Issues Paper notes Melbourne Water's ongoing investigations around reforms to non-residential waterways and drainage charges that would involve making these charges more cost reflective (they are currently based on property values). It considers any reforms would need to demonstrate the efficiency benefits outweigh issues such as ease of administration and customer impacts.

Melbourne Water recognises the value of moving non-residential waterways and drainage charges to a more cost-reflective approach. During this Water Plan period, Melbourne Water has investigated a number of options for reforming the non-residential pricing structure such that charges could in some way reflect the extent of cost of the waterway and drainage service. These options include differentiated fixed charges based on:

- Land use
- Impervious area
- Proximity to waterways

- Land area
- Location (as a proxy for impervious area).

A range of issues and challenges have been encountered in assessing the costs and benefits of these options, including the potential customer impacts for these options. These primarily relate to a lack of complete and consistent data required to model the impacts of options. In particular, consistent data is not available in relation to land use, impervious area and proximity to waterways. Where preliminary modelling has occurred for the remaining options, the results have shown there to be significant customer impacts.

To achieve pricing reform, Melbourne Water will need to improve the data set used to analyse customer impacts and also to establish a pricing option that will be easily understood by customers, is based on a justifiable driver, minimises customer impacts and maintains the current proportion of revenue derived from non-residential customers. In order to achieve these multiple objectives, there may be a need to develop a transition path to introduce a new pricing option over multiple regulatory periods. Alternatively, a combination of pricing options could be used to help manage the customer impacts, although this may increase the complexity for customers.

The complexity of these issues means that significant changes to non-residential waterways and drainage changes for the 2013 Water Plan are unlikely.

# Alternative source pricing

## Bulk recycled water

The ESC's issues paper notes that recycled water prices are regulated through a combination of scheduled prices and pricing principles. It also outlines the principles used by the ESC in the 2009 Water Plan as well as those under the National Water Initiative.

Melbourne Water's recycled water prices are currently regulated by pricing principles, reflecting the fact that supply is not unique and/or homogenous in either requirements for quality or security of supply. Melbourne Water broadly supports the ESC's and National Water Initiative pricing principles. The exception to this is the National Water Initiative principle that states where there is a cost recovery gap this should be recovered with reference to all beneficiaries of the avoided costs and externalities. Melbourne Water currently recovers its cost recovery gap from sewerage customers on a polluter pays basis, in order to send signals to polluters about the benefits of improved sewage quality (particularly in terms of salt levels) for recycled water. At this stage, Melbourne Water does not propose to change its

current approach for the 2013 Water Plan, however it will continue to monitor government policy outcomes and developments in valuing externalities with reference to this issue.

### Other alternative sources

Pricing for other alternative sources, such as stormwater, is evolving as these sources are used more widely. Initially pricing principles should be used for these services.