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Memorandum

Other Regulated Tariffs of the Water Corporation

Introduction

In its review into tariffs of the Water Corporation, Aqwest and Busselton Water, the Economic Regulation Authority identified a range of tariffs that appear to be inconsistent with the core recommendations on water tariffs.

This memorandum considers each of these tariffs and whether there is a justification for them in their current form.

Water Tariffs

Fixed Charge Variations

The standard residential fixed charge is $180.50. A wide range of variations to the standard residential by-law fixed charges apply.

1. In Brighton, there is a fixed charge for water used solely for garden purposes. This additional fixed charge (either $65.15 or $130.30 depending on the size of the land) is a charge for non-potable water supplies. The larger block size (> 400 square metres) incurs a higher charge based on the greater volume of non-potable water delivered.

Comments:

There is no metering of the non-potable water supply. It is controlled by rain sensors and these limit water application to a few hours per week. The sensors control the water volume and time. Effectively, this makes the non-potable water supply a fixed volume, as consumers have no ability to vary water use.

With central control over the water delivered, price does not influence consumption. In this case, a fixed charge for the fixed volume is appropriate, although the level of the fixed charge is an issue. Ideally, it would approximate a per unit charge for non-potable water that is consistent with potable water charges.

2. Various customers in the metropolitan area are provided with exemptions to the fixed charge (e.g. land belonging to a religious body, land used as a public hospital, public school, public library, public museum, public art gallery, land used for charitable purposes, not-for-profit entities such as sporting clubs, societies and associations, land used for horse racing, greyhound racing and trotting, cemeteries).

Comments:

This is wide range of organisations and exemptions, many of which go back a long time. There may have been some equity justification for these charges at the time of establishment and almost certainly some would have been largely political concessions. Arguably, such special exemptions are no longer an appropriate mechanism for achieving equity. Moreover, the scope of these concessions is broad, including organisations that are bordering on being fully commercial, or where other services are supplied to them on a fully commercial basis.

These charges should be restored to the standard charge and any concessions deemed necessary should be dealt with as part of a consistent policy for granting such concessions. This would ideally be based on an increase in direct grants to agencies/organisations that meet defined criteria. A fixed water charge concession is an inefficient way to achieve equity. However, where a concession is made to the water service charge, it would be desirable to have the full charge and the amount of the exemption/concession recorded separately, so both consumers and Government can see clearly the value and significance of the concession.

However, it is worth noting that the efficiency implications of this concession are minimal as the service level is fixed (availability/connection) and not influenced by the charge.

3. Strata-titled or long term residential caravan bays ($126.80).

Comments:

These charges were implemented during the 1990's. Essentially, they were agreed to on the basis that caravans use less water. About 75% of the standard load was the original assessment. That is, the essential water use allowance within the fixed charge was less for caravans than for standard residential properties. There may also have been an equity argument, but this would no longer apply and equity issues should be dealt with directly based on the circumstances of those in need of assistance.

The fixed charge could legitimately be changed to reflect the standard water service charge based on the availability of the service and the kL allowance. However, the longer term solution is to move to cost-reflective usage charges based on volume.

4. Community residential, which is land occupied as a communal property on which several family units dwell at the same time and is managed by the persons dwelling on the land or a committee of them ($90.25 for each notional residential unit). The community residential charge is based on the residential charge, with a built in 50 per cent concession, recognising that most residents are welfare recipients (pensioners).

This is a particular policy that is primarily oriented to indigenous communities. There are about 30 such communities located on the fringes of towns. The policy of discounting water services arose because in these communities the bulk of the members were in receipt of government welfare payments and, consistent with the general pensioner discounts, were entitled to a concession. The concession was deemed to be a practical way of providing the pensioner discounts.

In the case of community residential, the practical problem is that the ownership and organisational structure of the communities makes it difficult, if not impossible, to bill customers and pay the concession in the usual way, direct to the beneficiary. The policy of discounting the price to the community to reflect the pensioner status is a practical way of recognising the pensioner status of users.

More generally, for pensioners it might argued that equity would be best served by increasing direct grants to the individual and allowing water services, or any other desired good or service, to be acquired at full price. However, this would not appear to be workable for the members of these communities, because of the communal ownership structures, including, in some cases, the absence of property rental agreements.

Water Usage Charge Variations

A range of variations to the standard residential usage charges apply (compared to the standard metropolitan residential usage charges of $0.643, $0.828, $0.997, $1.423 and $1.714 per kL). These fall into several categories.

5. Community residential ($0.321 per kL, $0.828 per kL, then the same, for metropolitan community residential).

Comments:

As with the service charge, the community residential usage charge is based on the standard charge with a 50 per cent discount built in, which recognises that most residents are welfare recipients. This is an extension of the policy considered above for the variations to the fixed charge, where welfare recipients are involved. Again, the primary focus is around 30 indigenous communities on the fringes of towns.

In the case of usage, a conventional approach to the issue of equity would be to adjust pensions and allow water to be purchased at full price. However, as with the previous case, community residential is primarily about indigenous

communities where communal ownership structures exist. Given the complexity of the communal ownership structures and the associated difficulties of identifying and granting concessions to individuals, incorporating the pensioner concession into the usage concession is the only viable solution.

Again, as with the water service charge, a preferable approach may be to adjust pensions and allow pensioners to make choices about water consumption based on full commercial charges. While this may be generally true, the complexity of the communal organisation may make this unworkable for these communities.

6. For strata-titled caravan parks in the metropolitan area, each bay pays $0.643 for first 150 kL, then a rate linked to the highest non-residential metropolitan usage charge ($1.043 per kL). For strata-titled caravan parks in the non-metropolitan area, each bay pays $0.643 per kL for the first 150 kL, then the highest non-residential usage charge for the town class.

Comments:

These are long term caravan residents. In effect, they are residential dwellings. Pricing is complicated by the commercial involvement of the park owner. The argument is that the first 150 kL is essential water and should be priced accordingly, that is, at the standard rate. The assumption is that, on average, caravan residents would use this amount.

The further argument is that the balance of demand in a caravan park, that is above the 150 kL per bay, is essentially for non-residential purposes (short stay, lawns, etc) and that this is an input to the park operation, and as with any operating cost, the park owner will seek to cover the cost (including a profit margin) in the overall pricing for park services. Hence, this water should be priced at commercial rates. This methodology is applied to metropolitan and non-metropolitan parks.

The major issue here relates to the presence of "permanent" residents in an essentially commercial operation. It could be argued that a caravan park is a commercial operation and that the standard non-residential fixed and water usage charges should apply. That is, insofar as the commercial element is concerned, caravan parks are no different from any tourism/short stay accommodation and the standard non-residential water charges should apply.

However, whilst having long term residents in a caravan park is not policy, governments have been forced to recognise the existence of large numbers of such people. Park owners have argued that long term residents should pay residential fixed and usage rates.

Hence, the broad thrust of the pricing policy is consistent with the reality of caravan parks, whereby a significant number of bays are effectively given over to permanent residential dwellings.

7. A range of variations to the standard metropolitan non-residential usage charges (compared to metropolitan prices of $0.983, $1.043 and $1.028 per kL).

Comments:

This arises because of the existence of dual-use residential and non-residential properties and the issue of how the residential component should be recognised. Under this pricing model, the first 150kL is charged at residential prices, recognising the residential component of water use.

This is a purely practical solution to a combined metering and political problem. These charges apply when a residential component (e.g. a unit or flat) is built into a commercial complex but where no strata title exists for the residential unit. It follows the same logic as for long term residents in commercial caravan parks.

The development is essentially commercial and as such commercial water charges would apply. The lack of a strata tile makes it difficult to separate out the residential and non-residential water consumption. The practical solution has been to assume that the residential component either will consume or is entitled to consume the standard 150 kL associated with essential use.

If residential use exceeds this volume it is paid for at non-residential rates. If it is less, some non-residential water is consumed at residential rates.

Short of insisting on strata titling so that the residential unit can be treated separately, which has its own issues, this appears a necessary practical solution.

8. Farmland Pricing

A range of pricing situations arise in farmland areas. These are considered below as a suite of prices. The suite includes:

- Metropolitan farmland pays a discounted rate of $1.083 per kL. for usage;
- Non-metropolitan farmland pays a rate of $1.083 per kL;
- Local government standpipes ($1.083 per kL);
- Stock watering ($1.083 per kL).

Comments:

The above prices are all a part of farmland water pricing. Both equity and cost issues need to be considered.

The base case is non-metropolitan famers accessing water from the farmland system (e.g. from the Goldfields pipeline). There is a fixed unit price of $1.083

per kL. It is recognised that this is unlikely to be cost-reflective pricing and that the setting of this price had a significant political/equity component to it.

Ideally this price should be cost-reflective and, consistent with modern pricing, a tiered price structure may be appropriate rather than a single price. The current fixed price of 1.083 per kL does not relate to the tiered price schedule for non-residential water consumption in country areas. It would be desirable, from an efficiency perspective, if the non-residential pricing schedule applied.

In part, the argument here is that the opportunity value of this water is to sell it to other customers (residential and non-residential) who derive supplies from the system or who can use the source water that is delivered into the system. For example, source water from Mundaring into the Goldfields and Agricultural Water Scheme (GAWS) could be delivered to a range of consumers from GAWS or diverted to alternative non-GAWS uses.

Farmland water was originally designed as water of last resort – it drought-proofed the relevant farmland areas. However, at $1.083 per kL it may be underpriced and be attractive as a core water source. Certainly, it appears underpriced relative to competing uses.

Whilst the level of the farmland price is an issue, so is the question of who actually pays it and whether these specific circumstances are pricing special cases.

For the metropolitan farms, the use of farmland water prices recognises that some farms within the metropolitan area are supplied with water from the farmlands water system. For example, some hills farms are supplied from the Goldfields pipeline. In this case, they are charged the farmland price because they are being supplied from the same system as are other farms paying the farmland price.

There is a case for charging the same price for the same water service, although as pointed out above, the price charged should be cost-reflective and set correctly relative to the prices paid by other users of water from the system.

The local government standpipes are connected to the farmland water supply system. Hence, they are priced at the standard farmland price. Local Government accesses the water for a range of uses that involve users accessing water from the standpipe (e.g. farmers not connected to the system supplementing dam water, fire services, etc). The local government makes a small administration charge on top of the standard price. Water from the standpipes is not delivered to properties with connection to the system. Again charging the same price for essentially the same water service is appropriate. The same logic applies to stock watering with farmland water supplies.

Hence, the application of the farmland water price to the above categories of users is appropriate. It is the level of the farmland water price that is the more significant issue/

Non-residential non-metropolitan charges

Non-residential non-metropolitan charges are subject to a variety of adjustments.

9. Some mining customers pay $1.889 per kL.

Comments:

This is a residual price structure. In general, mines are subject to individual price negotiations and individual supply contracts. Most mines, and all large mines, are done in this way. However, there are a number of small mines (3-5 ML/day or less) where individual negotiation is not undertaken. For these, a constant usage price of $1.889 per kL is used.

The broad policy here is reasonable. Essentially a trade-off has to be made between the transaction costs of individual contracts against the revenue gains. It would be expected that, for small mine volumes, separate contract negotiation would not be worthwhile. The volume at which this occurs is obviously a commercial decision.

However, having said that, it appears that the charge of $1.889 per kL is not based on supply costs – it is not cost-reflective. There is a case to make this a cost-reflective price, consistent with the tiered non-residential country consumption price schedule.

10. Institutional public, charitable ($1.042 and $1.697 per kL)

Comments:

This appears to be a purely equity/political argument. Exemptions/discounts have been provided because of the work done and the nature of the ultimate beneficiaries.

The appropriate policy here would be to charge the standard non-residential prices for water and then offer specific and transparent concessions where these are deemed appropriate. However, given that it is the ultimate consumer who is likely to be the target of any equity based transfer payments, it could be argued that concessions should be addressed directly to these consumers where possible and not to the intermediate organisation.

Non-Residential Metropolitan Charges

11. Metropolitan hydrant standpipes ($1.043 per kL).

Comments:

These are a particular form of supply. The major use is by land developers for dust suppression. These portable standpipes are metered and the charge of $1.043 per kL is deemed by Water Corporation to be a full commercial rate for

a fully commercial use of water. However, it is fixed at the highest non-residential unit price and, given the metering, it could be argued that the full non-residential tiered price structure should be applied.

Wastewater tariffs

Sewerage charges for each residence in the metropolitan area are based on the rateable value of the property. The rateable value is the Gross Rental Value of the property (or estimated gross annual rent) which is determined by the Valuer General. For 2008-09 the tariffs are:

- 4.75 cents for each dollar of the first $12,400 of the rateable value, 1.62 cents for each dollar thereafter.

The minimum metropolitan residential sewerage charge for 2008-09 is $275.90 per residence. This is in effect a minimum fixed charge.

There are many criticisms of GRV as the basis for wastewater charges. Preferred approaches are based on fixed availability charges and associated volumetric charges. However, at this stage the GRV is the prevailing pricing system in Western Australia. This being the case, the variations considered below are considered in this context.

Metropolitan Wastewater Fixed Charge Variations

A range of variations to the variable metropolitan by-law charges apply.

12. Various customers in the metropolitan area are provided with exemptions to the fixed charge. These include: land belonging to a religious body, land used as a public hospital, public school, public library, public museum, public art gallery, land used for charitable purposes, not-for-profit entities such as sporting clubs, societies and associations, land used for horse racing, greyhound racing and trotting, cemeteries. Exemptions from the minimum charge apply to all classifications (residential, commercial and vacant land).

Comments:

The exemption is from availability based charges (for example from GRV-based charges), with these customers paying a fixed charge for each fixture connected to sewer. The charge is equal to the number of fixtures multiplied by $163.30.

These exemptions have no efficiency basis and exist either as a political or equity concession. Taking an equity perspective, these exemptions should be removed, with charges restored to the standard charge.

Any concessions deemed necessary should be dealt with as part of a consistent policy for granting such concessions, for example, the use of a direct grant, not a fixed charge sewerage concession. If the concession is to be maintained,

transparency would be served if the full charge was paid and the concession was handled as a designated rebate on the standard bill.

As with other fixed charge concessions it is unlikely to have major efficiency implications as the level and number of services is unlikely to be affected.

The exemption is from the availability charge which, to the extent that it is based on GRV, is not an ideal basis for an availability charge. Ideally, the charge in future would not be based on GRV. However, the point here is that whatever the basis for the availability charge, these equity exemptions are questionable.

Non-Metropolitan Wastewater Fixed Charge Variations

A variety of concessions also apply in country areas. These include:

13. Institutional public ($163.30 for the first major fixture and $71.80 for each additional fixture thereafter);

14. Charitable purposes ($163.30 for the first major fixture and $71.80 for each additional fixture thereafter);

15. General exempt – as with institutional public.

Comments:

The same arguments apply here as for concessions in the metropolitan area. The exemptions have no efficiency basis and must be justified as political or equity concessions. Taking an equity perspective, these exemptions should be removed, with charges restored to the standard charge. Any concessions deemed necessary should be dealt with as part of a consistent policy for granting such concessions, for example, the use of a direct grant, not a fixed charge sewerage concession.

Again, if the concession is to be maintained, transparency would be served if the full charge was paid and the concession was handled as a designated rebate on the standard bill.

16. Community residential ($71.80).

Comments:

This concession is essentially a concession to deal with fringe indigenous communities. As noted above, there are about 30 such communities and members are predominantly supported by transfer payments.

Two issues arise. As welfare recipients, members of these communities are entitled to pensioner discounts. Communal ownership structures make it difficult to grant such concessions directly to the pensioner. Discounting prices

to the community to reflect the pensioner entitlement is a practical solution which, as was noted previously, maybe the only way to grant the concession.

Supporting indigenous communities is an important policy. Government may believe that access to the specific water and wastewater services is important for these communities. In this case, concessional charging, over and above the assessed pensioner discounts, with funding via CSO, may be appropriate.

17. Caravan bay ($200.70) and strata-titled storage unit and strata-titled parking bay ($60.15)

Comments:

Both of these are concessions that are size/scale related. Caravan parks and strata-tilted storage units and parking bays have a service available but are less of a load than a full residential dwelling.

The case of the caravan bay is based on two elements. It would be inefficient to get a GRV for individual caravan bays. Hence, the fixed charge is appropriate. The discount to the standard fixed charge reflects the idea that the caravan bay is a smaller service unit. This is essentially a practical solution. Transaction costs are such that the basic GRV model is not applicable. A fixed charge is the only realistic option.

However, whilst a fixed charge may be appropriate, the concession on the fixed charge appears in part a compromise based on social/political considerations.

As a starting point, a caravan park could be considered to be a fully commercial enterprise, like a hotel. It should therefore pay commercial prices for water access and use and wastewater services. However, many caravan parks have substantial long term residents whose dwellings are substitutes for a conventional residential dwelling. Some parks have a very high proportion of such residents and it has always been argued that this meant that a residential style charge for wastewater services was justified.

Once it is accepted that a park location is effectively a residential dwelling, it is not clear why the full minimum residential charge should not apply when the caravan bay can be treated as a residential property. If a concession is justified on equity grounds, then it needs to be shown as a separate concession.

Storage units and parking bays also pose valuation problems. Each strata-titled unit must be rated. However, while each unit is a potential contributor to the need for wastewater services, it would be inappropriate to charge each the full fixed charge because each unit does not actually have a connection. These units share common facilities. A shared fixture charge is used based on four units contributing to the common use facility.

In the absence of full information about the GRV of such units, this is essentially a practical solution. However, it is worth noting that this is a

concessional charge and a strict availability test might see the standard fixed fee applied.

18. Non-residential strata-titled units pay either commercial charges (based on major fixtures) or the shared fixture charge (the charge for four or more fixtures)

Comments:

Non-residential wastewater charges are based on the number of fixtures. The issue here is that the non-residential strata-title units share common facilities – toilets, shower blocks, etc. The charge is based on the assumption that four units share a facility so each is charged the fourth fixture charge.

Again, in the absence of full information about the GRV of such units, this is essentially a practical solution. However, it is worth noting that this is a concessional charge and a strict availability test might see the standard fixed fee applied.

Vacant Land Wastewater Charges

19. Vacant metropolitan non-residential land not being land comprised in a residential property, a nursing park home, a caravan park, or a strata-titled caravan bay is charged as follows:

    - An amount of 1.530 cents/$ of GRV;
    - Subject to a minimum in respect of any vacant land the subject of a separate assessment of$207.50.

    For country vacant land the minimum is $181.60.

Comments:

Residential wastewater charges are based on GRV subject to a minimum charge as set out previously. Non-residential charges are based on fixtures and a volumetric charge.

Vacant land has no fixtures and so cannot bear a charge based on fixtures and volume. Wastewater services are available but not used. There is a case for adjusting the charge downward compared to the usual minimum fixed charge. The actual minimum charge at $207.50 is about a third of the minimum non-residential charge. In effect, it is an availability charge.

The GRV component seems anachronistic. GRV is no longer the basis for the non-residential charge. A preferable solution would be to strike a fixed charge for wastewater service availability and levy that as the standard fixed charge for vacant land.

Industrial Waste Charges

A range of pollution charges and service charges apply in the case of non-domestic waste as follows.

20. Industrial waste discharged into the sewer of the Water Corporation pursuant to a major permit is a uniform state-wide charge based on the volume of discharge together with composition of the discharge and the quantity of contaminants in the discharge: For volume the charge is 111.0 c/kl. After that, the charge varies with the nature of the discharge. It varies from no charge for sulphate discharge with a concentration of up to 0.05 kg per kL or dissolved salts discharge with a concentration up to 1 kg per kL up to a charge of 342,465 c/kg for mercury discharge with a concentration of over 0.001 kg per day.

Comments:

These are straight pollution charges and are meant to be reflective of the costs of monitoring, treating waste, impacts on system operation, etc. There are broadly two issues here.

From an efficiency perspective, where particular wastes add to costs, either because of volume or contaminants, efficiency dictates that the producer pay an appropriate price that reflects the marginal cost of dealing with that waste. Charging according to volume and contaminant is appropriate.

The second issue relates to the level of the charge – it should be cost-reflective. Whilst the structure of these charges is consistent with user pays and economic efficiency objectives in pricing, the level cannot be assessed in this memorandum.

Industrial waste, including the major permit waste just described, requires a range of specific services to be supplied. These are very much to do with monitoring and evaluation, including, for example, sampling wastes to check composition and evaluating a firm's production process (an audit type function). The services provided include:

21. Permit fee ($187.70);
    Meter reading ($21.20);
    Establishment fee – routine program or unscheduled visit ($105.50/hour);
    Inspection fee – routine program or unscheduled ($116.05/hour);
    Production evaluation – routine program – N/A;
    Production evaluation – unscheduled visit ($132.40/hour);
    Grab samples – routine program ($246.95);
    Grab samples – unscheduled visit (at cost);
    Composite samples – routine program ($579.70);
    Composite samples – unscheduled visit (at cost);
    Non-permit holders discharging industrial waste ($105.50/hour);

Discharging industrial waste from an open area ($1.25/square metre);
Fats, oils and grease management charge ($87.50), introduced in 2008/09.

Comments:

The principle here is that these are specific services traceable to particular clients and particular wastes. They are consistent with a user pays approach to the handling of wastes. It would not be appropriate to adjust the standard charge across all non-residential users to allow for these costs. Alternatively, the unit industrial waste charge could be adapted, but again, each firm would require a different mix of services. A separate charge is therefore consistent with user pays pricing and economic efficiency.

As with the discharge price, how well these actual charges reflect actual service delivery costs is not able to be assessed in this memorandum.

Drainage Charges

Drainage charges are calculated based on either fixed charges or variable charges.

Drainage charges are as follows:

- Residential $0.501 cents in $GRV;
- Non-residential $0.605 cents in $GRV;
- Vacant land $0.400 cents in $GRV;
- The minimum annual charge is $63.10.

Comments:

The variations in the rate applied to GRV are unlikely to be consistent with either efficiency or equity objectives. In fact, as set out above, it is likely to create potential inequities. Let area drained in the metropolitan area be the proxy measure of the drainage load. In this case, the percentage of revenue from residential properties is approximately equal to the percentage of area drained that is residential land. Non-residential land accounts for most of the balance. This means that non-residential land pays drainage costs for non-residential land and for public open space, road reserves, etc.

However, whilst the differential in the rate in the dollar is debatable, the real issue is that drainage is not suited to a GRV-based charge. It would best be charged at a fixed rate. As a proxy, land area might be taken as an appropriate measure of the drainage load. A fixed charge per residential lot (with perhaps two lot sizes defined) and an area based charge for non-residential land (with a small number of lot size, fixed charge combinations) would be a more appropriate pricing structure.

22. There is an exemption from the GRV and associated $63.10 minimum for strata-tilted caravan bays, strata-titled storage units and strata-titled parking bays. Fixed charges below the $63.10 are applied for a strata-titled caravan bay ($18.95) or strata-titled storage units and strata-titled parking bays ($7.80).

Comments:

As with the previous discussions of caravan bays and storage units, there are two issues. First, GRVs are difficult to get. Second, the configuration and land size suggest that the contribution to drainage may be less than for a standard residential or non-residential lot. A fixed charge is a reasonable practical solution to this problem, although the level of the charge is an issue. It appears to be unrelated to costs and is more a compromise between what is reasonable and what is achievable.

Discounts and Additional Charges

A range of commercial discounts are offered. These include:

23. Discount if an account is paid on or before 31 July in the year the charge was incurred ($1.50);

    Additional charges ranging from $1.50 to $3.00 if instalment payment arrangements are made with the Water Corporation (does not apply to pensioners or seniors);

    Two different rates of interest are applicable to outstanding amounts as a result of special payment arrangements made with the Corporation (5.36 per cent per annum and 6.36 per cent per annum);

    Interest on overdue amounts (13.99% per annum).

Comments:

These are essentially commercial adjustments that are cost-reflective of the payment arrangements they are designed to encourage/discourage. As such, they are consistent with economic efficiency.

The assessment of the actual charge magnitude is beyond the scope of this memorandum.