Sydney WATER

Sydney Water Submission to IPART's Draft Determination

Review of developer charges for metropolitan water agencies

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GLOSSARY

Annual Revenue Requirement	the revenue required to recover the efficient costs of providing regulated services
BASIX	Building Sustainability Index
BOO	build, own, operate
Catchment	the area drained by a stream, lake or other body of water, areas that feed into dams. May also refer to areas served by a wastewater or stormwater system
DECC	Department of Environment and Climate Change
Demand management	strategies to reduce water consumption by residential, commercial and industrial sectors
Desalination	the process that removes salt from saline water to produce potable or drinking water
DSP	development servicing plan (area)
EPLs	Environment Protection Licences issued by the Department of Environment and Climate Change (DECC)
Equivalent tenement	a measure of the average annual demand that a development will place on the infrastructure in terms of water consumption and discharge for a single detached dwelling
Filtration	a process for removing particles from a solution by passing it through a porous structure or medium, such as a screen, membrane, sand or gravel
IPART	Independent Pricing and Regulatory Tribunal, the independent body that oversees regulation in the water, gas, electricity and public transport industries in NSW
Irrigation	controlled application of water for agricultural purposes through manmade systems to supply water requirements not satisfied by rainfall
K	the capital component of the formula for developer charges
LRMC	long run marginal cost
O & M	operating and maintenance (contract)
Operating Licence	a licence issued under the *Sydney Water Act 1994* defining many of Sydney Water's performance standards
Potable	fit or suitable for drinking
Recycled water	highly treated wastewater that can be used in industrial processes, to irrigate agriculture, urban parks and landscapes, and in the home for flushing toilets, car washing and watering gardens. It is not for drinking or personal use
RAB or Regulatory Asset Base	the value of Sydney Water's assets used to provide regulated services, determined by IPART and used in estimating the Annual Revenue Requirement
R - C	revenues minus costs or the net operating result component of the formula for developer charges
Sewage	the wastewater from homes, offices, shops, factories and other premises discharged to the sewer. About 99 per cent of sewage is water

Sewage overflow	any liquid that escapes from the sewerage system, as well as partially treated sewage that is discharged from a sewage (wastewater) treatment plant
Sewerage system	the network of pipes, pumping stations and treatment plants used to collect, transport, treat and discharge sewage (wastewater)
SPS	sewage pumping station
STP	sewage treatment plant, which improves sewage quality before discharge to receiving waters
Sydney Water	Sydney Water Corporation, a statutory State-owned corporation, provides drinking water, recycled water, wastewater services and some stormwater services to more than four million people in Sydney, Illawarra and the Blue Mountains
WACC	weighted average cost of capital
Wastewater	the dirty water or wastewater that goes down the drains of homes, offices, shops, factories and other premises and is discharged into the wastewater system. Also known as sewage
Wastewater system	the system of pipes and pump stations for collecting and transporting wastewater from each property to the wastewater (sewage) treatment plant
WFP	water filtration plant, which improves water quality by removing impurities through filtration

EXECUTIVE SUMMARY

The Independent Pricing and Regulatory Tribunal's (IPART) draft determination and report seeks to provide clarity and guidance around the calculation and implementation of developer charges. The draft determination provides a basis for lower and more consistent developer charges across Sydney Water's area of operations. It does this by:

- reducing the number of development servicing plan areas (which averages costs over larger areas);
- removing older assets from charges; and
- amending the net operating result in the formula so that charges should be lower in areas with high charges.

Sydney Water considers that there are three areas in the draft determination that require clarification.

The first is the allocation of capital costs to existing and future properties. IPART requires that charges for developments be expressed as a cost per property (equivalent tenement). The draft report expresses a preference for the approach used by Hunter Water. Under Hunter Water's approach capital costs for most assets are allocated to both existing and future properties. Sydney Water supports this approach. The legal determination, however, excludes existing properties from the denominator in the formula. Sydney Water recommends that the legal determination be modified so it aligns with the approach in the draft report.

Second, IPART considers that some of the costs of the desalination project should be included in developer charges. Sydney Water considers that the desalination project should be funded through potable water prices. This means that the desalination project would not lead to either higher or lower developer charges. Given that the cost of the desalination project is already incorporated into future water prices, it is appropriate to include its full costs (both operating and capital) in the operating expenditure component of the net operating result in the developer charges formula. This is consistent with the current treatment of the privately owned water filtration plants.

Finally, the draft determination seeks comment on the most appropriate way of partitioning growth assets from the regulatory asset base (RAB). Sydney Water does not believe that a change to the existing arrangement is necessary. There is no double dipping and assets are not funded twice. Moreover, there is no evidence that existing properties cross-subsidise new developments in Sydney. In aggregate, revenues from new developments exceed the total cost of servicing growth. Partitioning of growth assets and greater risk transfer to Sydney Water will lead to significantly higher developer charges.

INTRODUCTION

The outline of this submission is as follows:

Section 1 briefly discusses issues in implementing the formula, in particular, the allocation of capital costs to properties.

Section 2 comments on how Sydney Water can apply the formula in relation to:

- the privately owned water filtration plants;
- the desalination project; and
- the discount rate applied to pre 1996 assets.

Section 3 briefly covers those matters where IPART has sought further comment, namely:

- principles for calculating growth equivalent tenements (ETs); and
- partitioning growth assets and revenues.

Section 4 covers issues where Sydney Water is largely in agreement with the draft determination. Comment is provided on the likely impact of the draft determination on the calculation and implementation of developer charges. The issues discussed are:

- development servicing plan (DSP) areas;
- implementation of new and revised charges;
- recycled water developer charges;
- defining asset capacity; and
- other definition issues.

1 IMPLEMENTING THE FORMULA

Main points

- The draft report expresses a preference to allocate capital costs to both existing and future properties. Sydney Water supports this approach.
- The legal determination should be modified so it aligns with the approach in the draft report.

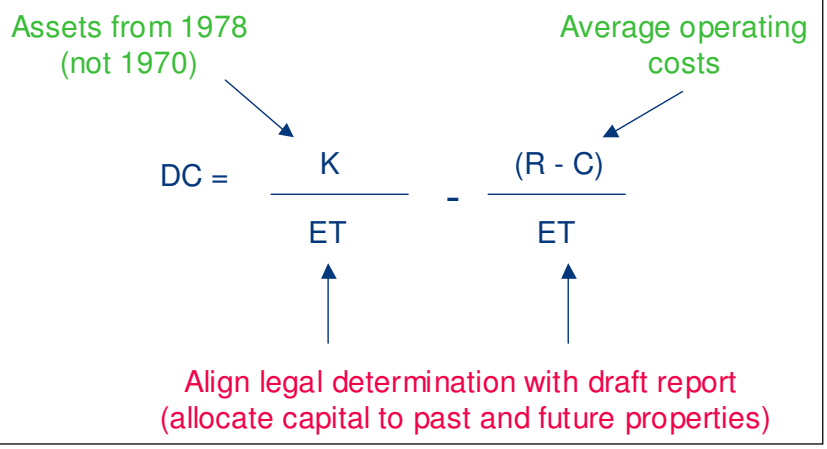
The draft determination includes two improvements to the formula, which will provide lower and more consistent charges (see box 1). These are:

- limiting past assets to 30 years prior to the review date. Old assets from 1970 to 1978 are now excluded; and
- the use of average operating costs rather than location specific operating costs. This reduces charges in high cost areas.

The draft determination also specifies how capital costs are to be allocated to existing and future properties. However, clarification is required because there are inconsistencies between the draft report and the legal determination.

The draft report expresses a preference for the approach used by Hunter Water. Under Hunter Water's approach capital costs for most assets are allocated to both existing and future properties. The legal determination, however, excludes existing properties from the denominator in the formula.

Box 1 Summary of changes to formula



Sydney Water supports the approach used by Hunter Water in calculating developer charges. This approach is cost reflective, moderates the unnecessarily high charges in inland areas and will lead to more stable charges over time.

The current drafting in the legal determination would lead to higher charges, especially in greenfield areas. The legal determination should be modified so it aligns with the draft report.

2 APPLYING THE FORMULA

Main points

- Sydney Water considers the current practice of including the full payments made to the water filtration plant operators in operating expenditures should be continued.
- The desalination project should be funded through potable water prices. This means that the desalination project should not lead to either higher or lower developer charges.
- In the interests of simplicity and consistency, it is recommended that the rate of return for pre 1996 assets be applied from the start of a financial year, namely 1 July 1996.

Incorporating Sydney Water's water filtration plants into developer charges

Sydney Water's four major water filtration plants (WFPs) are privately owned and services are provided for a charge. The four WFPs account for over 90 per cent of total filtered drinking water. These contracts were awarded during the 1993-94 financial year, are set up as Build Own Operate (BOO) arrangements and pre-date IPART's original 1995 determination on developer charges.

Sydney Water does not own assets under these contracts. Sydney Water is purchasing a product (in particular, filtered water) at an agreed price from a third party. Payments include both a fixed and variable component. The cost of the assets is not pertinent for Sydney Water.

Sydney Water currently includes all payments (fixed and variable) to WFP operators in operating expenditures in calculating the net operating result in the developer charges formula.

The draft determination requires Sydney Water to incorporate the WFPs into developer charges in a similar manner as other headwork assets. Growth was not the driver for the WFPs. Attempting to estimate the value attributable to growth of assets that do not belong to Sydney Water would be time consuming, subjective, and contrary to the general objective of simplifying the calculation of developer charges. Some of the data necessary might also be subject to confidentiality provisions and could not be published in a DSP.

Sydney Water therefore considers that the full payments (fixed and variable) made to the WFP operators should be included in operating expenditures. These costs would only be applied to those DSP areas served by the privately owned WFPs and not the areas served by WFPs owned by Sydney Water.

Including the costs of the desalination project in developer charges

The draft determination states that there is a need for further guidance regarding the allocation of costs between growth and other drivers of capital expenditure. IPART has provided a case study based on a desalination plant.

In its case study, IPART has used the concept of 'safe' yield as a basis for allocating costs between existing and growth properties. New developments are assumed to consume part of the safe yield attributable to the plant.

Sydney Water does not consider the IPART approach of allocating desalination capital costs to new developments to be appropriate.

First, Sydney Water notes that the Water Services Association of Australia considers the concept of 'safe yield' to be a misleading term that should not be used.[1] Second, the concept of safe yield (usually referred to as 'system yield') was derived in an era of dam building and rainfall dependent sources of supply. It is losing relevance in a situation where technology allows investment in water factories, such as recycling and desalination plants, that can produce supply as needed.

The desalination plant does not provide a fixed level of capacity that is 'consumed' by new developments. Rather, the plant will operate in response to falling dam levels. The rainfall in Sydney's catchments is highly variable. Inflows to Sydney's dam catchments are three times as volatile as inflows to Melbourne's. As a consequence, Sydney has dam storages that can both fall and rise rapidly.

The primary driver of the desalination plant is variable rainfall and the risks associated with that. Desalination allows water to be produced when storages are insufficient. Furthermore there has been insufficient rain in most of the Sydney catchment. Water has been mainly sourced from the Tallowa Dam on the Shoalhaven river. Without the transfer of water from the Shoalhaven system, in February 2007 (when the decision to proceed with desalination was made), Sydney's dams would have dropped to 13% full (rather than 33% full). Reliance on this single source is very risky.

The rise in demand from population increase is far less than the impact of variable rainfall on dam levels. The desalination plant can make a significant difference to dam storage levels during periods of low inflows to the dams. With lower and more variable rainfall, possibly due to climate change, the desalination contribution is significant in securing the water supply for all of Sydney, the Illawarra and the Blue Mountains.

As set out in Sydney Water's submission to IPART's review of postage stamp prices, the desalination project should be funded through potable water prices. This means that the desalination project should not lead to either higher or lower developer charges. Given that the cost of the desalination project is already incorporated into future prices, it is appropriate to include its full costs (both operating and capital) in the operating expenditure component of the net operating result in the developer charges formula.

The discount rate applied to pre 1996 assets

The draft determination retains the principle that for pre 1996 assets, the three per cent real rate of return should only be applied from 1 January 1996 onwards. In the interests of simplicity and consistency, it is recommended that the rate of return be applied to pre 1996 assets from the start of the financial year, namely 1 July 1996.

[1] Water Services Association of Australia (June 2005), *Framework for Urban Water Resource Planning*, Occasional Paper no.14, p.24.

3 EQUIVALENT TENEMENTS, GROWTH COSTS AND REVENUES

Main points

- The draft determination requires a consumption or flow basis for allocating ETs. IPART has requested that water agencies forward proposals to establish principles that can be incorporated into the final determination.
- To the maximum extent possible, the calculation of ETs should be consistent with the flows used to charge properties. This will mean the number of growth ETs better reflects actual increases in network demand.
- IPART is seeking comment on potential ways to 'de link' growth capital from the regulatory asset base (RAB). This is based on concerns over cross-subsidies and risk transfer.
- There is no evidence that existing properties cross-subsidise new developments in Sydney. Rather, aggregate revenues from new developments exceed the total cost of servicing growth.
- Developer charges would need to increase under any proposal to de link growth capital from the RAB because of the higher risk associated with growth investments.

Principles for calculating growth equivalent tenements

The draft determination requires a consumption or 'flow' basis for allocating ETs. IPART has also requested that Sydney Water forward proposals to establish the principles for such a system so that they can be incorporated into the final determination.

Sydney Water currently applies a design standard (an ET multiplier) to land areas in determining the number of growth ETs for commercial and industrial developments. For example, Sydney Water currently assumes each hectare of industrial land consumes the water of around 30 average residential properties.

Developers have expressed concerns over the assumed water consumption and wastewater discharges implied in this approach to commercial and industrial land. In response to these concerns, Sydney Water now provides an option for commercial and industrial developer charges to be calculated on a usage or flows basis rather than an area basis.

To the maximum extent possible, the calculation of ETs should be consistent with the actual flows used to charge properties. This will mean the number of growth ETs better reflects actual increases in network demand.

Partitioning growth assets and revenues

IPART has stated that it is concerned at an increasing proportion of growth-related capital expenditure being retained in the regulatory asset base (RAB). IPART questions why this is happening. IPART also states that the recovery of costs is dependent on Sydney Water implementing developer charges

correctly and that developer charges are designed to require Sydney Water to bear the risk of inappropriate or ill-timed infrastructure.

Because of these concerns, IPART is seeking comment on potential ways to 'de link' growth capital from the RAB.

Is there a problem that needs addressing?

Sydney Water does not consider that there is either double dipping on growth assets or that existing properties are cross-subsidising the cost of new developments.

An increasing proportion of growth capital in the RAB does not mean that existing properties are cross-subsidising new developments. Rather, it should be expected that the proportion of growth capital in the RAB grows in line with the growth in the proportion of new developments to existing properties.

In the case of Sydney Water's current developer charges the opposite situation is more likely, where aggregate revenues from new developments more than recover the cost of total growth expenses.

In Sydney, the majority of new developments in brownfield areas do not pay any developer charges because the net operating result in the formula is more than capital charges. For the majority of new developments revenues from postage stamp prices more than cover the cost of servicing growth. As such, the incremental or additional cost of servicing most new developments is less than the existing average cost. As a consequence, growth capital will continue to increase in the RAB but it does not mean that postage stamp prices need to rise.

If IPART were to 'de link' growth capital from the RAB it would likely reveal that the average value of the RAB for existing properties (since 2001 when the RAB was established) exceeds the average value of growth capital per growth property. This would reflect the fact that the additional cost of servicing growth is less than the existing average cost.

The level of postage stamp prices over time indicates that existing properties do not cross-subsidise new developments. From 1997-98 to 2004-05 prices have remained relatively constant in real terms. Prices have increased since this time, but the reasons for this are not growth capital. Rather, costs have increased due to the continual replacement of existing infrastructure (valued at its 'line in the sand' valuation in the RAB), which is below replacement cost, with new assets at current replacement cost. In addition, supply augmentation, including the desalination project and some recycling projects, has also required price increases.

The interaction of growth investment and developer charges means that timing issues may generate modest short-term increases and decreases in postage stamp prices. However, long term increases in prices will occur because replacement of old, non growth assets greatly exceeds their indexed value in the RAB. Instead, over the longer term aggregate revenues from new developments are exceeding the total cost of servicing growth.

IPART's concerns and the draft determination

IPART suggests that its draft determination will reduce Sydney Water's overall revenues from developer charges. Based on existing data, IPART's modelling indicates that Sydney Water's developer charges revenues should fall by around $83 million over five years, or almost $17 million per year. This would suggest that Sydney Water's developer charges on average are currently too high and need to be reduced. Sydney Water agrees. This further indicates that new developments are not subsidised by existing properties.

Risk transfer

The objective of IPART's various partitioning arrangements appears to be based around transferring the risk of inappropriate or ill-timed infrastructure investments onto the water utilities. That said, IPART also requires growth capital plans to have regard to the latest demographic statistics published by the NSW Department of Planning. Sydney Water must provide reasoning in its DSPs for any divergence from the latest demographic statistics published by the NSW Department of Planning.

Sydney Water also notes that developer charges would need to increase under any proposal to de link growth capital from the RAB because of the higher risk associated with growth investments. In the first instance this should translate into a higher cost of capital applied to such investment. The draft determination applies a rate of return for overall investments, which is well below that necessary to justify investments in infrastructure for new developments.

4 OTHER ISSUES

Main points

- Sydney Water supports the principles for defining DSP areas and the ability to levy preliminary developer charges. Sydney Water recommends that preliminary charges also be permitted for recycled water.
- For recycled water developer charges, Sydney Water proposes to apply an avoided cost based on potable water supply augmentation deferred due to recycling. This would be valued at the long run marginal cost of potable water.
- Sydney Water supports the revised definition of an ET and the method for estimating the water consumption of an ET.

Development servicing plan areas

Sydney Water supports the principle that DSP areas should be consistent with the boundaries of water, wastewater and stormwater systems. This is consistent with Sydney Water's current intention to define water DSP areas according to water delivery systems and wastewater DSPs according to sewer catchments.

Defining water DSPs on the basis of water delivery systems will lead to an overall reduction in water developer charges revenue compared to the existing defined DSPs. This is because where no charge is currently payable in an existing DSP, the formula actually produced a negative result. This negative result will be included in the overall level of charges for the new, larger DSP areas.

Implementation of revised and new charges

The draft determination states that DSPs may be exhibited at any point during the financial year, either concurrently or on a rolling basis. Whatever the exhibition timeframe, the new DSP and its charges must come into effect on 1 July of the following financial year.

Sydney Water supports the need for flexibility in the timeframes for preparing and exhibiting individual DSPs. However, the fixed implementation date of 1 July of the following financial year could create a substantial lag between the exhibition of a DSP and its adoption. For example, a DSP could be exhibited in July, public comments taken into consideration and the DSP finalised. For the remaining months of that financial year however, the previous DSP charges would remain in force. If the new DSP charges were lower, developers may delay their works to avoid payment of the higher fees in the existing DSP.

Sydney Water considers that the draft determination provides a pragmatic solution to this issue. In particular, the draft determination makes provision for water agencies to levy preliminary developer charges.

Sydney Water supports this provision. Preliminary charges provide more flexibility for water agencies to calculate DSP charges in a timeframe appropriate to the planning for the area. It also resolves the

potential delay if new or revised DSP charges may only come into effect on 1 July of the year after their exhibition.

Sydney Water understands there is no requirement for the preliminary DSP charges to be exhibited prior to their implementation. Notwithstanding this, Sydney Water will implement any preliminary DSP charges in a transparent fashion. This would include publishing the preliminary charges on Sydney Water's website in place of the existing DSP charges (if such exist), and communicating the preliminary status of the charges to developers.

Appeal of charges

IPART has stated in the report to the draft determination that it will amend its determination to clarify that the dispute resolution process provided for under section 31 of the *IPART Act* can be invoked at any time.

Sydney Water supports a dispute resolution mechanism for developer charges. The development application process provides several opportunities for concerns to be raised, including:

a. the option to make comment on the DSP document and charges during the public exhibition period before the DSP is finalised and implemented;

b. the option to challenge Sydney Water's calculation of charges before they are paid – developers are able to call on arbitration at any time before they pay their fees; and

c. the option to challenge charges after they have been paid.

Sydney Water recommends that IPART clarify the boundaries for accepting appeals and disputes. The main elements of a DSP are the assets Sydney Water considers necessary to support growth and a method and calculation for allocating asset costs to new developments. If IPART was to accept appeals over the assets Sydney Water considers necessary to support growth, then IPART would effectively become an arbitrator of capital needs. Sydney Water considers appeal matters should be limited to issues such as the method and calculation to allocate costs to growth.

For stages (b) and (c), Sydney Water considers that IPART should limit arbitrations to the manner in which the water agency has applied a calculated developer charge for that development. If appeals are still open to all elements of a DSP even after it is registered with IPART, then there is never any point in time at which a DSP charge is considered settled and the exhibition serves little purpose.

Sydney Water also considers that 12 months from the date of payment of developer charges is a reasonable timeframe for developers to make appeals. This provides developers time to challenge the DSP itself during exhibition, their charges calculation prior to payment, and an additional 12 months after payment has been made.

Sydney Water's proposed timeframe for appeals is also consistent with NSW's *Recovery of Impost Act 1963*. This act places a limitation that legal challenges regarding charges may only be made within 12 months of the payment of those charges.

Recycled water developer charges

Sydney Water supports IPART's decision that the 2006 Recycled Water Developer Charges Determination will continue to apply. The determination noted that the cost of a recycling scheme could be offset by costs avoided by a scheme. The cost offset amount may instead be recovered from potable water customers. This recognises that recycling benefits the whole community by reducing the use of drinking water, thereby increasing the security of drinking water supplies. Potable water customers should contribute to the cost of recycling to recognise the benefit they receive from these schemes.

One type of avoided cost relates to potable water supply augmentation that would be required if recycling were not taking place. Sydney Water intends to calculate such an avoided cost, which recognises that by producing recycled water, an equivalent volume of drinking water is not required. The cost of each scheme would therefore be reduced by the cost of producing the same volume of drinking water. The avoided cost would equal the long run marginal cost of water (LRMC), which is estimated to be the potable water usage charge ($1.93/kL in $2008-09) as contained in IPART's latest Price Determination for Sydney Water.

Sydney Water's proposed system-wide approach to avoided costs would offset the cost of supplying recycled water to new developments. The avoided cost would reduce recycled water developer charges by around $2,500 per ET. The proposed avoided cost offset would make development connected to recycling schemes significantly more affordable.

Generally, there is no need for a cost offset where voluntary recycling schemes (ie. non-growth schemes) can be commercially negotiated. However, there may be an argument for an offset if the cost of economically efficient voluntary schemes cannot be recovered through usage charges set at 80 per cent of the potable water price (ie. the usage charge paid by customers of growth schemes). Other mechanisms to reduce the cost of such schemes should also be considered (eg. a subsidy from the Climate Change Fund or a government direction to include a proportion of the costs in potable water or wastewater charges).

Defining asset capacity

The draft determination sets the 'end date' for including growth ETs in capital charges based on whether the capacity of an asset is 'known' or 'unknown'. The capacity of individual assets is to be stated in terms of average ETs. IPART notes that water agencies have stated they have information about the capacity of some but not all of their assets.

Sydney Water has detailed information about the capacity of its networks. However, often the capacity of a particular piece of infrastructure is dependent on the configuration of the surrounding assets. As such, the capacity of individual network assets can change when the capacity of a network is restored or increased, even though no work was done on the asset directly.

The capacity of network assets are not defined at a discrete asset level. To do so would suggest that individual assets are amplified as they approach the stated capacity. This is rarely the case in practice as it is usually not the least cost way of restoring or increasing network capacity.

Wastewater network infrastructure

The flows carried by sewer pipes include discharges from properties, ingress and infiltration during wet weather. When sewer pipes run full in wet weather, designed and directed overflows are necessary to protect public health by acting as safety valves for the system. It is the wet weather overflow frequency limits, including 'no deterioration' in existing performance, that govern network capacity. The Department of Environment and Climate Change (DECC) sets the wet weather overflow frequency limits of Sydney Water's sewer networks.

If an individual pipe or pumping station is approaching capacity it does not follow that its capacity will be increased through amplification. Instead, there are usually many ways of restoring the performance of a section of network. Optimisation models are used to determine the least cost methods from available options.

For example, the wet weather overflow performance of sewer pipes close to the coast may be declining due to growth in the local area. The least cost option may not involve changing local pipes but may be to rehabilitate sewer pipes well upstream in the catchment. This would reduce the level of wet weather flows that ultimately flow down into the pipes on the coast. Another option could be to construct upstream storage facilities or transfer tunnels. This means that the capacity of the coastal sewer pipes increases even though the actual works occurred well upstream.

Therefore it is not meaningful to estimate the capacity of individual network assets. Instead, Sydney Water uses models to test the network as a whole to determine where infrastructure is at or near capacity.

Water network infrastructure

For water networks, a key performance requirement is the minimum pressure provided to properties. In a water network the issue of capacity becomes further complicated because there is a greater degree of interconnectivity. Water can travel from a number of directions to the point of use depending on the configuration of a network.

While each individual pipe has a theoretical maximum capacity, its actual capacity is dependent on the pump capacity and pressure differentials through surrounding pipes. This again means that the capacity of individual network assets can change when the capacity of a network is restored or increased, even though no work was done on the asset directly.

Changes to measured capacity through time

The capacity of assets, as measured by the number of ETs, can also change irrespective of whether works are undertaken in a network. This further weakens the case for defining the capacity of individual network assets.

Where new infrastructure is needed it is generally designed to accommodate ultimate catchment development. However, changes in design standards since the 1970s have meant development above original planned design capacity has been accommodated without the need for augmentation. For example, gains in water efficiency, reductions in dwelling occupancy and the introduction of alternate water sources such as rainwater tanks have reduced demand on the water network per property. Thus for no change in configuration, the number of ETs individual network assets can accommodate has

increased. However, the number of properties that existing infrastructure can serve will fall if peak demand increases due to extreme hot weather events.

Headwork infrastructure

Defining capacity in headwork infrastructure is simpler. However, the capacity of headwork assets can fall if performance standards are increased or limits imposed. For example, licences may limit the total volume (measured in kilograms) of pollutants that a sewage treatment plant can discharge. This means that while the plant may have the capacity to process additional sewage, this capacity cannot be used to serve growth customers if the current volume of pollutants discharged are close to the limits set by DECC.

Definition issues

Definition of an equivalent tenement

Sydney Water supports the new definition of an ET. This removes the confusion associated with 'an average residential dwelling'. This is particularly important in Sydney where the majority of new residential developments are expected to be multi-residential (townhouses and flats) rather than single detached dwellings.

Average and not peak equivalent tenements

Sydney Water agrees that on the basis of simplicity and transparency it is appropriate to express all ETs in terms of average demand. Using average demand will increase the number of water ETs included in developer charges. Superficially, this will reduce the charge per ET. However, charging will also be based on average demand, so there will be more chargeable future water ETs.

Annual average water consumption of an equivalent tenement

Sydney Water supports IPART's proposal to calculate the revenue component of the net operating result based on the consumption figures used in the current Price Determination. Sydney Water understands that the water consumption of one ET is set equal to the average level of consumption of a 'single detached dwelling', rather than 'an average residential dwelling'. For clarity, Sydney Water requests that the final determination state that the definition of average consumption is worded consistently with the definition of an ET.

Adjusted for restrictions, the four-year forecast average annual consumption of *single detached residential* properties for the period of IPART's current price determination is 256 kL per year. This level of consumption is greater than the previous 240 kL per year because it represents the average consumption of single residential dwellings rather than an 'average' residential property.