

4.2 Large Non-Domestic Recycled Water Users - Pricing.DOC

11.2 Recycled Water - Pricing for Large Non-Domestic Users

Delivery Program Water and Wastewater

Objective To present options for the pricing of recycled water to large non domestic users.

Background

Council operates four separate recycled water supplies.

Two supplies, Alstonville and Wardell, undergo traditional wastewater treatment with additional chlorination, prior to supply to the customer.

This high quality water is fit for agricultural and open space uses so long as traditional Non Treatment Barriers (NTBs) are in place, such as preventing direct contact with the water.

The two other systems, Ballina and Lennox Head, undergo membrane filtration and advanced disinfection, prior to supply.

They are fit for restricted internal and external domestic use without the implementation of NTBs. It is also used for sports ground and other irrigation.

Council has previously resolved (250713/28) that domestic users of recycled water should be charged at 80% of the price of potable (i.e. drinking) water and that they should pay no extra charge for the connection.

In setting this price Council also resolved that "Council acknowledges that due to the actual high quality of this product that, over time, the price should move closer to parity with the potable water supply".

During the setup of the Alstonville Recycled Water Scheme in 2003 Council resolved (resolution 280803(034)) that the contract formed between each user and Council would include (among other things):

- require the user to utilise the water in preference to other water supplies
- that after a length of time Council would negotiate with users to introduce a cost for water.

As part of the 2013 resolution, Council further noted "that the existing price structure for open space customers will be reviewed over time."

Council's 2016 Fee and Charges document includes the following new comment

Recycled water supply to users of large open spaces:

- a) Recycled water will continue to be provided to open spaces users at no charge up to July 2017.*
- b) From, July 2017 charging will commence at a lower rate and moved to the proposed rate over five years.*

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- c) *From July 2022 the charge will be set at 50% of the price for recycled water supplied to urban dual reticulation (i.e. 40% of the drinking water price)*

At the time, this caused significant concern in a number of the large open spaces users and would have resulted in some paying significant charges and for some there would be difficulty absorbing this cost into their operations.

Due to this, when the pricing strategy was set, Council also resolved (230616/10) that:

“That Council notes the submissions in respect to the 2016/17 charge for recycled water to urban open space users, with the charge to remain as advertised, being nil. Council will undertake further consultation with the urban open space users to better understand their concerns and the results of this consultation will be considered by Council prior to exhibiting the proposed charges for the 2017/18 year.”

This consultation has been undertaken informally in discussion with various customers, and formally through an open invitation to users to a session to discuss a new pricing proposal (17 November 2016).

This report provides information on the outcomes of the consultation and seeks Council direction in respect to the pricing for the large open space users.

Definitions

Council has traditionally defined Recycled Water users as either Urban Dual Reticulation (UDR) or Urban Open Spaces (UOS).

This definition does not completely suit the intention of introducing a charge for large irrigation users as some of them are Rural and Private.

For the purpose of the pricing, UOS will also apply to Rural Irrigators (such as Nurseries) or Private Spaces (such as a Bowling Club).

Some users may be supplied two Recycled Water connections, a domestic connection for toilets, laundry and an irrigation connection for lawns.

The first connection would be considered as a UDR connection and charged 80% of the price of drinking water.

The second is a UOS and charged the amount that is determined by Council.

Key Issues

- Support Council's Recycled Water targets (through additional revenue)
- Ensure that Recycled Water is the preferred supply to large customers
- Reduce wastage by pricing the water

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Information

The presentation that was discussed at the consultation is attached to this report and has information that may help inform this report.

There is no mandatory or recommended pricing structure for recycled water in NSW but the NSW Best Practice Guidelines state that councils "...should have regard to the [National Water Initiative] guidelines when setting future fees and charges for recycled water..."

These guidelines are outlined in the options section of this report.

In preparing a new price proposal, staff considered that the price of the recycled water could be related to the alternative cost that bulk users have available.

This would either be a surface water, or ground water extract license, including operating costs of pumps and equipment.

It is estimated that a typical ground water bore would cost around 20 cents per kilolitre to operate, which is mostly pumping, capital and maintenance costs.

This means that the target price for recycled water to large users (some have a viable alternative supply) should be close to 20 cents per kilolitre.

For ease of dealing with inflation and year-to-year pricing, it would be more efficient to nominate the recycled water price to large users as a percentage of the drinking water price, which is currently \$2.14 cents per kilolitre.

Based on this, one option could be:

- a charge structure that is 10% of the drinking water supply (21.4 c per kiloliter) for usages greater than 25 ML per year
- with a stepped in tariff to charge 12% for usage between 5 – 25 ML per year
- 15% for usage between 1 – 5 ML per year and
- a fixed fee for less than 1 ML per year, equal to 15% for the 1 ML.

The stepped in tariff reflects efficiencies that Council has in supplying recycled water to the larger users, helps users when more water is required, because it gets cheaper as needed, but still prevents wastage.

The price does not cover the cost to supply (annual charge for connection), which is subsidised by the Wastewater Fund based on the earlier resolution of Council.

This is considered reasonable as one of the key objectives of the recycled water supply is reduce the amount of wastewater discharged to the marine environment.

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The stepped tariff would operate similar to income tax (or Council's own stepped drinking water tariff) where the first ML is a flat \$321, for the next four ML the user pays 32.1c per kilolitre and so on.

This information is presented in the following table.

Table One – Stepped Tariff

Drinking Water	\$2.14			
Water Usage (in Year)	<1 ML/a	1 - 5 ML/a	5 - 25 ML/a	>25 ML/a
Rate as % of Drinking Water	0%	15%	12%	10%
Variable Rate \$/kL	\$0	\$0.321	\$0.257	\$0.214
Fixed Charge	\$321	\$321	\$321	\$321
Price Range	\$321	from \$321 to \$1,605	from \$1,605 to \$6,741	from \$6,741

During consultation, the three recycled water users that attended the session (in the 1 – 25 ML usage range), were interested to ensure that, in their opinion:

- Council recognise that a smaller user has a larger cost (per unit production) to use recycled water than larger users, due to internal infrastructure costs.
- That the scheme (in this case Alstonville) was supported very heavily by the users for a long time in the lead up to its commencement and was only feasible because of the mutual commitment of Council and the users (users built their own internal infrastructure)
- That, while a fee is seen as necessary, they felt Council should minimise the fee as much as possible in recognition of the above.

As a result of the consultation undertaken, staff feel that the new proposal does strike a good balance between the objectives in pricing recycled water (listed in key issues above) and recognising small users.

An alternative option is listed in Table Two. This is based on a flat 10% rate. This could be seen as recognising the contribution and commitment that smaller users have made in ensuring the success of the scheme.

Table Two – Flat 10% Rate

Drinking Water	\$2.14			
Water Usage (in Year)	<1 ML/a	1 - 5 ML/a	5 - 25 ML/a	>25 ML/a
Rate as % of Drinking Water	0%	10%	10%	10%
Variable Rate \$/kL	\$0	\$0.214	\$0.214	\$0.214
Fixed Charge	\$214	\$214	\$214	\$214
Price Range	\$214	from \$214 to \$1,070	from \$1,070 to \$5,350	from \$5,350

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A further option could be to reduce the percentages in either Table One or Table Two further, dependent on the level of discount Council wishes to provide.

Since the price is not aimed at cost recovery, there is no number which is the mandatory price for the services.

The estimate of 20 cents per kilolitre is considered to be reasonable, as a comparison cost, where some users have access to an alternative water supply (eg ground water).

Sustainability Considerations

- **Environment**

The usage of recycled water supports the health of Ballina Shire's waterways, offsets some reliance on drinking water catchments and helps to ensure our precious water resources are used efficiently

- **Social**

Not Applicable

- **Economic**

Additional revenue helps support the Wastewater Fund and the ongoing supply of recycled water.

Economic development – there are industries that have grown specifically due to the availability of recycled water

Legal / Resource / Financial Implications

Contract agreements are already in place for many users which includes, among other things, the requirement to pay fees for the supply of recycled water.

Where contracts are not in place, there is no agreement to supply at no cost.

There is not a legal impediment to implementing a price.

The total revenue expected to be achieved with Table One pricing in place is;

Table Three – Revenue Estimate based on Stepped in Table One Pricing

Financial Year	2016/17	2017/18	2018/19	2019/20	2020/21
Percentage of Drinking Water Price (currently \$2.14 /kL)	0%	2.5%	5%	7.5%	10%
Rate per kL > 25 ML	0.00	5.35 cents	10.7 cents	16.0 cents	21.4 cents
Flow Estimate (ML)	750 ML	750 ML	750 ML	750 ML	750 ML
Revenue Estimate (\$)	0	40,100	80,300	120,400	160,500

The staged implementation is based on the earlier Council resolution to implement this pricing over a number of years.

Consultation

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Council invited users to a targeted consultation session (which three users attended) and discussed the revision to the proposed pricing informally with others. The same user group will be further notified of this Council report.

Council's rating and finance team were consulted to confirm this charge could be easily implemented with Council's Authority Water Billing module.

Options

As mentioned in this report there is no set rule that Council needs to follow in setting the price for large non-domestic users.

It is a matter of Council determining what is reasonable and fair, whilst ensuring that users don't seek alternative supply sources.

The three main options are as per Tables One and Two of this report, along with any variance to those tables.

Importantly any agreed approach would include a staged implementation with the full fee introduced in 2020/21.

This is essentially a five year program; i.e.

2016/17	0%
2017/18	25%
2018/19	50%
2019/20	75%
2020/21	100%

Option One – As per Table One

Introduce a fixed fee (equivalent to 15% for 1 ML) and a stepped consumption tariff; i.e.

Water Usage (in Year)	<1 ML/a	1 - 5 ML/a	5 - 25 ML/a	>25 ML/a
Rate as % of Drinking Water	0%	15%	12%	10%
Variable Rate \$/kL	\$0	\$0.321	\$0.257	\$0.214
Fixed Charge	\$321	\$321	\$321	\$321
Price Range	\$321	from \$321 to \$1,605	from \$1,605 to \$6,741	from \$6,741

This is the preferred approach and is largely consistent with the nine principles of the National Water Initiative Guidelines, which are outlined below and assessed against this option.

Principle	Requirement	Assessment
1: Flexible regulation	Light handed and flexible regulation (including use of pricing principles) is preferable as it is generally more cost-efficient than formal regulation...	Council has no fixed regulation regarding recycled water price.

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Principle	Requirement	Assessment
2: Cost allocation	When allocating costs, a beneficiary pays approach – typically including direct user pay contributions – should be the starting point, with specific cost share across beneficiaries based on the scheme's drivers (and other characteristics)	For the schemes, the beneficiaries include the broader community and wastewater customers as there is a reduction in the volume of effluent discharges to creeks and streams. With an introduction to usage pricing all beneficiaries will share some of the cost, at the moment it is fully funded through wastewater charges.
3: Water usage charge	Price to contain a water usage (ie volumetric) charge	Yes, for water over 1 ML. by fixing the cost for < 1 ML, small users have a certain bill that can be planned for (eg the Ballina Community Garden)
4: Substitutes	Regard to the price of substitutes (potable water and raw water) may be necessary when setting the upper bound of a price bound	The new proposal regards a viable alternative supply of 20 c / kL for a pumped groundwater system.
5: Differential pricing	Pricing structures should be able to reflect differentiation in the quality or reliability of water supply	Partly yes, the proposal is for an across the board fee based on usage type. UDR usage is currently charged at 80% the price of drinking water, and the new proposal is for a lesser, staged, tariff 15/12/10% the price of drinking water. The UDR allotment is more reliable as Council's provides a 'drinking water top up' in case of treatment failure for UDR customers.
6: Integrated water resourcing planning	Where appropriate, pricing should reflect the role of recycled water as a part of an integrate water resources planning system	The project is part of the Urban Water Management Strategy - which is Council's Integrated water resource plan
7: Cost recovery	Prices should recover efficient full direct costs	Yes, but from all beneficiaries and mostly the wastewater bill
8: Transparency	Prices should be transparent, understandable to users and published to assist efficient choices	Yes, to be clearly presented in Council's Fees and Charges
9: Gradual approach	Prices should be appropriate for adopting a	Yes, to be phased in over five years (we are

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Principle	Requirement	Assessment
	strategy of 'gradualism' to allow consumer education and time for the community to adapt	currently in year one).

Option Two - As per Table Two

Introduce a fixed fee (equivalent to 10% for 1 ML) and a flat rate consumption tariff; i.e.

Water Usage (in Year)	<1 ML/a	1 - 5 ML/a	5 - 25 ML/a	>25 ML/a
Rate as % of Drinking Water	0%	10%	10%	10%
Variable Rate \$/kL	\$-	\$0.214	\$0.214	\$0.214
Fixed Charge	\$214	\$214	\$214	\$214
Price Range	\$214	from \$214 to \$1,070	from \$1,070 to \$5,350	from \$5350

This recognises that smaller customers have greater comparative infrastructure costs – although this would be true to some extent regardless of the water source.

Option Three

Reduce the ultimate rate to some lower, arbitrary, amount with a structure as per either Option One or Two.

Based on the modelling undertaken and the consultation to date, option one (Table One) is the preferred approach and is recommended as follows.

RECOMMENDATIONS

1. That Council endorses a preferred pricing strategy for the supply of recycled water for large non-domestic users (Urban Open Spaces) based on Table One of this report; which is summarised as follows:

Water Usage (in Year)	<1 ML/a	1 - 5 ML/a	5 - 25 ML/a	>25 ML/a
Rate as % of Drinking Water	0%	15%	12%	10%
Variable Rate \$/kL	\$0	\$0.321	\$0.257	\$0.214
Fixed Charge	\$321	\$321	\$321	\$321

2. This pricing is to be phased in based on 25% increments commencing in 2017/18 resulting in the full fee being charged in 2020/21.

Attachment(s)

1. Recycled Water - Bulk Users Pricing