

23 September 2020

Peter Achterstraat
Commissioner for Productivity

Dear Mr Achterstraat

Thank you for providing Sydney Water with the opportunity to comment on the NSW Productivity Commission's *Continuing the Productivity Conservation Green Paper*.

Sydney Water strongly supports the NSW Productivity Commission's efforts to find new opportunities to make NSW a better place to live, work and invest. We agree with the objectives of the Green Paper, particularly its focus on opportunities to improve productivity and sustainable resource use.

As we have seen in the response of both government and business to COVID, our ways of working can change quickly when needed. We support the Commission's focus on boosting acceptance of new ways of doing business, while prioritising changes that be given effect in NSW.

At Sydney Water, we are focussed on optimising the use of our physical assets and investing in the smartest additions to our infrastructure, improving the skills and adaptability of our workforce, and boosting innovation and use of technology. As a water manager, we also appreciate that we rely upon natural capital stocks for clean safe water, and effective management of well treated wastewater.

We agree with the Green Paper that reducing fragmentation – and improving co-ordination – in the NSW water sector can improve productivity in water management, and provide better outcomes for water customers, the broader community, and our environment. We believe the upcoming Greater Sydney Water Strategy can provide leadership, vision and establish delivery pathways for more integrated and productive water management. In our response, we have reviewed some of the practical options for improved whole-of-catchment water planning and urban stormwater and water management. We have also highlighted the role the improved identification and valuation of benefits can have in improving infrastructure planning and delivery.

We look forward to continuing the conversation with the Commission on our responses to your Draft Recommendations. Please contact [REDACTED] if you require more information.

Yours sincerely

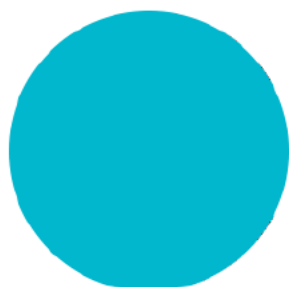
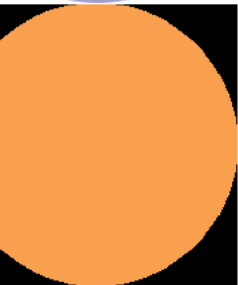
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Sydney Water's response



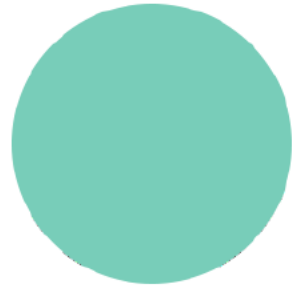
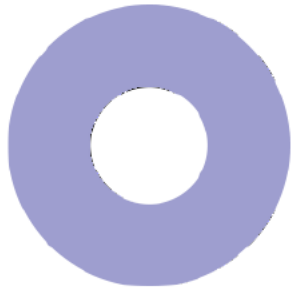




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1 Executive summary

Sydney Water strongly supports the NSW Productivity Commission's efforts to find new opportunities to make NSW a better place to live, work and invest. We agree with the objectives of the Green Paper and its focus on:

- opportunities for improved productivity
- sustainable resource use
- encouraging acceptance of new ways of doing business
- creating an environment that enables us to respond quickly to changes.

We support the Commission's appraisal that recommendations should be:

- high benefit and low cost
- feasible to implement
- easy to be implemented by, and in, NSW
- aligned with priorities to enhance quality of life and our response to COVID.

We believe that many improvements to urban water management and governance fit these criteria.

We are pleased to see that the Commission's 2020 Green Paper has recognised many of the barriers Sydney faces in achieving world-class integrated water services. It is vital these barriers are removed so we can efficiently deliver the thriving, liveable and sustainable cities our community needs, while addressing our emerging challenges.

We strongly support the recommendation that a clear vision for NSW water sector be produced, and clear direction given from water leaders on how to co-ordinate and deliver the vision.

We agree that reducing fragmentation of the NSW water market will improve customer and environmental outcomes and underpin further productivity gains in the community.

In this submission, we discuss our views on how governance of the water sector could be improved.

To improve whole of water cycle management in urban Sydney, we support improving capacity for integrated catchment planning, to increase the ability of private and public organisations to contribute to holistic plans.

We also believe an effective delivery entity must be given responsibility for regional or catchment-based management and investment of stormwater, with a mandated role in land use planning.

We believe better integrated planning and delivery of water is easily achievable under NSW's existing legislation. The Government's upcoming Greater Sydney Water Strategy is a good vehicle to implement improvements to the structure of Sydney's water governance.





We agree with the Commission that it is timely to review BASIX. Consistent with our other recommendations, we suggest that a whole of water cycle approach may help achieve the key water and energy efficiency objectives of BASIX, with more benefits for the community.

Throughout this submission, we highlight opportunities where a consistent approach to benefits assessment will improve the ability for NSW infrastructure organisations to invest in high value infrastructure.

For example, assessing the benefits of wastewater in different locations - as well as the long run marginal cost of wastewater - will help Sydney Water make efficient decisions about wastewater management and recycling.

We have also noted where some of the Commission's recommendations won't improve water sector's productivity as they stand. They are:

- increasing land tax on land used to manage waterway health (draft recommendation 8.1)
- the option to fund growth related costs from increases to broad-based rates and charges collected by councils (draft recommendation 8.2).

The Commission has highlighted the importance of all categories of capital in improving future productivity. We would like to emphasise the importance of preserving stocks of natural capital to enhance Sydney's future productivity and resilience. Sydney Water highlights this because the services we provide to our customers – that in turn underpin the productivity of the entire city – rely upon natural services.





2 Introduction

Elements of capital relevant to future productivity of the water sector

Natural Capital

The services Sydney Water provides – that underpin the productivity of Sydney - are highly dependent on the productivity and receiving capacity of the natural environment.

We purchase water that's collected from rainfall-fed rivers in natural catchments. We rely on the capacity of our oceans and rivers to receive and assimilate treated and recycled wastewater, and the capacity of urban waterways to receive high volumes of stormwater after rain. Natural capital in Sydney provides productivity benefits for communities that include improved air quality, a pleasant and cooler urban environment, healthy waterways and improved amenity that bolsters human well-being and productivity.

Reductions in natural capital will lower our state's future productivity through impacts such as reduced (or more variable) water supplies, urban heat, or reduced productivity of arable land.

Measures of productivity that take into account increases or reductions in our store of natural capital would provide a clear signal of the impacts of economic activity on the environment and demonstrate the benefits of investments to enhance natural capital. Likewise, assessments of the resilience of our systems to threats would be useful, as high levels of resilience enable cities and communities to maintain productivity in the face of challenges. This would ensure that efforts to improve productivity in the short to medium term do not have detrimental impacts in the longer term.

Human Capital

At Sydney Water we recognise that to improve our productivity we need to invest in technical skills as well as enterprise skills to enable continuous improvement across our entire workforce.

We are building capability in strategic workforce planning. This will enable us to define our workforce of the future and build adaptive behaviours so our workforce keeps learning and growing to match the evolving needs of our business and the communities we support.

Investment in operational tools and data analytics will allow us measure performance close to real time and enable us to become more predictive and intentional.

Working across our industry in Australia we are broadening concepts of workforce productivity, so we not only look at financial measures but cultural and diversity measures too. We recognise the value in leveraging diverse talent to drive engagement and participation, for our benefit - and as a reflection of the diversity of our customers.

With an ageing workforce, we are looking to increase our involvement in VET to build the skilled Trades segment of our workforce and replenish our talent pool. We will look to leverage our older employees as coaches and offer more flexible work patterns to support transition to retirement. Concurrently we will invest for the future in disciplines such as automation, engineering, science,





and city shaping which brings together our skills in water and land use planning, customer needs and long-term planning.

We also appreciate how water planning and management can be improved by better integration of Aboriginal knowledge about water management.

Finally, we anticipate exploration of technology and innovation in other industries will create opportunity for us: for example, quantum sensing technology used in mining can be adapted to our operations to detect leaks.

Innovation

We acknowledge the Commission's discussion on the importance of technical innovation in enabling future improvements to productivity. Sydney Water has a successful research and innovation program. It relies on recognising and nurturing the knowledge and capability of our staff, many of whom are recognised leaders and experts in their fields.

Our research and innovation program delivers on the full innovation pipeline - from concept to research, application and delivery. We have over 80 projects in our research and innovation pipeline, from concepts to transfer and adoption. Our R&I portfolio is balanced over three time horizons (short 1-5 years, Medium 5-10 years, long-term 10+ years) and has five focus areas: safe and reliable drinking water, enhancing assets and operations, protecting and enriching natural waterways, improving treatment and resource recovery, and enabling a liveable and resilient city. We aim to see completed research projects result in adoption and change of practice.

The Commission notes that improvements to productivity can often seem to occur sporadically. Measuring investment in innovation is one way the commission can monitor the pre-conditions for future productivity gains.

We also note that innovation across sectors is going to be increasingly important. Recent research has promoted innovation in wastewater, organic solid waste and energy management, the link between land use planning and water management, and advanced sensing and robotics to improve management of our pipes.

Physical capital

Sydney Water provides high quality, efficient water services through its vast network of assets. Many of the assets that are the backbone of Sydney's urban water system – major pipes and canals for water and wastewater and stormwater, reservoirs, and pumps - are reaching the end of their engineered life or reaching full capacity. Some of Sydney's coastal wastewater systems will reach capacity in the next decade, as a growing population in the Eastern and Central cities generates more wastewater. We are also seeing increasing evidence of the need to expand our bulk water assets to supply more water (including more climate and rainfall independent assets to improve supply resilience), and improve the configuration of our supply network so it best services our city's changing urban footprint.

The investments we will need in Sydney's urban water systems over next 30 years and beyond are comparable to those made during the last century, when big water infrastructure, such as Warragamba Dam and major coastal wastewater carriers, were built.





We strongly support the commission's recommendations that will bolster the infrastructure sector's ability to evaluate and choose infrastructure investments to maximise long term benefits, while making the best use of the infrastructure we have.

Green infrastructure

There is increasing awareness of the community's reliance upon green infrastructure to provide services to communities - many of which are not recognised in existing infrastructure investment approaches or productivity metrics.

We support moves to properly embed green infrastructure in infrastructure assessments, and assess the customer and community benefits it delivers, and the appropriate rate of investment in green infrastructure.





3 Our response to the draft recommendations

3.1 Forward looking regulation supports innovation and competition

Draft recommendation 4.13 Have the Independent Pricing Regulatory Tribunal update the NSW Government's competitive neutrality policy and processes.

We strongly support the core tenets of competitive neutrality to ensure that Sydney Water, as a statutory state-owned corporation competes on a level playing field, does not hinder fair competition in the market, and avoids inefficiencies in resource allocation. Although the vast majority of our products are regulated monopoly services, we have delivered some products in competition with private providers for many years. As such, our internal processes to ensure ring fencing, fair and transparent cost allocation, and inclusion of market rates of return on investment (margins) are well developed.

It must be noted that delivery of services in the water sector entails a large proportion of natural monopoly supply chain cost elements. This means that competition to supply these elements would be inefficient. Policies to increase the amount of competition in the urban water market should be focussed on improving customer and community outcomes. However, competition should not be pursued for its own sake. For example, we do not consider that existing customers should be required to subsidise inefficient entry.

Sydney Water now faces competition to deliver certain elements of the supply chain. For example, private water utilities can deliver certain water, wastewater and stormwater services under the Water Industry Competition Act. As such, we welcome the Commission's draft recommendation to have the Independent Pricing and Regulatory Tribunal update the NSW Government's competitive neutrality policy and processes. It is important that entrants to the emerging water market have confidence they can operate on a level playing field with public utilities. It is equally important that public utilities have a good understanding of competitive neutrality policy and how it applies to their operations and services.

This Green Paper recommendation would address the 2015 Harper Review recommendation that all Government competitive neutrality policies should be reviewed and overseen by an independent body. IPART is well placed to conduct this review. We particularly support IPART analysing the costs and benefits of any expansion of the scope of the policies to a broader range of government activities.





Draft recommendation 4.19 Create a best-practice regulatory policy framework, with Regulatory Stewardship as the cornerstone, that promotes rigorous and transparent impact assessments and improves regulator performance.

We support this change. The Commission has acknowledged the need for significant change in the NSW water sector (draft recommendations 5.1, 5.2 and 5.3). We consider that such change is likely to require supporting changes to statutory regulation.

We understand regulatory stewardship to mean a whole-of-system, whole-of-lifecycle view of regulation. We believe this approach may be appropriate for the whole of water cycle approach we advocate in this paper. However, we caution that the effectiveness of any regulatory stewardship model will depend on its scope, design, roles and responsibilities assigned within it, and the capability of both regulators and organisations being regulated.

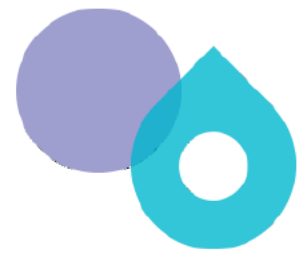
We are also pleased that IPART is currently looking to update their framework for regulating public water utilities. While many aspects of IPART's framework have proved effective and in some respects, remain ahead of their peers in other States (for example, IPART's independent, arm's length relationship to Government), the framework could be improved by greater focus on company performance, customer outcomes and customer engagement – all matters which reflect the recommendations of the Green Paper. We look forward to engaging productively with IPART in this respect. We understand that IPART's framework must respond to overall structure of water governance in NSW, and our recommendations for best practice governance across the water cycle are contained in our response to draft recommendation 5.3.

We consider elements of a best practice regulatory policy framework for water managers such as Sydney Water will include:

- reference to government policy that sets objectives for water management and overall city outcomes that are enabled by effective water management and reference to other planning policies and catchment plans, or government statement of expectations.
- specific utility outcomes for water quality, customer and community services and environmental performance that are needed to achieve broader policy and plans
- embedding of best practice process, accountability and review
- clear evaluation framework

We also note that regulation should be proportionate to risk. Regulation should also recognise the role of essential infrastructure in supporting the productivity of other sectors of the economy, while minimising environmental harm.





3.2 Meet the challenge of sustainable, well priced water and energy

Draft recommendation 5.1 Outline the long-term vision for the whole water sector (including rural water, wastewater, stormwater, flood management) and develop a plan to meet the challenges facing the sector.

We strongly support this recommendation.

We are actively collaborating with Department of Planning, Industry and Environment and Water NSW to develop the Greater Sydney Water Strategy (GSWS). We are also working directly with Water NSW to develop a long-term capital and operational plan that's consistent with NSW policy objectives and a drought response plan. These are all elements of the Government's 2019 Greater Sydney Urban Water Framework.

We strongly support the Government's intention that the GSWS will explore an integrated water cycle approach for managing water, wastewater and stormwater in Sydney and how we can improve the integration of water and land use planning.

When it's completed, the GSWS will replace the 2017 Metropolitan Water Plan to ensure Sydney has the water it needs for a growing population, and to be resilient during drought. It will also see that water continues to contribute to the Government's vision for a productive, sustainable and liveable Sydney.

Preliminary analysis to inform the GSWS identifies that additional water supply for Sydney will likely be required in the medium term, resulting in significant expenditure on water infrastructure in Sydney beyond what is currently in the price paths for Sydney Water and Water NSW. We agree with the Government that the potential impact on customers of these investments must be managed, and this may be through increasing water efficiency activity, monitoring demand and supply and carefully staging investments.

As we note in our commentary on water efficiency recommendations, it's important that the GSWS has long term actions on water efficiency because producing more services with fewer resources is fundamental to productivity.

Having an integrated vision and strategy for water in Sydney will help address the gaps in responsibility and governance identified by the Productivity Commission in draft recommendation 5.3. The GSWS may be one vehicle by which the reforms identified by the Commission can be implemented effectively.

Draft recommendation 5.2 Issue Statements of Expectations to state-owned water corporations to provide clear guidance on the Government's plans and direction.

Sydney Water generally supports this recommendation, with the clear caveat that any formal Statement of Expectations must be logically aligned with current policy, reflect Sydney Water's status as a Statutory State Owned Corporation, have customer and community benefit at the heart, and be able to implemented in a cost-effective manner.





We also strongly recommend that any future Statement of Expectations be issued with enough notice to give State Owned Corporations sufficient time to embed new expectations or required levels of service into planning, investment decision making and pricing.

Giving effect to a Statement of Expectations may require some analysis of, and changes to regulation, to ensure that Sydney Water does not have to re-prosecute the case for investing to achieve Government's stated expectations, with its regulators.

This recommendation aligns with Sydney Water's existing approach of embedding clear objectives from the Government's adopted Greater Sydney Region Plan into our strategic direction and strategic asset planning - meaning our long-term planning aligns with formal Government policy.

We believe our ability to cost effectively deliver on the objectives of Government policy will also be enhanced if there is formal recognition that delivery of a full suite of water cycle services and benefits are within the remit of an organisation such as Sydney Water. This could be addressed in a Statement of Expectations.

At Sydney Water, we are improving our ability to gain and embed customer evidence of broader liveability benefits (that align with the directions and objectives of the Greater Sydney Region Plan). This is enabling us to deliver benefits beyond "traditional" water and wastewater services within our existing funding frameworks.

It would also be useful if consistent Statements of Expectations or similar documents were issued to all Government owned entities and Local Councils who manage parts of the water cycle. Such statements would be most beneficial if they reflected the clear vision and direction that must be outlined in the Greater Sydney Water Strategy.

Draft recommendation 5.3 (a) Bring together leaders from all key NSW water sector organisations to coordinate and deliver the vision outlined in the planned state water strategy.

We agree that one of the key barriers to the delivery of world-class integrated water services is the fragmentation of the NSW water sector. We strongly support the Commission's draft recommendation to bring together leaders from all key NSW water sector organisations to *coordinate and deliver* the vision outlined in the planned state water strategy.

Strong public advocacy of the vision and direction of the Greater Sydney Water Strategy will help create a public mandate for better water management.

We believe that delivery of the vision will be materially improved by the implementation of recommendation of governance measures that address the fragmentation of water responsibilities in NSW, as discussed in the section below.

We also look forward to participating in DPIE's informal co-ordinating body (as outlined in the Green Paper) to set the direction for future water governance changes, and we anticipate that this can occur through the development and delivery of the GSWS.





Draft recommendation 5.3 (b) Identify governance measures to solve the fragmentation of water responsibilities across New South Wales.

We strongly support this recommendation. Sydney Water suggests the recommendation should be strengthened to require “**timely prioritisation** of the identification **and implementation** of permanent governance measures and **unified investment approaches** to solve the fragmentation of water responsibilities across New South Wales.”

As discussed below, the improved customer and community benefits of integrated water and land use planning are now well supported by evidence from our strategic planning. Integrated water and land use planning can also deliver economies of scale. The longer governance gaps hinder best practice water management, the more communities miss out on additional benefits, and the greater the costs and impacts accrued for future water customers. This issue needs to be resolved as soon as possible.

We strongly agree with the Green Paper that catchment level planning would facilitate effective governance and management and could improve efficiency and accountability. Some of the key issues that should be addressed with new governance approaches are listed.

- setting catchment and waterway goals and outcomes that will deliver on the overall vision for Sydney and its water, preferably through a collaborative planning approach. This would include goals for water supply, wastewater, waterways (including rivers, coasts and the marine environment) as well as “water in the landscape”
- giving one entity clear responsibility for ensuring waterway health objectives are achieved in specific catchments, and ensuring this responsibility follows through to shaping and guiding local policy. This includes developing consistent monitoring, reporting and identifying and implementing improvements. Tracking and addressing long term, cumulative impacts must be included.
- setting consistent land use planning and development controls across regions or catchments to improve transparency and ease of use for developers. Current requirements can change from Council to Council, and other organisations with land use and stormwater planning responsibility.
- giving one entity responsibility for ensuring land use and development in catchments achieve waterway health objective. This potentially implies rationalising the number of organisations responsible for managing parts of the water cycle. Where multiple organisations are involved in water management in a catchment, they must work to consistent waterway health objectives, and have consistent principles and approaches for investment decision making and prioritisation, preferably guided by common planning and evaluation.
- establishing a regional or catchment-based delivery entity for waterway, stormwater and catchment services. This would allow costs and funding to be spread across a greater customer base, to improve efficiency of water management, and deliver efficiencies of





scale and scope. It would also lead to more efficient decisions because impacts downstream and in waterways would be internalised.

- entities to be efficiently managed and well-resourced to improve capacity and capability, embed best practice and improve efficiency. Ensure customer and community views are embedded in vision and values. Improve participation of Aboriginal people in decision making and respectfully integrate Aboriginal knowledge and decision-making approaches in integrated water planning

We have reviewed a number of potential governance structures for improved planning, integration and delivery across the water cycle. Many existing structures exist in NSW legislation and practice and could be used to greater benefit.

However, all need a stronger mechanism to influence or deliver land use and urban development controls to ensure both private and public development contributes to overall catchment objectives and enable optimum planning. This is important because water – and particularly stormwater - requires management on private and public land.

As noted above, an **effective delivery entity** at the regional or catchment scale is needed for effective infrastructure management and engagement with the land use planning system. Potential models for delivery entities include:

Statutory State Owned Corporations – SOC's such as Sydney Water are set up to deliver services that are critical to the people of NSW. As government owned businesses, they can earn regulated revenue and make investment and infrastructure investment decisions. They must operate to achieve balanced objectives. Sydney Water has stormwater management responsibilities in some stormwater catchments in its area of operations, such as the Cooks River and Rouse Hill. Our trunk stormwater assets currently service about 15 percent of Sydney's urban area.

We have done preliminary planning to determine the resources and processes we would need to undertake whole-of-catchment water services in the growing Western City - including water, recycled water, wastewater, stormwater and waterway management. A SOC, such as Sydney Water that takes on comprehensive waterway and stormwater management role, would need to be given formal responsibility for urban catchments –for example, through an updated drainage order.

Another example of a SOC with water and land use planning responsibilities is Water NSW. Water NSW is a SOC established to supply bulk water and it has a responsibility to ensure development in Sydney's declared drinking water catchments has a neutral or beneficial effect on water quality. This is enforced through the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011. It is a practical example of how catchment objectives can be linked to planning controls to manage private impacts on water quality, while the SOC remains responsible for planning and investment in its lands and assets.

County Councils – established under the Local Government Act 1993, such organisations are created to deal with regional issues - including water supply, floodplain management and wastewater management. They rely on funding from constituent Councils. Such entities improve





the ability for whole of catchment planning, while costs and investments can be spread across a greater customer base for greater efficiency. They don't have a direct role in land use planning but may provide "model" clauses for Councils to include in their planning instruments, and can provide central oversight, policy leadership and capacity building.

In addition to delivery entities, NSW legislation provides for the creation of groups that could take on the role of more **co-ordinated catchment planning**.

Water Management Committees - management committees can be established under the Water Management Act 2000 to carry out tasks that relate to any aspect of water management and prepare management plans. Water management committees have been used for the preparation of Water Sharing Plans. Committees that could make stronger links between overall metropolitan water yield, water extractions and local catchment management could be advantageous. A shortcoming of such committees is that Councils are only required to consider - and not implement - these plans.

Coastal Management Programs - Coastal Management Programs, under the Coastal Management Act 2016 set the long-term strategy for the co-ordinated management of the coast in line with the objects and objectives of the *Coastal Management Act 2016*. CMPs have a formal process for developing, implementing and evaluating plans. They are co-ordinated by Councils (or groups of Councils). Programs must be focused on the coastal zone (as identified under the Act and supporting SEPP). Key coastal threats identified in the development of Sydney's CMPs relate to stormwater impacts on coasts and receiving water quality – implying that to address threats, the Plans must consider catchment processes, even as the statutory operation of these programs could be limited to coastal areas identified under the Coastal Management Act and associated SEPP.

Local Strategic Plans – Under the Local Land Services Act 2013, local boards can prepare a local strategic plan for land services and natural resource management to set the vision, priorities and strategy for delivery of local land services in the region, with a focus on appropriate economic, social and environmental outcomes. Greater Sydney LLS Strategic Plan¹ includes relevant strategies for waterway health but actions are focused on support and capacity building because the plan has limited integration with the land use planning system.

As noted, these planning committees and groups can provide beneficial whole of catchment and stakeholder approach. They can provide vision and direction and improve the way existing entities collaborate for common goals. This improves resource allocation and efficiency. The shortcoming is that they don't have formal role in the land use planning system and rely upon member organisations making direct investments in natural resource management, generally on public lands.

¹ NSW Local Land Services (2016) Greater Sydney Local Strategic Plan, Available https://www.lls.nsw.gov.au/__data/assets/pdf_file/0010/660493/Greater-Sydney-Local-Strategic-Plan-2016-2021.pdf





Under current arrangements, each committee or group would have to individually influence planning controls, including Local Strategic Planning Statements, Local Environmental Plans or Development Control Plans.

The development of a Catchment SEPP for NSW, that covers Sydney's major urban catchment areas and requires achievement of uniform catchment and water objectives through the land use planning system, would be a very positive development. As a useful intermediate step, the new Aerotropolis SEPP includes requirements for Precinct Plans to include integrated water cycle management approaches.

We reiterate our recommendation that NSW must create capacity for regional and catchment level planning that encompasses urban development controls.

This issue is being addressed in other jurisdictions. Victoria has provided for regional water planning and integrates water management with urban planning via its Water Act and Planning Act. – it provides for catchment or regional level Waterway Managers who deliver on strategy, infrastructure plans and planning controls. They also work with and provide support to the local councils and community groups to deliver on the projects designed to deliver on (or align with) catchment level objectives.

In Sydney, local, voluntary and co-operative catchment groups have formed to overcome some of the gaps in formal catchment management. The Parramatta River Catchment Group has identified a number of land use planning approaches to support improved waterway health outcomes to deliver its Masterplan, outlined in their draft 'Standardising the Standards – Recommendations Paper'. When implemented, the recommendations of this paper will fulfill a goal for standardised best practice land use management to improve waterway health.

As catchment management matures in NSW, Sydney Water will continue to work more collaboratively with local government and other land use managers to implement more holistic water management in catchments within our area of operations.

Draft recommendation 5.3 (c) Draw on the experience of the INSW South Creek Sector Review to identify other areas in New South Wales that would benefit from integrated land use and water planning

We strongly support this recommendation.

Within Sydney, we recommend the Government implement the findings of the sector review, particularly recommendations that address:

- early, integrated land and water planning (for both private and public development) that delivers more community benefits for water cycle management, open space provision, waterway protection, tree canopy cover and urban form
- cost benefit assessment that drives water investment, including acknowledgement of the significant avoided costs and resource recovery benefits of recycled water





- coordinated regional stormwater and flood plain governance
- implementation of the blue green grid
- improved resource recovery, led by sophisticated wastewater management.

Integrated catchment planning and waterway protection has sometimes been positioned as a costly exercise that may hinder the efficient delivery of development.

Analysis conducted by the South Creek Sector Review and Sydney Water's Western Sydney Regional Master Plan has demonstrated that "parkland" or "water sensitive" approaches to land and water planning has higher community benefits and in some cases, is lower cost than "traditional" servicing. Additionally, parkland style urban development can encourage innovations in urban form that mean housing and jobs targets can be achieved, with more land allocated for open space and waterway protection.

Sydney Water planning has investigated regional servicing concepts that will provide all "traditional" water and wastewater services for customers, while achieving "Western Parkland City" water and amenity outcomes such as landscape cooling and greening, healthier local waterways, and improved local water balance.

Sydney Water analysed the water balance, financial costs and economic benefits of each option. Analysis demonstrates that greatest economic value will be realised through an adaptive and integrated water cycle management. The options developed and analysed are:

Pathway 1 – Drained City

Baseline servicing to meet a current level of water demand and services. Water is largely imported, and wastewater transferred out of local catchments. Models of urban development and housing are similar to current greenfields development. This option is unlikely to meet the NSW Government's Parkland City vision and the aspirations of customers.

Pathway 1a – Drained City with Parkland water use

This option investigated using traditional water sources and management to deliver key parkland elements, such as tree canopy and cool green landscape.

Pathway 2 – Water Cycle City

Wastewater recycling for non-drinking uses and stormwater harvesting to retain water in the landscape. Water helps create the South Creek-Wianamatta blue-green corridor.

Pathway 3 – Water Centric City

This option uses small scale servicing schemes to maximise flexibility in servicing growth. It may require appropriate wastewater treatment, water recycling and water sensitive urban design approaches to be provided as part of private development.

Pathway 4 – Water Resilient City

Large-scale re-use of recycled water and harvested stormwater reduces discharges to the environment and improves resilience and reliability of water services.





The Water Cycle City has been assessed as the preferred pathway because it delivers the greatest economic value: it realises the Parkland City at least cost and can be more readily delivered with current regulatory frameworks and community attitudes.

Some elements of the identified pathways could be opportunistically adopted. The recommendations arising from this Green Paper may help higher cost / higher benefit pathways be adopted and essential community conversations take place.

Pathways for a Water Centric City and a Water Resilient City are both favourable, delivering greater economic value than the Drained City. Some approaches -such as adoption of highly treated purified recycled water for drinking - need to thoroughly be discussed with the community before adoption. Sydney Water is committed to implementing stormwater when it is cost effective and beneficial.

Pathway 1a has the highest net cost of the four pathways – demonstrating how traditional methods of water management must adapt if to achieve aspirations for our cities at reasonable costs to customers.

All options (except Pathway 1) require significantly more water use for outdoor irrigation to support an expanded tree canopy, cooling and greening - but Pathways 2, 3 and 4 make more use of recycled water and harvested stormwater. This enables these pathways to intrinsically achieve better levels of waterway protection.

Supporting high benefit pathways with land use planning

This analysis demonstrates how water management must be integrated with land use planning at a very early stage.

The high benefit pathways are embedded with urban design approaches that have high levels of stormwater retention and detention (enabling waterway protection and flood management), pervious landscape areas, and space for canopy trees, while facilitating appropriate levels of housing density to support active and mass transport and viable centres.

This underscores how any integrated water and land use planning – supported by effective models of governance to ensure co-ordinated delivery – can provide a more economically efficient mix of water supply, wastewater and stormwater services.

It must be noted that all the high benefit pathways are likely to require elements of effective water management to take place on private land. All high benefit pathways, for example, will require more water sensitive urban design approaches to improve stormwater retention, and pathway three may require wastewater treatment at the lot or precinct scale.

To be effectively implemented, high benefit pathways will potentially require both the Environmental Planning and Assessment Act 1979 and relevant Environmental Planning Instruments to embed water management requirements that align with a relevant catchment-based water plan.





Additionally, pathways that require elements of stormwater harvesting may require updates to the relevant Water Sharing Plan to enable more stormwater harvesting in catchments with licenced water allocations.

Draft recommendation 5.4: Improve wastewater pricing Sydney Water should continue to work with the Independent Pricing and Regulatory Tribunal of New South Wales to estimate long-run marginal costs for its wastewater catchment areas and consider implications for pricing.

We are pleased to see the Commission has recognised the importance of Integrated Water Cycle Management in delivering more efficient and productive water related services. We also agree that at the city scale, increasing costs of wastewater management are providing significant incentives to increase recycling and avoid wastewater augmentation costs. We look forward to continuing our work with IPART to consider how long run marginal costs (LRMC) - and the benefits arising from different types of wastewater treatment can be calculated - and this information used to drive innovation, efficiency and customer benefit.

Inclusion of avoided costs has revealed opportunities for cost effective and beneficial recycling in analysis conducted for Sydney Water's regional master planning and the South Creek Sector Review. The low cost of coastal wastewater discharges has created historic incentives to transfer wastewater volumes to coastal networks to achieve a least-cost service. Holistic considerations of Sydney's water balance, system constraints, avoided costs and waterway outcomes are now revealing opportunities for higher benefit outcomes associated with more intensive wastewater treatment (typically provided for wastewater that's discharged into the Hawkesbury Nepean river system).

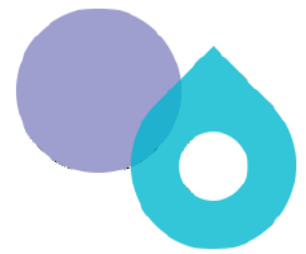
We don't think a simple LRMC of wastewater (especially at a catchment level) should be the sole determinant of wastewater management and charging decisions. LRMC for wastewater includes both long run costs associated with increasing capacity as well as short run costs of treatment. Setting LRMC for specific catchments will show a higher LRMC for higher cost tertiary treated wastewater, even when this has a higher benefit (including meeting high environmental regulatory standards).

Some of these difficulties could be overcome by establishing categories of wastewater treatment so LRMC for different catchments can be fairly compared. We also suggest that the benefits of different types and locations of treated wastewater be included. We therefore recommend that ongoing calculations of wastewater LRMC be done in conjunction with ongoing development of a consistent benefits framework (as we discuss in our response to draft recommendation 6.2)

Benefits of high-quality wastewater treatment include:

- providing a platform for recycled water production
- enabling flow and water quality benefits in waterways affected by water supply dams
- extraction of beneficial resources, including biosolids (and the nutrients within them)
- energy recovery.





Inputs of very highly treated wastewater make an important contribution to major waterways downstream of water supply dams. Modelling in Sydney Water's Hawkesbury Nepean model indicates that without inputs, or return flows, of highly treated wastewater, there would be significantly greater concentrations of nutrients and conditions would be more conducive for algal growth in the river. Work conducted by the Metropolitan Water Directorate for the 2017 Metropolitan Water Plan demonstrated a very high community willingness to pay for increases in river health.

The development of Sydney Water's new Upper South Creek Advanced Water Treatment Facility provides opportunity for very high-quality recycled water to be supplied to customers or used to offset some of the releases from Warragamba Dam required for environmental flows (thus reducing the yield impact of environment flows while maintaining river health).

Most of Sydney's existing water recycling schemes have been enabled by high quality tertiary treated wastewater, that has stringent quality requirements in order to protect waterways.

Increasing recycling will be a key strategy to improve resilience of Sydney's water supplies and delivery network. Maintaining a good geographic spread of wastewater treatment and transport capacity across Sydney - with treatment that's appropriate for end uses and receiving environment – is required to keep all recycling options open.

Recent planning work indicates that the most economically beneficial pathway for future city-wide wastewater management is to disaggregate some of our large coastal systems and recycle more water.

Higher quality wastewater enables more resources to be recovered. On average, Sydney Water captures about 40 percent of all possible biosolids in wastewater. Biosolids are reused on farms to improve soils and improve agricultural productivity, and biosolids recovery is generally higher with higher standards of wastewater treatment.

IPART has previously discussed² that establishing the LRMC for different wastewater catchments in Sydney could be an appropriate way to set prices and create incentives for recycling. We do not consider that setting catchment based LRMC volumetric pricing is equitable or efficient because residential and small business customers have:

- no cost-effective way to measure wastewater discharges
- negligible ability to reduce wastewater pollutant loads
- a high barrier to moving to a lower-cost wastewater location.

Large commercial and industrial customers largely internalise costs of wastewater volume and pollutant loads as they face trade waste charges and acceptance standards. Many commercial

² IPART (2020) Review of prices for Sydney Water March 2020. Available: <https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/pricing-reviews-water-services-metro-water-prices-for-sydney-water-corporation-from-1-july-2020/legislative-requirements-prices-for-sydney-water-corporation-from-1-july-2020/draft-report-review-of-prices-for-sydney-water-march-2020.pdf>





customers still have high barriers to moving to lower wastewater cost locations, including the availability of land and transport, and proximity to suppliers or markets.

We believe the city-wide scale of water supply and wastewater networks, and the community-wide benefits of effective wastewater services, means our current of “postage stamp” pricing for water and wastewater services should continue.

Draft recommendation 5.5 Engage on water recycling Coordinate with state-owned water corporations to develop and implement a public engagement program for recycled water. Explore the establishment of a Demonstration Plant in Sydney to help people understand the water cycle

As we noted in our response to the Commission’s Discussion Paper, Sydney Water strongly supports the considering all viable water supply options as part of a robust urban water planning process, such as the Greater Sydney Water Strategy.

NSW’s 2017 Metropolitan Water Plan³ identified the need to engage with the community to understand if purified recycled water should be considered as an option for Sydney’s future drinking water supply. We acknowledge that purified recycled water is an efficient, safe and sustainable component of the water supply for more than 35 cities around the world.⁴

The potential to form part of a wider portfolio of supply sources that can meet the demands of a growing population, and service the increasing liveability and amenity aspirations of Greater Sydney. We note that IPART has also strongly encouraged the consideration of purified recycled water to inform calculations of Sydney Water’s long run marginal cost of water supply.

Historically, lack of engagement with the community on water recycling has prevented active consideration of purified recycled water. We support the intent of draft recommendation 5.5.

Between March and July 2020, we engaged with approximately 200 of our customers to explore the role of water in our future cities. Through these conversations a majority of participants expressed an openness for considering purified recycled water for drinking as a potential supply method, suggesting broader public engagement is appropriate.

We believe our community’s ability to provide a meaningful and informed contribution to urban water planning decisions is grounded in their understanding of the local urban water cycle, and the challenges and opportunities within our region. The success of demonstration plants and visitor centres in growing this awareness and understanding has been proven around the world.

We also note that a demonstration plan can improve water managers’ knowledge of the technical, economic and social aspects of water supply options in line with the Commission’s priority of improving technical innovation.

³ NSW Government (2017) Metropolitan Water Plan. Available at: <https://www.planning.nsw.gov.au/-/media/Files/DPE/Other/About-us/Metropolitan-Water/2017-Metropolitan-Water-Plan.pdf>

⁴ Water Services Association of Australia (2019), All option on the table: Lessons from the journeys of others. Available: <https://www.wsaa.asn.au/publication/all-options-table-lessons-journeys-others>





A demonstration plant provides the evidence required for more effective planning, appraisal and public justification of infrastructure investment options, as outlined in draft recommendation 6.2 and improving use of our existing infrastructure, in draft recommendation 6.4. It helps ensure that high benefit infrastructure investments are not prematurely taken out of consideration because of assumptions about technical performance or public perception.

A demonstration plant also has the potential to provide a platform to:

- discuss the role water plays in enabling the Government's vision for Sydney as a productive, liveable and sustainable metropolis, with greener and cooler places
- promote understanding of the urban water cycle and encourage water-wise behaviors as well as improving community understanding of circular economy concepts, such as nutrient and biosolids extraction and reuse, and waste to energy opportunities
- better involve the community in urban water planning – building trust and confidence that the NSW Government and water sector is planning for a productive, liveable and sustainable future.

We look forward to working with the NSW Government to explore opportunities for a demonstration plant in Sydney - including funding. It's important that any plant work with and provide benefit to our existing facilities and complement existing servicing strategies so it can be delivered in a prudent and efficient way for our customers.

Draft recommendation 5.7 Monitor the effectiveness and efficiency of the new Sydney Water scarcity pricing model in managing demand and use this to guide water demand management policy

Sydney Water strongly supports recommendations to support increased water efficiency. We note that there are some important differences between IPART's newly implemented *drought pricing* with true scarcity pricing. Scarcity pricing has not been adopted in NSW.

IPART's *drought pricing* simply reflects the increased costs of supplying water in periods of drought (for example, the increased cost of supplying desalinated water).

IPART's approach does result in a stronger reward to households who conserve water in drought. As such, we look forward to working with IPART and DPIE to understand how the drought pricing approach interacts with water efficiency and demand management approaches.

Structured customer water efficiency projects are important complements to any pricing changes because they give customers essential information about water efficient practices and technologies that enable them to better respond. We agree that changes to water use pricing must be combined with targeted water efficiency information to assist and support water use behaviour change. Analysis from preliminary supply demand planning conducted for the Greater Sydney Water Strategy has confirmed that demand management is an important and cost-effective method of managing Sydney's supply/demand balance.





We consider IPART's approach to regulating water efficiency provides a good balance between independence and prescription: Sydney Water is responsible for determining its own economic level of water conservation but must implement options that are economic.

Recent recalculations about yield constraints in Sydney and the likelihood of upcoming water supply augmentations may also have the effect of increasing effort in water conservation and increasing the number of projects that can deliver economic water savings. We anticipate the GSWs will identify cost effective levels of demand and water efficiency targets that will complement Sydney Water's ongoing updates to our economic level of water conservation.

The 2019 drought also demonstrated the importance of maintaining a baseline level of investment in water conservation to improve resilience and adaptability to rapidly changing circumstances and meet customer needs. Responding to the 2019 drought demonstrated how it is difficult to rapidly ramp up conservation programs and contracts during very rapid depletion of water supplies. A baseline level of investment is also essential to maintain industry capacity and knowledge. It is also important to note water efficiency programs are a long-term proposition, as behaviours, culture and knowledge can take years to embed.

Draft recommendation 5.8: Review and redesign NSW Building Sustainability Index Review NSW's Building Sustainability Index scheme to ensure it meets both environmental and economic objectives.

After 16 years, we agree that its timely to review and improve BASIX. We support updates to BASIX to maintain a high level of cost-effective water efficiency and thermal comfort in new houses – including potential synergies between water and energy use.

We also support opportunities to increase the scope of BASIX so it can help achieve government policy – for example, net zero emissions, the Greater Sydney Region Plan, and the risk-based framework for waterway health.

As a water manager, we advocate that BASIX include all aspects of water use in the house – including water supply and efficient use of water, cost effective capture of rainwater, and management of discharges to the environment and waterways – both in the form of stormwater and wastewater.

An integrated approach to managing water is likely to meet policy objectives and water efficiency outcomes at a lower cost to the community.

Water efficiency

Improvements to BASIX water-efficiency targets that are related to overall supply demand decisions and mandated through a new Greater Sydney Water Strategy can help keep overall demand at a sustainable level. Ongoing improvements and market development of efficient appliances means improvements in efficiency can often be made without compromising customer water service outcomes (especially when water is a “derived” demand for waste transport or cleaning).





Stormwater

Incorporating site and stormwater considerations can reduce flood risk and improve catchment protection and waterway health - while enabling cooling and greening objectives to be achieved with less impact on potable water supplies.

Recent Sydney Water analysis of urban design and water typologies for the Western Parkland City⁵ has demonstrated a range of viable approaches to building and urban design in greenfield development areas that could reduce annual volumes of stormwater run-off from greenfield residential development by about 75 percent. Work in other jurisdictions for established urban areas is suggesting targets of at least 25 reduction in annual runoff would be appropriate, and 40 percent reduction in flood event runoff. Targets can be set based on the needs of particular sub-catchments and waterway condition.

The Parramatta River Catchment Group is proposing a composite “blue green” index that would include elements of stormwater retention, pervious areas, and vegetation.

Rainwater tanks

We note the Commission’s analysis on the costs and effectiveness of rainwater tanks. Recent Sydney Water research on rainwater tanks suggested approximately 40% of nearly 300 tanks were not delivering water efficiently and many customers were electing not to spend money to fix problems.

As with other water efficiency measures, we believe that effective customer awareness programs are important to enable people to get the most benefit out of their rainwater tank (or other water efficient device or alternative water source). A system to certify maintenance of tanks could be considered, to ensure effective operation throughout their lifecycle.

As a stand-alone measure, a well-maintained 3,000 litre rainwater tank can supply around 30 KL of water for an average household. The cost per kilolitre of rainwater tank supply can be higher than that of recycled water, and householders’ maintenance costs need to be taken into account.

When rainwater tanks are plumbed into houses and the water is used frequently, they are likely to provide stormwater management and catchment protection measures with benefits of urban waterway protection, flood risk reduction and cooling and greening benefits from local irrigation. We would be interested in working with the Commission or other partners to quantify this performance and associated benefits. It would complement recent research Sydney Water is conducting to quantify the performance of different water sensitive urban design approaches.

Our research has shown there are possibilities to improve rainwater tank effectiveness, including the concept of “smart networked tanks” that are centrally managed to improve their contribution to water supply, stormwater retention and flood management. We see great opportunities in digital innovation to support water management opportunities such as these.

⁵ Sydney Water (2020) Western Parkland City Urban Typologies Available <https://www.sydneywater.com.au/SW/water-the-environment/what-we-re-doing/current-projects/servicing-growth-areas/west/index.htm>





Recycled water

Efficient delivery of recycled water can contribute to reductions in household usage that can enable new development to meet updated BASIX water efficiency targets. Economic implementation of recycled water is climate independent and will reduce discharges. As noted elsewhere in our response, appreciation of the avoided costs of wastewater treatment, the benefits of resource recovery, and the need to achieve cooling and greening objectives for the city make recycled water a more economically effective choice.

Timeframe and updates

We support improvements to standards if increases in construction costs for new homeowners to meet new targets are more than offset by the benefits received by occupants over the lifetime of the dwelling. Such assessment should consider likely increases in water costs if very high levels of water consumption brings forward investments in water and wastewater systems.

We encourage detailed planning on updating BASIX savings targets to occur before the 2020 National Construction Codes are updated. When the codes are updated, we agree that BASIX should be aligned with them.

Data improvements

Monitoring the real efficiencies gained by BASIX in households can be improved by better capturing the data from BASIX certificates, likely at dwelling completion time. It is also important that there is an improved validation process for the data, to ensure the correlation between BASIX interventions and water use can be more robustly quantified.

System design

There may be opportunities to introduce new rating systems for integrated water management. The current efficiency targets could be updated, reflecting improvements in technology and market development since BASIX was developed. Additional “star ratings” or similar could be given for elements of integrated water management adopted – such as site pervious area and other stormwater retention approaches, and effectively maintained and used rainwater tanks.

3.3 Smarter infrastructure will support jobs and communities

Draft recommendation 6.2: Publicly justify infrastructure spending Require Infrastructure NSW to publish, within one week of an announcement for all Tier 1 and Tier 2 projects: • Gate 1 strategic business case and Gate 2 final business case documents • a simple ‘social value for money’ rating based on the project Benefit Cost Ratio • a risk report, drawing on historical experience, with probabilities where feasible. To further increase the transparency of spending priorities: • Have Infrastructure NSW publish its five-yearly infrastructure plan (and annual updates), along with underlying analysis, at the time of the Budget. • Provide additional justification in the Budget where investments are prioritised that do not align with the Infrastructure NSW priorities

We agree with this recommendation. It is consistent with the transparent basis on which a state owned corporation must make investment decisions.





We believe that the proposal for a social value for money rating aligns strongly with our position that development and adoption of a robust and NSW-wide benefits framework will assist in the planning and delivery of high value, high benefit infrastructure. It will assist all infrastructure organisations adhere more closely to NSW Treasury's guidelines for cost benefit assessment.

We support regulation that provides incentives for stronger customer outcomes. This is likely to align well with existing SOC governance structures: for example, we have an Operating Licence that outlines levels of service and obligations we must fulfil.

A consistent state-wide benefits framework can identify when water infrastructure investment that cost effectively delivers high levels of community benefit, and that clearly aligns with contemporary government policy should be co-funded by government.

Sydney Water has conducted rigorous cost benefit assessment for large strategic asset planning exercises. The cost and time taken to conduct an assessment is justified because of the geographic scale and long planning horizon of such exercises. However, conducting detailed willingness to pay and benefits studies for smaller investment decisions can be costly and add limited value. Adopting state or city-wide benefit values with a supporting assessment framework will provide improved efficiency for smaller projects, and help them align with larger strategic frameworks.

Water infrastructure investment can be more efficient when it is guided by holistic regional or catchment water planning, as we outline in our discussion on draft recommendation 5.3.

Draft recommendation 6.3: Make evaluation a priority Ensure that agency project business cases comply with the NSW Government Business Case Guidelines, including planning for monitoring and evaluation at the detailed business case stage. Ensure that post-evaluation costs are included in funding requests.

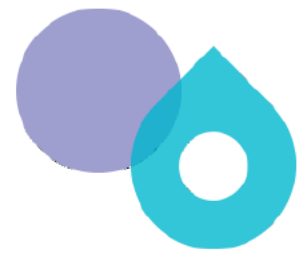
Yes. We agree that with the expected lifetime of future water assets, it is vitally important to evaluate them properly and ensure that we don't "cut-off" future water supply options or inhibit our ability to adopt new pathways in the future.

Draft recommendation 6.4: Improve use of existing infrastructure

While the detail of this recommendation concerns transport infrastructure, it is relevant to the water sector too. Demand management has had a proven impact on increasing capacity in water infrastructure.

Our current strategic asset planning is also demonstrating some of what must be considered in augmenting water supply. For example, high levels of investment in new water augmentations such as dams or desalination could remove options to invest in recycling pathways that maintain capacity in wastewater assets and reduce the need to duplicate this infrastructure.





3.4 Planning for the housing we want and the jobs we need

Draft recommendation 7.7: Making the most of our open and green spaces Develop a consistent approach to measuring benefits to community welfare from the provision of open and green space to help inform government business cases involving development. Develop better options for taking into account green infrastructure and public space in strategic land use planning.

Sydney Water supports the development of a consistent approach to measuring benefits to community welfare from the provision of open and green space to help inform government business cases involving development. This will be an important step towards transparency and consistency in Government decisions. We particularly support this approach providing clarity on how much open space is the right amount, and what the benefits of open space are compared with the costs. Sydney Water would be able to use such information when we assess new water and wastewater serving options to target solutions that will deliver more benefits than others.

We recommend that the approach adopted use evidence from Sydney Water's development of "Parkland City" water sensitive typologies⁶ and development of water regional master plans. We note that to maximise benefits from open space and green infrastructure, water and open space must be planned at the outset of development for optimal outcomes. Benefits provided can be across the spectrum of transport, health and education.

3.5 Better taxes to encourage growth

Draft recommendation 8.1: Replace inefficient taxes with more efficient ones. Start by replacing transfer duty with a broad-based land tax. Before proceeding, identify how various designs will improve the economy and the state budget, and how adverse impacts on various groups can be minimised.

We strongly agree the current tax system is inefficient, and welcome the move to remove transfer duty, as this is a barrier to us purchasing enough land to deliver stormwater and waterway management services.

We are however concerned that the Commission's proposal to increase land tax might exacerbate rather than address our concerns about efficient and equitable delivery of stormwater infrastructure and waterway health. Currently, when councils deliver stormwater infrastructure, they are exempt from land tax, whereas State Owned Corporations are not. We welcome the caveat noted in the recommendation that the design of the land tax reform must improve the economy and state budget and minimise adverse impacts. We consider that land used for stormwater and waterway management should not be subject to land tax as this inflates the cost to provide these services which disincentivises the adoption of optimal servicing solutions.

⁶ Sydney Water, 2020, Western Parkland City Urban Typologies Available at: <https://www.sydneywater.com.au/SW/water-the-environment/what-we-re-doing/current-projects/servicing-growth-areas/west/index.htm>





Draft recommendation 8.2: Use the Review of Infrastructure Contributions to find ways to deliver a more sustainable system of rates and infrastructure contributions, so that councils can provide the infrastructure and services required to accompany development and growth. Evaluate reforms within three years and if reforms do not provide sufficient funds to deliver services, councils should hold a plebiscite of ratepayers to test support for abolishing the rate peg.

Sydney Water welcomes the Review of Infrastructure Contributions however, it is of concern that the Commission's recommendation refers to only councils, and not also utilities. Both Sydney Water and Hunter Water have the statutory ability to collect infrastructure contributions, but since 2008 the NSW Government has set a policy prohibiting the collection of these contributions for water, wastewater and stormwater infrastructure. As WSAA noted in its submission to this review:

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.⁷

WSAA presents a strong case in their submission that developer contributions in water and wastewater are critical to fund growth nationally, but particularly in Sydney and the Hunter.

As we noted in our response to the Commission's discussion paper, the Sydney Water Act allows Sydney Water to levy charges on developments that will make use of the services it provides. Since 2008 the NSW Government set a policy prohibiting the collection of developer charges for water, wastewater and stormwater. Our suggested principles for effective developer charges for water, wastewater and stormwater are that they:

- apply to development dependent cost
- be calculated by a methodology that is simple to understand
- strike the right balance between location specific charges and ease-of-use.

Given this, it is also of concern, the Commission's recommendation notes that if reforms do not provide enough funds to deliver growth, the next option is for councils (so, potentially by association, utilities) to look to gain increased funds from ratepayers. Application of this same approach to a utility's existing customer base would go against the above principles for effective developer charges. That is, existing customers are generally neither the impactor nor the beneficiaries of development related infrastructure. We also question whether it is efficient for growth related infrastructure to be completely funded by ratepayers or existing customers.

Sydney Water supports the way forward presented in WSAA's submission, including transition arrangements to ensure property developers have time to adjust to the new regime. We also support the use of the existing IPART method in combination with minimum and maximum capped charges. We consider this would increase the certainty and simplicity of outcomes – and enable an appropriate transition – without sacrificing the inherent efficiency of the IPART method.

⁷ WSAA, *Submission - Review of infrastructure contributions in NSW - NSW Productivity Commission*, August 2020





We also see the potential of collaborative place-based planning to assess the total infrastructure investment required for development of high-quality urban places, and the application of an effective framework to fund it. Approaches such as the Greater Sydney Commission's Place Infrastructure Compact could be used for such a purpose.

Given the benefits of integrated catchment planning, revision of the current contributions system must also ensure that adequate funding is available to the entity who delivers catchment planning and management. For example, if Sydney Water conducted these services on behalf of Councils, this should be funded via a proportion of s.7.11 contributions. Likewise, if Sydney Water delivers infrastructure that enables efficient delivery of other development dependent infrastructure, such as open space or pedestrian and cycle routes, a proportion of costs could be funded by Special Infrastructure Contributions.

A benefits framework and social value for money rating (as outlined in draft recommendation 6.2) could also confirm that if in Sydney, where the community that receives broader benefits strongly overlaps with Sydney Water's customer base, it be fairly funded by water and wastewater customers (with efficiency oversight by IPART) – or if funding should be contributed from other sources.

