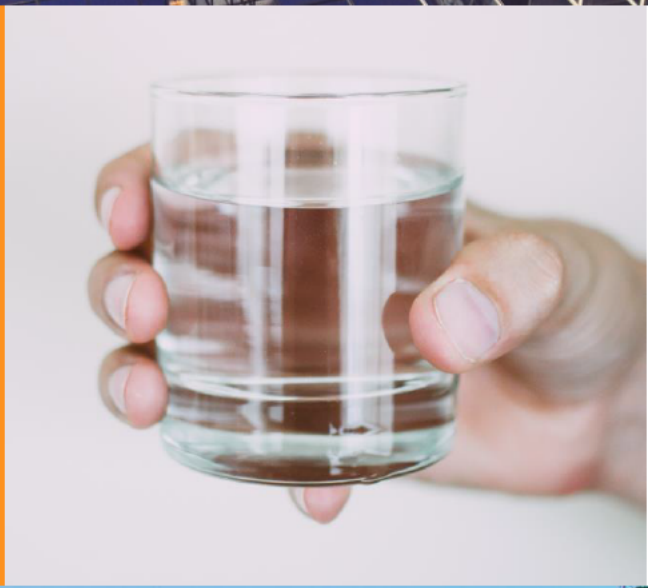
WATER SERVICES
ASSOCIATION OF AUSTRALIA

WSAA Submission

Review of infrastructure contributions in NSW

NSW Productivity Commission



About WSAA

The Water Services Association of Australia (WSAA) is the peak body that supports the Australian urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. The collegiate approach of its members has led to industrywide advances on national water issues.

Key messages

- **Australia's population is growing rapidly with most growth occurring in major cities. This provides opportunities to deliver urban water services in ways that improve liveability. But it also provides challenges to fund the up-front costs of new services.**
- **The Issues Paper outlines the three sources of funding for infrastructure:**
  - **User charges**
  - **Developer contributions**
  - **State or commonwealth government grants**
- **Currently in Sydney and the Hunter, all weight for funding water and wastewater infrastructure falls on user charges.**
- **This submission concentrates on the necessity of sharing some of the cost with developers as beneficiaries of growth infrastructure. Equally, government funding should also be provided for core social blue and green infrastructure to meet the government's objectives of cool, green, sustainable cities.**
- **Considered against NSW state and local contributions for other infrastructure, the absence of contributions for water and wastewater for Sydney and the Hunter is a clear anomaly. Like local government rates, current water and wastewater charges are insufficient to cover the costs of growth infrastructure.**
- **Sydney and the Hunter regions are also outliers compared to the charges for water and wastewater that apply across Australia. While a number of jurisdictions set contributions at levels below that necessary to recovery the full costs of growth infrastructure, in all other jurisdiction contributions offset at least some costs.**
- **A well designed system of developer charges will not affect housing affordability, nor will it affect the supply of housing. They are absorbed earlier in the value chain, as they capture part of the increase in land value, when land is rezoned to higher value uses.**
- **Far from discouraging investment activity, a more liveable city supported by sustainably-funded blue and green infrastructure should encourage high-value development.**
- **It would be a good step forward to re-introduce developer charges in the Sydney and Hunter regions, so that developers once again contribute to the infrastructure that enables growth. To do nothing would be a missed opportunity.**
- **The developer charges should apply to all water and wastewater services (and stormwater where applicable), not just recycled water. In Sydney and Hunter, the current application of developer charges to recycled water only, distorts decisions about the best overall water management approach for a development.**
- **The developer charges framework for Sydney and Hunter is still in place. It would not require legislative change to re-introduce charges using IPART's methodology. Mitigations like caps or minimum/maximum thresholds could be considered during a transitional period.**

Introduction

WSAA is pleased to provide a submission to the NSW Productivity Commission's *Review of Infrastructure Contributions in New South Wales*.

WSAA represents utilities nationally. It provides input to state reviews, particularly when they raise issues that are nationally important. The NSW Productivity Commission's review raises important issues around the funding of growth infrastructure.

The goals of the review are to:

- Fund the infrastructure to support our growing communities
- Lead to an infrastructure contributions system that is simple to understand, transparent and principle-based
- Meet the objectives of certainty and efficiency to support our stakeholders and boost investment in NSW.

WSAA strongly supports these goals and has framed our submission to meet these goals for water and wastewater contributions.

A well-designed system of developer charges and contributions is an important element for funding growth, providing signals on the societal cost of development, and facilitating fair pricing of water services. While practice varies around Australia, most other jurisdictions have contributions systems which make some contribution to the costs of water infrastructure. To the best of WSAA's knowledge, Sydney and Hunter are the only metropolitan areas in Australia without developer charges for water and wastewater.

While the submission concentrates on Issue 4.7: Metropolitan water charges, it strongly supports the holistic nature of this review. Examining the role of infrastructure across all sectors sheds important light on the need for contributions for water infrastructure. Water is no different from other forms of local infrastructure, all of which are at least partially funded through the growth process by those who benefit from those services.

This submission sets out:

- The national growth challenge
- The Sydney and Hunter Vision
- Why developer contributions are necessary and appropriate
- Why a well-designed system of developer contributions is efficient and does not affect affordability; and
- The way forward.

1. Our cities and regions are growing

Many of the challenges the water industry faces in providing better services to its customers and the community coalesce around servicing new growth. The Productivity Commission (federal) highlighted this in its 2020 report "Integrated Urban Water Management – Why a good idea seems hard to implement" [1]:

> Australia is a highly urbanised country with over 17 million people currently living in the five largest cities — Sydney, Melbourne, Brisbane, Perth and Adelaide (65% of the total population). Population projections by the Australian Bureau of Statistics point to Australia becoming even more urbanised over the next 30 years, with these five cities projected to grow at an average annual rate of 1.5% per year, well ahead of the 0.7% for the rest of Australia.
>
> These five cities will need to accommodate around 10 million *additional* residents by 2050 (figure 2.1). This would take their combined population to 26 million (or 70% of the overall population), with 45% of Australia's population living in just two cities — Sydney and Melbourne (with 8.3 million and 8.5 million people, respectively).

Population growth drives a rising demand on urban infrastructure which is already under pressure. As was stated in Infrastructure Australia's Australian Infrastructure Plan in 2016[2]:

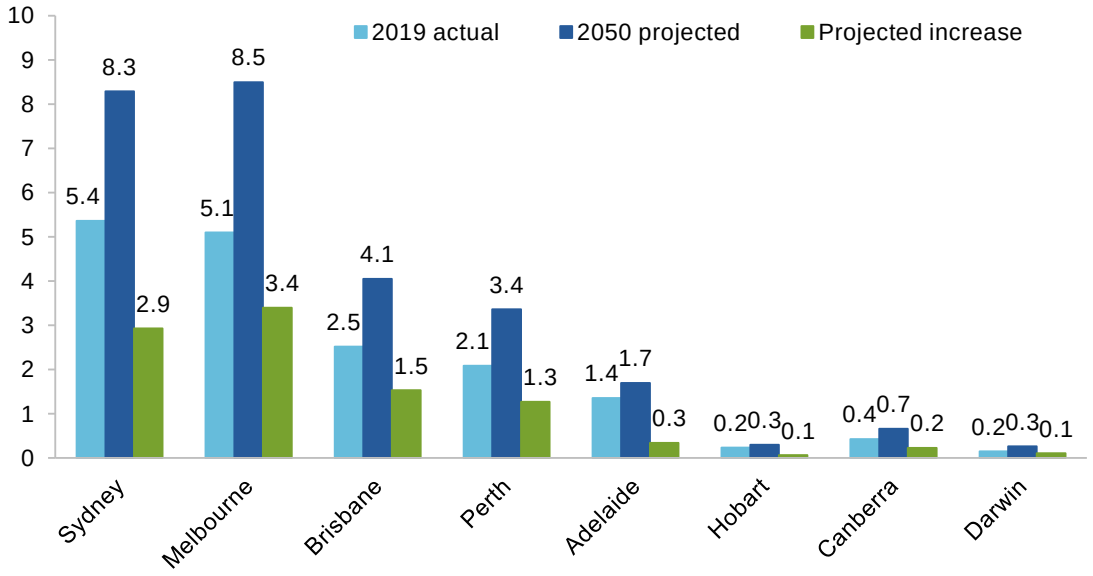
> "Growing communities need places to live, work and enjoy our great Australian way of life, placing pressure on existing infrastructure networks. But if we plan for this growth now, we can further develop our cities as thriving, world-class centres of growth and prosperity."

We have great visions for our growing cities, to make them attractive and liveable places where people want to be. Urban water businesses are in a unique position to contribute to green space, amenity, waterway health and recreation alongside growth. Through an appropriately funded, holistic planning framework we will be better enabled to achieve overall growth objectives.

[1] Productivity Commission 2019, Integrated Urban Water Management - Why a good idea seems hard to implement, Chapter 2, p11
[2] Infrastructure Australia 2016: Australian Infrastructure Plan: Priorities and reforms for our nation's future Report, p6

Figure 2.1 Our capital cities are expected to grow strongly[a]

Million people



[a] Greater Capital City Statistical Areas.

Sources: ABS (2018, 2019).

Increasing densification

The Productivity Commission also highlighted in its Integrated Urban Water Management 2020 report, the way higher urban densities impact the urban water industry[3]:

> Growth will increase the density of these capital cities…proportionately more Australians will live in units than is currently the case…. The increasing density will have implications for the urban water sector. Higher density will involve proportionately more hard surfaces, such as concrete, brick, glass, metal and asphalt… These hard surfaces are generally impermeable to rainfall and result in relatively more runoff of rainwater that needs to be managed to avoid pooling and flooding. Hard surfaces also absorb more heat than natural vegetation. This, coupled with the reduction in vegetation, will result in cities being warmer than surrounding rural areas (this is referred to as the 'urban heat island effect').

2. The Sydney and Hunter Vision

Traditionally, cities like Sydney have addressed public health and water management needs with engineering. Clean, fresh water is piped into the city, and wastewater is piped out to prevent disease. Rainwater is drained away from streets and buildings in hard, hydraulically efficient channels. Public health is protected, essential services are delivered efficiently, and properties are protected from local floods.

Urban communities around the world have recognised that a better approach is needed. In Sydney, for example, we have the NSW Government's vision for a connected metropolis of three liveable cities, that can be realised by more effective and integrated water management:

[3] Ibid, p12

Greater Sydney: A vision for water and the three cities

Western Parkland City
South Creek is the spine of a new form of parkland city and generous corridors of riparian land support recreation and walking. The new city takes a form that's pleasant, compact and walkable. Rainwater and stormwater are successfully captured and reused in the catchment and integrated with effective recycled water systems. Creeks are protected and their natural systems thrive. The city is cool and shaded, and buildings are interspersed with a generous, well irrigated tree canopy. Creation and connection of great places helps build the identity of the new city. Water is revealed throughout the Parkland City – from ridgetop storages, re-invented farm dams, and healthy natural waterways. The broad flood plain of Wianamatta-South Creek and the Hawkesbury River supports traditional farming, while high tech agribusinesses use recycled water, energy and organics recovered from the city. Aboriginal water values are revealed through the management and design of the corridor parkland. The Nepean River is healthy and flowing. Penrith Lakes is a vast inland waterway that rivals the Eastern City's harbour. Mountain streams of the Hawkesbury, Blue Mountains and Wollondilly are protected, and healthy and Sydney's drinking water catchment is well protected.

Central River City
Greater Parramatta to Olympic Park (GPOP) converts the suburban centre of Sydney to a connected modern city. Development respects waterways and enables creation of generous high-quality public spaces that support liveability, recreation and urban cooling. Generous, well-designed streets will be shaded, and capture and treat stormwater, while making a positive contribution to the public domain. The Parramatta river is clean and healthy. Swimming is safe and popular. The foreshore is revealed, and its helps to create community connections. Toongabbie and Prospect Creeks are revitalised, with improved water quality and access. Iconic plants and animals return to urban streams. A plentiful supply of recycled water is used for public space irrigation and maintenance of the public domain. Prospect Reservoir becomes a magnet for water interaction, active recreation and nature conservation.

Eastern Harbour City
The beauty of the coast and harbours is maintained because stormwater is captured, reused and pollution removed. Channelized and piped streams are restored and "daylighted", helping to create a fine grain of blue green grid connections. Bushland fingers along waterways from the north and south are linked into the urban green grid and regenerated mangrove forests protect some vulnerable foreshores. Water quality in coastal lagoons is improved, while The Cooks River and Georges Rivers are returned to health, enriching surrounding communities. Large new urban parklands are created near the eastern coast - these parks celebrate wetlands, facilitate nature interaction, and acknowledge their role in Sydney's early drinking water supply. Seawalls, foreshores and coastal canals are renovated to recreate habitat niches, public access and resilience to climate impacts such as flash floods and storm surges. Treated wastewater and stormwater is stored in coastal sand aquifers. Resources – recycled water, energy, organics and nutrients – are efficiently extracted from wastewater and reused in the eastern city.

Modern water utilities are looking to plan and deliver water services in a more holistic way through Integrated Water Cycle Management (IWCM) and Circular Economy principles. IWCM is a whole-of-system, multidisciplinary approach that aims to manage the entire urban water cycle by integrating the delivery of water, wastewater and stormwater services to contribute to the full suite of water security, public health, environmental and urban amenity outcomes that the community seeks[4].

IWCM may enable more opportunities for cost-effective recycling; and enable water to be held in the urban landscape, meaning water is available for natural evaporative cooling or for slow natural irrigation of trees.

The important point is that modern servicing approaches are moving away from a strict product focus, to one of looking at the whole water cycle (water, wastewater, stormwater and recycled water), and the overall 'water services' that utilities can provide. Through modern approaches, many different livability

[4] Productivity Commission 2020, Integrated Water Management – Why a good idea seems hard to implement, Commission Research Paper, Canberra, p1.

outcomes can be delivered from a single piece of infrastructure – for example open space can provide recreation, urban cooling, flood mitigation, cycleways, and be part of wastewater management all at once. A more holistic approach may deliver greater social and private value.

There is good evidence for pursuing these approaches. For example, Sydney Water's "Cooling Western Sydney" study demonstrated that passive evaporative cooling in the landscape, trees, shading and cool building materials and pavements can reduce the peak ambient temperature in Sydney's west by 2.5 degrees — and cut peak energy demand by nearly 10%, by reducing demand for air conditioning.

Many of these benefits can be enhanced through supporting changes in land use typologies, including the provision and management of open space, and the form and density of housing and other developments. WSAA coordinated a study[5] which found that if an area like Western Sydney could achieve regional scale greenfield urban development that favoured high levels of irrigated public open space and tree canopy, high levels of perviousness, and a diversity of dwelling types, this could deliver benefits to residents of between $142 million and $723 million.

The vision for the Hunter[6]

The NSW Government has also developed an exciting vision for the Hunter region as "The leading regional economy in Australia with a vibrant new metropolitan city at its heart".

Recent customer engagement by Hunter Water has found that the Hunter Region is widely considered as 'very liveable' with many factors contributing to the enviable lifestyle of the region (e.g. natural beauty, access to recreation and resources). There is a clear sense of pride in the region and a preference for the area when compared to large cities where many of the participants have previously lived.

Customers indicated that the pace of living is relaxed (especially outside of Newcastle) and the region's natural beauty, clean pristine beaches and forests are a major reason for this. This coupled with good access to resources, facilities and jobs means that life in the Hunter region is hard to beat.

The engagement noted that:

- Connected pathways for walking and cycling, and access to natural areas for passive recreation would improve liveability.
- Drought is regarded as impacting liveability, especially with restrictions imposed on water usage.
- Customers and the community see the potential impacts of wastewater on the environment (overflows and treated effluent discharges) as a priority aspect of Hunter Water's business.

[5] Frontier Economics 2019, Health Benefits from Water Centric Liveable Communities, p66-68

[6] Department of Planning and Environment 2016, Hunter Regional Plan 2036, p11 and Department of Planning and Environment 2018, Greater Newcastle Metropolitan Plan 2036, p5

The Hunter Regional Plan 2036, launched the NSW Department of Planning and Environment, is a 20 year blueprint for the future of the Hunter. It is supported by the Greater Newcastle Metropolitan Plan, as shown in the figure below. The overall aim is to ensure alignment between State and local planning and infrastructure provision.

Hunter Regional Plan 2036

The Hunter is the leading regional economy in Australia, with thriving communities and a biodiversity-rich natural environment. The Regional Plan will guide land use planning decisions over the next 20 years. It identifies the importance of delivering infrastructure and services to support growth, the preferred staging of development, and supporting changing communities.

To achieve this vision the Government has set four goals for the region:

- The leading regional economy in Australia
- A biodiversity–rich natural environment
- Thriving communities
- Greater housing choice and jobs.

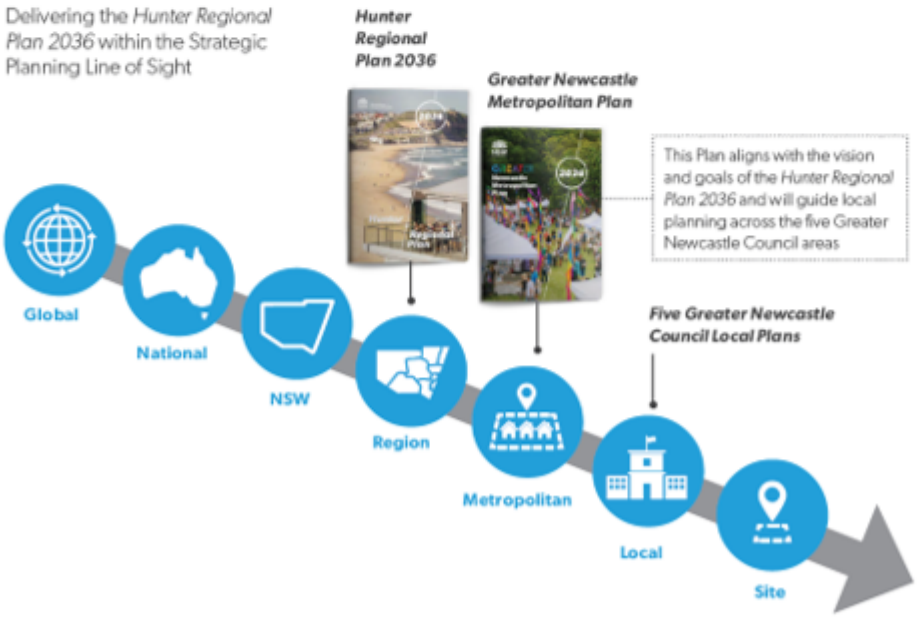
Greater Newcastle Metropolitan Plan

The Greater Newcastle Metropolitan Plan sets out strategies and actions that will drive sustainable growth across Cessnock City, Lake Macquarie City, Maitland City, Newcastle City and Port Stephens communities, which together make up Greater Newcastle. The vision is for a vibrant new metropolitan area with global gateways that maximise exports and tourism, and a centre of excellence for health and education.

Presently, Greater Newcastle is home to around 475,000 people but it is expected to grow to around 600,000 over the next 20 years. By 2036, it is estimated that 50,000 dwellings and 48,000 jobs will be required.

Hunter Water will play a key role in enabling good development through the provision of water and wastewater services.

Alignment between NSW Government growth plans at different scales



Source: Greater Newcastle Metropolitan Plan 2036

The water industry has long known and indicated that to achieve these visions within a postage stamp pricing framework is challenging. The additional values and benefits offered by these options do not easily fit with a least-cost framework.

Chapter 2 of the issues paper discusses the three broad sources of funding for infrastructure:

1. Direct user charges
2. Developer contributions; and

3. Grants from State and Commonwealth Governments

This submission argues that for water-related infrastructure in Sydney and Hunter there should be a shift from sole reliance on direct charges to a contribution from developers. However, it also considers there is a role for direct funding from governments. In setting visions for the growth of cities, governments are recognising the benefits and value derived from water-related infrastructure.

Increasingly it is being recognised that water for amenity and recreation in new developments represents core social infrastructure necessary for health, liveability and general wellbeing. In line with the funding of other core infrastructure such as transport and health there is a strong argument that there be contribution directly from state and commonwealth budgets for water related liveability infrastructure. WSAA has canvassed this issue in its research paper Blue + green = liveability: the value of water to liveable communities.

3. Developer charges regimes across Australia

A feature of the developer charge regimes across Australia is their diversity. All seek to recover the costs of development but in widely different methods. These regimes are not the product of long-standing practice or history; a number are relatively new or have been reviewed recently. Why such diversity? Developer charges is one instrument that is designed to meet a number of objectives: cost recovery, providing location-specific investment signals, and equitable funding of investment. Inevitably one instrument cannot meet multiple objectives perfectly and trade-offs will be necessary. Pragmatism and flexibility in regime design are necessary.

Across Australia the main methods for calculating water developer charges are:

Flat fees across the area of operations
In some jurisdictions there are geographically uniform fees across a utility's whole area of operations.

A schedule of fees is set according to factors including the category of development (e.g. residential, commercial, industrial), density (dwellings per hectare), greenfield vs infill, and demand factors like meter size/flow rate and equivalent population served. However, the fees do not vary according to which part of the utility's operating area the development is located in. This is a similar framework to postage stamp pricing – the same development, using the same amount of the same type of services, will pay the same fee no matter where it is located.

Versions of this apply in Western Australia, the Gold Coast, and parts of Victoria including one Melbourne retailer and one peri-urban utility.

Different charges per region within the area of operations
In other jurisdictions, the fees vary according to regions within the utility's overall area of operations.

Within each region, the schedule of fees will still be set based on category, density, demand factors and greenfield vs infill as above.

Versions of this apply in Melbourne, Queensland, South Australia, regional Victoria, and Sydney, Hunter (before their developer charges were set to zero in 2008).

Separate charges for individual developments within the area of operations
Some jurisdictions calculate specific fees for each development, reflecting the cost for servicing it.

Versions of this apply in South Australia, Tasmania and Melbourne.

Some jurisdictions have more than one of these regimes at the same time, for example some areas are identified as special areas for various reasons and may have non-standard charging regimes.

Different water services

All jurisdictions apply developer charges to water and wastewater services. However only some places apply them to recycled water: regional and peri-urban Victoria, Melbourne, the Gold Coast, and SA Water. In Sydney and Hunter, recycled water developer charges still apply whereas the developer charges for water, wastewater and stormwater were set to zero in 2008.

Only water utilities in Melbourne, Western Austraila and (previously) Sydney apply developer charges to stormwater.

Fees and gifted assets

All jurisdictions include a combination of cash contributions (developer charges fees), and gifted assets, which are typically treated as revenue.

The revenues received from developer contributions can amount to up to 20% of a utility's total revenue base.

While in most jurisdictions developer contributions are less than necessary to fund the costs of growth infrastructure, they at least make a contribution and lessen the burden on general water and wastewater consumers.

4. Why developer contributions are necessary for water and wastewater

In Issue 4.7 the NSW Productivity Commission raises metropolitan water charges, stating that:

> *Currently, the costs of new and upgraded connections for Sydney Water and Hunter Water are borne by the broader customer base rather than the new development.*

It then poses two questions:

- *How important is it to examine this approach?*
- *What is the best way to provide funding for potable and recycled water provision?*

This section addresses these key issues.

WSAA considers that the NSW Productivity Commission has set the right context for the review by considering water and wastewater funding and charges alongside other infrastructure contributions, rather than in isolation. As set out below this context demonstrates that the need for developers to contribute to costs is the same for water and wastewater infrastructure as it is for other classes of infrastructure. It is well accepted that local councils could not provide necessary services without contributions (or without increasing rates as a whole). This is directly analogous to the situation facing water utilities.

Just as local council rates are not sufficient to fund infrastructure, neither are water and wastewater[7] charges.

Water and wastewater bills do not cover the cost of growth

In noting that the costs of new and upgraded connections for Sydney Water and Hunter Water are borne by the broader customer base, the NSW PC has shown a critical understanding of the impact that setting developer charges to zero has in Sydney and the Hunter.

The costs of servicing growth in greenfield, and increasingly in existing areas, are significant. For infill growth, if there is existing capacity, redevelopment can increase density at modest costs. However, nationally we observe that many existing systems are reaching capacity. In the long term, all customers are responsible for using the capacity of the water and wastewater systems and eventually the costs of upgrading capacity in existing areas also involves significant costs.

However, utilities do not charge higher prices to customers in growth areas. Overwhelmingly utilities in Australia operate under a system of postage stamp pricing whereby customers across an area of operations pay the same charges regardless of the cost of delivery. As a consequence of postage stamp pricing, water and wastewater revenue recovered from new customers is less than that required to cover the costs of extending the network. The traditional role of developer charges has been to partially or fully fund that gap. In this way cities can grow without putting significant

7 In Sydney, developer charges apply to stormwater services as well as to water and wastewater (albeit now set to zero). Recurring stormwater charges are only paid by about one third of Sydney Water's water and wastewater customers, in certain parts of Sydney Water's operating area. Developer charges do not apply to stormwater in the Hunter, due to legislative differences in the stormater responsibilities between Sydney Water and Hunter Water. This submission makes the case for the re-introduction of developer charges for Sydney and the Hunter. For Sydney, this should be taken to include stormwater as well as water and wastewater. To avoid confusion, this has not been specified each time.

pressure on existing water bills.

Of the developer contributions approaches operating across Australia, the contributions in southern Queensland come closest to achieving full cost recovery on growth infrastructure. Typical water and wastewater contributions for a residential house are around $13,000. This is much less than the total capital costs of a new lot which are likely to be upwards of $20,000. Allowing for some capital costs being recovered in water bills, there is still likely to be a gap, even in Queensland. Nevertheless, the Queensland framework illustrates the magnitude of the costs on a per lot basis involved in providing for growth, and that developers can feasibly make a valuable contribution.

In terms of revenue, developer contributions can vary through time significantly, depending on rates of development. However, they can comprise up to 20% of utility revenue in some years. Under the economic regulation that applies to the Hunter and Sydney, any developer charges revenue would not increase profits. It would be deducted from the utility's Regulatory Asset Base and directly translate into lower water prices to customers.

All water utility infrastructure costs must be recovered in one way or another. Without a developer charging framework, the additional costs of new growth will necessarily be recovered through water and wastewater service charges from existing customers, placing additional pressure on general water and wastewater prices. The pattern of development may also be different in the absence of developer charges playing their role in supplementing planning decisions by providing a price signal on where to develop.

Impact of zero developer charges in Sydney

The implication of zero developer contributions in Sydney and Hunter is that the higher the population growth, the higher water bills will be. IPART set out how this will occur in its September 2019 Issues Paper for the review of Sydney Water prices[8]:

> Because interest rates have fallen, Sydney Water has been able to propose a small bill reduction despite a large increase in expenditure. However, over the medium-longer term, bill increases may be larger and significant, especially if interest rates rise.
>
> …a key driver of Sydney Water's increased expenditure is the costs that Sydney Water incurs to service new development as Sydney's population expands. For many water utilities, a 'developer charge' is levied on a developer, to provide a signal to the developer about the costs of servicing new properties. In contrast, because developer charges are set to zero for Sydney Water, these costs are instead added to Sydney Water's Regulatory Asset Base and gradually recovered from the broader customer base. This means that over time the costs of servicing new growth accumulate and place upward pressure on prices, potentially reducing the affordability of bills.

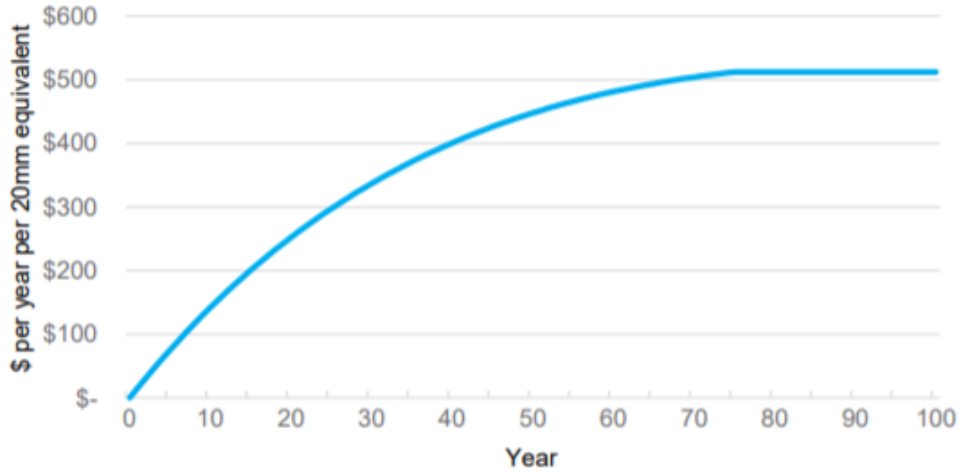
IPART also drew attention to the magnitude of the costs that would be faced by all water consumers, without developer contributions in place. IPART estimated that an average customer would be paying and additional $140 a year in ten years' time, as set out in IPART's figure 2.3[9]. These cost rise to over $500 a year by 2050[10]:

[8] IPART 2019, Prices for Sydney Water from 1 July 2020 – Issues Paper, p.12

[9] IPART 2019, Prices for Sydney Water from 1 July 2020 – Issues Paper, p.29

10 IPART states on p29 that: "The figure shows that, 10 years from now, based on assumptions of forecast population growth and the costs required to service that population, an average customer would be paying an additional $140 per year for their water, wastewater and stormwater services. For simplicity, we have defined the average Sydney Water customer as a residential customer

Figure 2.3 The costs of funding growth capital expenditure over time



Note: This does not calculate the forgone revenue from setting developer charges to zero. It calculates the cost of funding growth capex to service new development, which is a major component of the developer charge formula. The developer charge formula also takes into account the net revenue generated from future customer tariffs above future operating and capital expenditure.

Data source: IPART analysis.

Impact of developer charges only apply to recycled water

The current situation in Sydney and the Hunter where developer contributions apply to recycled water but not to water and wastewater (and stormwater in Sydney), distorts development decisions about the best overall water management approach for a development.

This issue was considered by Infrastructure NSW in its 2018 review of barriers to cost-effective water recycling. A report commissioned from Frontier Economics[11] noted that:

> The impact of this differential approach to developer charges for recycled water vis-a-via water and wastewater is to provide a bias towards traditional solutions rather than recycled water solutions. This is because developers are likely, all other things being equal, to prefer traditional solutions that do not incur developer charges. The differential approach to developer charges for recycled water could also disadvantage new entrants who cannot cross-subsidise servicing of new development…

Infrastructure NSW went on to conclude:

> In our view, whether developer charges apply or not should not be dependent on the nature of the servicing solution, as long as it provides the best value for customers.

(where all residential customers are charged based on a 20mm water meter size). The forecast cost of growth is based on the capital costs that Sydney Water expects to incur to service the new development over the 2020 determination period, assuming that this capital has an asset life of 75 years. It then extrapolates this 'per property' cost forward to meet the Government's 8 million population target by 2050."

[11] Frontier Economics 2018: Economic regulatory barriers to cost-effective water recycling – A report prepared for Infrastructure NSW, pp65-68

> In our view, there is a strong argument when considering how to promote cost-effective water recycling, for the NSW Government to consider rescinding the 2008 Direction to set specified water, wastewater and stormwater developer charges for Sydney Water and Hunter Water to zero. This would remove a clear bias against recycled water schemes (whether provided by public water utilities or new entrants) in being able to compete with traditional water and wastewater solutions for servicing new developments, and more broadly would provide locational price signals.

Infrastructure NSW made 2 specific recommendations:

> **Recommendation 19:** DPE, in its role in leading the development of the Metropolitan Water Plans, should review and report on the costs and benefits of a continuation of the 2008 NSW Government Direction to set specified water, wastewater and stormwater developer charges for Sydney Waster and Hunter Water to zero. This should highlight whether the benefits, in terms of promoting housing affordability, outweigh the costs, in terms of impeding investment and private sector entry in water recycling and the achievement of integrated land use and water planning.
>
> **Recommendation 20:** As part of its 2018 recycled water review, IPART should review the developer charges formula and methodology for recycled water to ensure it remains fit for purpose and reflects current common industry assumptions.

5. Developer charges will not impact on housing affordability

While the amounts discussed in the last section are considerable, reintroducing developer charges will not simply shift the costs that would have been borne by customers, back to either developers or homebuyers.

While developer charges are payable by the developer, they do not generally get passed onto the prices paid by homebuyers. In this way they do not affect housing affordability. Nor do they reduce developers' returns and suppress the supply of housing. Despite some misconceptions on this point, this conclusion is well supported by economic research and is explained below.

Governments have been increasingly looking at forms of value capture to fund infrastructure. Developer charges are an attractive funding source because, if well-designed, they recover the additional costs of servicing new growth through a form of value capture in the early stages of land supply and rezoning. Moreover, they may reduce the additional costs through incentivising developers to develop lower cost sites. There is no evidence of a negative impact on affordability from jurisdictions with significant cost base contributions.

Who pays developer charges?

The Issues Paper for this review talks about value capture in various sections. This is worth exploring, as there has long been an assumption that to re-introduce developer charges would put a brake on housing development, as developer charges would add to the market price of the house to the home-buyer.

A fundamental point is that while developer charges are payable by the developer, they do not necessarily impact on the prices paid by homebuyers. Zoning rules constrain the quantity of land available for development. When agricultural land is rezoned for houses, industrial land is rezoned for residential, or residential land rezoned for higher levels of density, its value will increase significantly. This leads to a windfall gain or profit which will be shared in some combination by

landowners and developers. Developer charges remove part of that profit to fund infrastructure. Knowing that they will pay a developer charge, developers will pay less for rezoned land than they would if there were no developer charges; and this may offset the developer charge. In this way developer charges capture part of the increase in land value when land is rezoned to higher value residential uses. But as long as some windfall profit remains, there is still a strong incentive for development to occur to meet demand for new housing.

This important conclusion that developer charges do not exacerbate pressure on housing prices or affordability is well supported in the economic literature. The rationale is set out in Abelson 1999, but also more recently in the Henry tax review. As Ableson said:

"If, as seems generally plausible in Australian cities, demand is elastic and supply is inelastic, the main incidence [of developer charges] will be borne in lower raw land prices."

More recent Australian empirical research by Murray (2018) found no evidence that developer charges increase the price of new dwellings.

This does not mean that Governments do not have to be mindful of the level of the total imposts initially levied on developers. If these total imposts exceeded the value uplift in raw land then developers could not afford to pay more than the value of the land in its existing use. If too high, developer charges will constrain the supply of viable development land. Any formula needs to take this practical factor into account.

The economics explained

The impact of developer charges depends on the nature of the market; in a simple competitive market, the relative elasticities determine the burden of the charges. However more complicated models, incorporating structural features of the Australian housing market, may easily lead to results that may perhaps be considered counterintuitive. Australia specific research indicates that the incidence likely falls on developers and landowners rather than home buyers (Abelson (1999), Ruming, Gurran & Randolph (2011), Davidoff & Leigh (2013) and Murray (2018)). The most reliable Australian evidence is consistent with this view with little credible evidence to the contrary.

The basic principles behind this can be seen the figures below. The price of residential land depends on demand for housing and the supply of land zoned for residential use (Figure 1). Where land is rezoned for development, owners of raw land will receive a value uplift (Figure 2). Developer charges recover part of this value uplift to fund the cost of water and sewerage services provided. They do not affect the price to home buyers per lot (Figure 3).

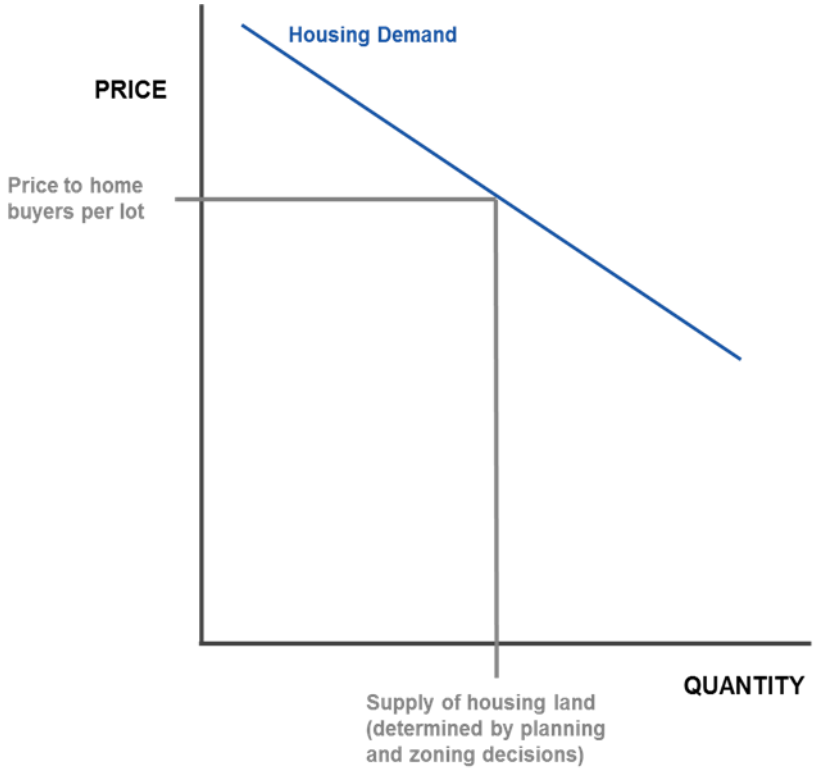


Figure 1 *- Supply and demand for housing*

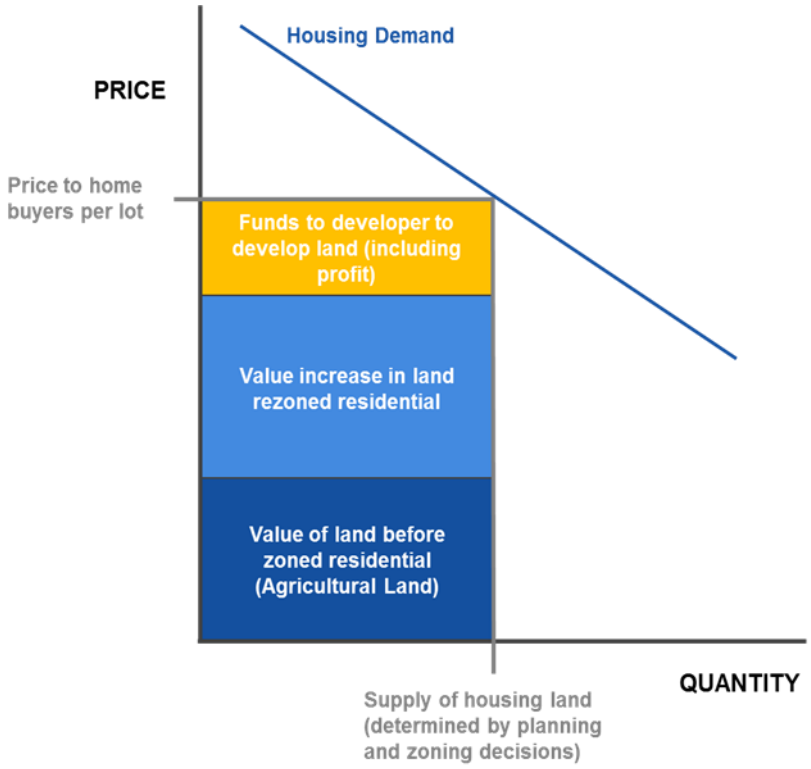


Figure 2 *- Value uplift with rezoned land*

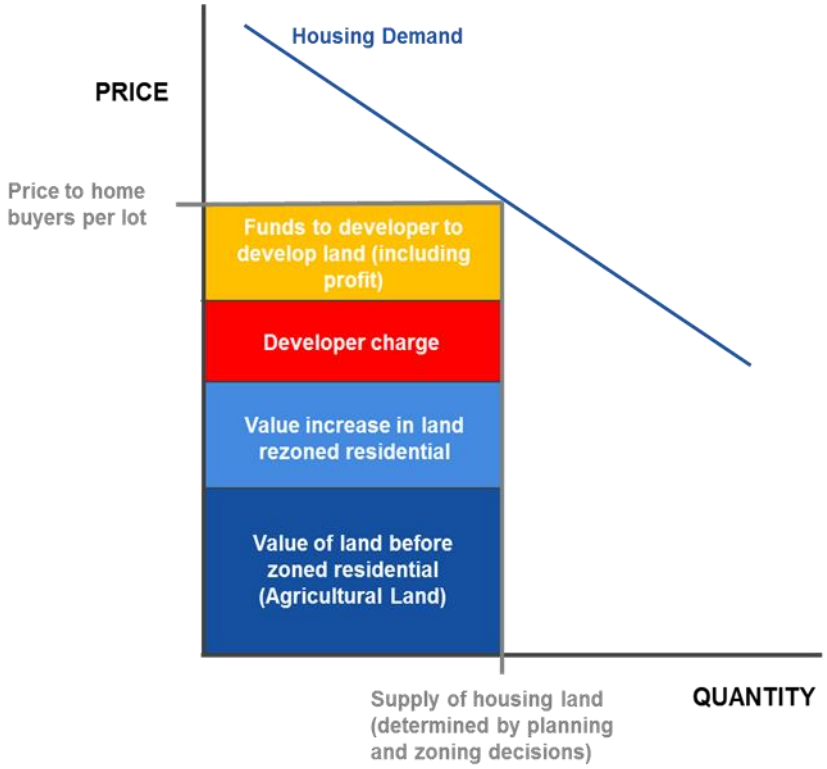


Figure 3 *- Impact of developer charges*

For References see page 20.

6. The way forward

This submission has made the case that developer contributions in water and wastewater are critical to fund growth nationally, but particularly in Sydney and the Hunter.

Across Australia there are a number of frameworks for developer contributions that range from flat charges for the whole state, to area specific charges. Each makes their own tradeoff between efficiency, equity, certainty and simplicity.

The method adopted by IPART lies at the complex end of the spectrum. In 2018 IPART reviewed the methodology for setting developer charges for Sydney Water and Hunter Water, even though they are currently set to zero. IPART made some streamlining changes to its 2000 methodology, including:

- A light-handed approach to approving developer servicing plans, including allowing a zonal approach – balancing the trade-off between administrative costs and exactness in calculating location-based charges
- A more flexible approach to the process of updating and revising DSPs
- Greater clarity on the analysis period and other key parameters.

Previously WSAA has questioned whether sufficient data is available on future growth costs at a level of detail to ensure IPART's method operates as it intends.

Nevertheless, in NSW IPART's approach is the right place to start. Despite the government having set developer contributions for water, wastewater and stormwater to zero in 2008, the legislation and framework remains in place. The government could simply direct IPART to cease the setting to zero re-introduce these developer charges. It is likely that Sydney and Hunter Water could implement IPART's revised methodology with sufficient notice.

As this review notes, finding the right balance between efficiency, equity, certainty and simplicity poses a key challenge in reforming the infrastructure contributions system.

Transition arrangements will be important for the introduction of water and wastewater developer contributions to ensure property developers have time to adjust to the new regime. WSAA suggests that the IPART method in combination with minimum and maximum capped charges would increase the certainty and simplicity of outcomes – and enable an appropriate transition – without sacrificing the desirable efficiency properties of the IPART method.

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Contact Details

WSAA welcomes the opportunity to discuss this submission further. If there are any details you wish to follow up on please contact:

[redacted]