

Response to the Productivity Commission's National Water Reform Draft Report

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1 Overview

Sydney Water appreciates the opportunity to respond to the Productivity Commission's Draft Report for its review of *National Water Reform*.

This submission presents Sydney Water's view on the Commission's draft findings. We also outline additional priority areas for future urban water reform that we think the Commission has not addressed in detail or overlooked.

The current National Water Initiative (NWI) has not been a strong driver for reform in the urban water context. Indeed, in the Sydney context, reform has largely pre-empted or happened in spite of, not because of, the NWI. A reinvigorated NWI presents an opportunity for national policy to drive real reform in the urban context. To this end, we outline some proposals to help ensure that any future policy and reform directions can have traction within each state, to allow reform objectives to be realised.

Planning for growth, and integrated water cycle management (IWCM)

We support the Commission's findings on the importance of integrated land and water use planning, as well as evaluating and recognising the potential benefits of IWCM. All approaches need to be considered early in the planning cycle. Collaboration is a useful short term way to achieve this, but relies on parties being willing and able to collaborate, given their different policy and funding environments. A mandated process for ensuring water utilities, government agencies and the relevant regulators can collaborate to ensure that good intentions are translated into properly costed, well-grounded business plans may be required long term.

IWCM is not a code-word for the inclusion of additional, discretionary liveability benefits; rather, it is anew approach to water servicing. However, existing governance frameworks and methodologies for valuing costs and benefits may not be appropriate to support IWCM approaches. IWCM can introduce new costs and benefits including avoided supply and disposal system augmentations, with associated operating costs. National policy guidance would be most useful if it addressed not only the policy objectives of IWCM, but also how best it can be delivered.

This should include consideration of how to create an environment which promotes innovation and appropriate risk-taking by utilities, with a bias towards action, while containing the necessary backstops and protections to provide regulators with confidence that, should benefits not materialise as anticipated, utilities and other stakeholders can learn the lessons and move on. For example, the use of trials or pilot projects, delivered by regulated companies (and supported by regulators within defined parameters), are increasingly recognised and used internationally to ensure innovation is encouraged in complex regulatory environments. Supporting, or indeed incentivising, this sort of mindset could help unlock the more holistic contribution that governments want to see from utilities in meeting growth objectives.

There is an opportunity for continued national reform to promote new thinking about policy solutions and assist in the provision of water services that deliver broad customer and catchment benefits. In particular, a revamped NWI could develop guidelines to help translate policy objectives

into some level of mandate that has traction within each state's regulatory context. This could include:

- guidance on how water utilities can be engaged earlier in decision-making processes on land use and urban form, to ensure an operational perspective is factored into policy design and to better integrate consideration of water servicing as an input rather than an afterthought
- encouraging debate about whether direct user pays pricing is still the most relevant system, or whether there is community openness towards water pricing encompassing a wider range of benefits and beneficiaries
- guidance on how governments can translate identified growth outcomes into service level requirements for enabling infrastructure providers, including water utilities. Guidelines could outline minimum environmental and community performance standards expected by utilities and suppliers
- national guidelines to codify methods for consistent and robust evaluations of the costs and benefits of IWCM. This would help utilities to be able to demonstrate where IWCM is valuable. Guidance on the types of investigations and comparisons undertaken; economic and financial analysis; methods for quantifying and monetising externalities (who benefits, and who pays for, servicing that provides broader social, environmental and economic outcomes for regions and communities) would also be useful
- recommendations on how to mandate that planners must consider IWCM and measure how much it could contribute to modern urban outcomes of waterway health, urban comfort (cooling and greening), flood prevention, creation of local waterway corridors and greenspace (and access to them), and system resilience.

Outcomes-focussed environmental regulation

We fully support the Commission's recognition that environmental regulatory regimes tend to focus on point source pollution of waterways (Draft Report, p 194). This is a legacy approach, from when point sources pollution was the largest and clearest area of environmental concern. However, this approach is now at odds with optimising environmental improvement.

A revitalised NWI could help provide clear policy directives to state governments to:

- move towards environmental regulation that addresses holistic waterway health outcomes. This may require funding commitment to bodies to carry out assessments for discrete waterways.
- improve regulation of diffuse stormwater pollution sources (typically managed by local governments), which could assist with the challenge of implementing potentially valuable combined stormwater/wastewater solutions
- in the longer term, as noted in our first submission, encourage a load-based licensing scheme where pollutant reductions would be linked to environmental outcomes, with costs established through market-based trading schemes

- create standardised and codified approaches to setting 'equivalence' targets for innovative, new approaches for evaluation against traditional approaches. A project currently being developed by the NSW EPA may contribute useful learnings towards national guidelines in this area.

More broadly, environmental cost-benefit frameworks remain under-utilised and are another area where the NWI could provide guidance and direction.

Other issues

Other priority reform areas that would could also be further analysed and addressed under a reinvigorated NWI include:

- customer centricity
- consistent national guidelines on developer charges
- the appropriate national/state regulatory model, including identifying optimal competition approaches that could be adopted across jurisdictions
- the United Nations Sustainable Development Goals.

2 Introduction

Sydney Water supports the objectives of the Commission's *National Water Reform* review to:

- assess progress across jurisdictions in achieving NWI outcomes and objectives
- consider potential and realised benefits from NWI implementation
- consider the scope for improving the NWI
- make recommendations for future priorities for reform.

In our first submission in April 2017, we provided an outline of our operating context and business model. We also identified five priority issues the NWI could target for urban water reform. These were (in summary form):

- **integrated water cycle management (IWCM)** – provide a clear policy direction at a national level to facilitate IWCM where valuable, to allow more sustainable, liveable, resilient and economically productive cities. This requires removing governance and regulatory barriers, increasing the certainty of cost recovery, and promoting early consideration of IWCM in land use planning processes.
- **customer centricity** – encourage greater customer centricity in water-related services, to ensure the industry is delivering the outcomes customers want. There is much to be learned from other jurisdictions, especially the UK, on the roles the economic regulator and utility can take in demonstrating clear understanding of customer-desired outcomes in price setting.
- **competition and pricing** - define the objectives of competition in urban water markets, and support competition as a means of improving industry efficiency, where it can improve the long-term interests of consumers. Refine and improve pricing frameworks, including better recognition of externalities (broader social, environmental or economic outcomes) of service provision.
- **environmental regulation** - greater use of outcomes-focused regulation, as opposed to prescriptive methods-based regulation. This will assist to ensure positive environmental outcomes for communities with optimised costs and benefits.
- **metropolitan water planning** – support increasing use of whole-of-water cycle planning, for holistic city amenity outcomes beyond just supply security. This could also be an avenue to reconsider the optimal water governance framework in the urban context.

We are pleased to note that the Commission's draft findings align closely with many of these reform priorities. However, to date, the NWI has not been a strong driver of reform for the urban water context. Retaining overly generalised findings in the Final Report risks a continuing lack of initiative and drive in any future national urban water reform agenda. Section 3 of this submission details our response to the draft findings, along with some proposals for ensuring any policy directions adopted by a revamped NWI can be effectively implemented, in the context of each state's specific regulatory environment, to allow the NWI's objectives and benefits to be realised in practice.

3 Response to the Commission's draft findings

We support many of the Commission's draft findings in relation to urban water. However, we believe that for the NWI to take a leadership role, it needs to translate good policy objectives into mandates or directives that have some traction at state level, otherwise the report risks becoming a well-meaning but ineffectual voice. The Commission concedes this has occurred in the past, noting on p12 that "while the NWI provided valuable high level outcomes for urban water management, it provided little specific policy guidance to the sector on issues other than pricing."

Enforcing national policy objectives in individual state-based environments is not always straightforward – in the past this has been most effective where it has involved competition incentive payments. However, we believe that the NWI could potentially create many clear drivers for state-based reform that do not require payment, through guidance on specific issues in the form of national guidelines. Some suggestions in this regard are provided below.

3.1 Draft findings Sydney Water supports

3.1.1 Planning for growth, and the role of Integrated Water Cycle Management (IWCM)

We echo the Commission's concern at the unprecedented amount of growth to come; and the pressures imposed by the scale of this growth in the context of a changing climate. With Sydney now planning for a population of eight million by 2056, there is a pressing need to ensure land and water planning is coordinated.

We support the Commission's focus on role clarity in centralised planning processes and a thorough consideration of centralised, decentralised and IWCM approaches. We note that these approaches may be delivered by public utilities and/or the private sector; neither approach is exclusively the domain of any player.

We fully support the Commission's view that all approaches need to be considered early in the planning cycle, with integrated city scale planning, local scale planning and land use planning, and non-traditional approaches given equal consideration. Only in this manner can all service providers across a city ensure that growth is being enabled to meet the government's objectives, with optimal economic outcomes.

Collaboration versus mandate

We agree with the Commission's finding (Draft Report, p187) that the ideal approach to accomplishing better integration of land use and water planning *in the short term* is to trial collaborative processes and gain learnings, rather than re-allocating responsibilities at a formal institutional level. However, this relies on all parties being willing to collaborate, and having compatible policy and funding environments.

In the longer term, we believe that ensuring that water utilities have an early seat at the table to work with centralised planning authorities would further improve planning outcomes and more effectively realise IWCM policy objectives. As providers of essential infrastructure, water utilities

can add value through greater involvement in strategic planning of land use, and integrating it with best practice urban water management.

This may also involve a reconsideration of roles and responsibilities in urban water management – into a more integrated system of decision-making, price-setting and management of the different water products, along with clearly assigning accountability for new, but critical city planning outcomes like waterway health or urban cooling. There is currently poor alignment between urban planning processes and the delivery of integrated water cycle outcomes. The NWI could also provide a leadership role in identifying the beneficiaries of better water cycle management and appropriate funding sources.

Sydney Water practices consideration of centralised and decentralised approaches in all service planning. The best servicing solution for a region is very much case by case, depending on the specific place and the many parameters at play there.

The use of trial environments, as a basis to stimulate innovation and temporarily bypass regulation in the interests of learning, is increasingly being recognised and used internationally. It can ensure innovation is positively supported and encouraged in complex regulatory environments. We are now pursuing a range of innovative servicing approaches through pilot projects where developers or the government have shown an appetite for innovation. For example, we have a \$ project worth hundreds of millions of dollars, working with Infrastructure NSW to develop a water cycle master plan for Western Sydney, with a holistic focus on the South Creek Corridor and Hawkesbury Nepean. The project will provide infrastructure for an additional half a million people by 2040. Importantly, our planning for the project focuses on how we can improve environmental outcomes for the local waterways, which will be crucial to meet the NSW Government's aspirations for the region as a 'garden city'. The project will deliver a coordinated framework for major infrastructure investment decisions (on all types of major infrastructure, not just water) that seeks to integrate water and land use planning.

How could the NWI help?

We would particularly support a revitalised NWI providing guidance on how water utilities can best be engaged in decision-making processes on land use and urban form, to ensure an operational perspective is factored into policy design and to better integrate consideration of water servicing as an input rather than an afterthought.

3.1.2 Evaluating the benefits of IWCM

We support the Commission's view on the potential benefits and costs of IWCM. We also note the challenges raised in the Draft Report of quantifying benefits such as improved ecological outcomes and urban amenity or 'liveability' benefits for consumers; and the difficulties that arise in taking leadership when multiple agencies are involved, with siloed or unclear responsibilities, and multiple beneficiaries.

However, these difficulties only exist when IWCM is considered as an outcome or an objective in itself. Many definitions of IWCM specify that it is the coordinated management of all components of the water cycle for sustainability and liveability outcomes; that is, IWCM is an approach to help

achieve a desired pre-determined outcome. In its 2017 determination of prices for wholesale water and sewerage services, the NSW Independent Pricing and Regulatory Tribunal (IPART) noted that

“...IWCM and recycled water supply are not benefits or ‘ends’ in themselves. Rather, they can be means of achieving a range of objectives, which are largely related to environmental protection and enhanced liveability and include:

- *enhanced environmental outcomes as result of less water extracted from the natural environment and/or less sewerage discharged to the natural environment*
- *downward pressure on water prices from avoided upstream and/or downstream water and/or sewerage infrastructure augmentation*
- *more secure water supply (eg, reducing the likelihood, and hence cost, of water restrictions), and*
- *enhanced liveability, through urban greening and cooling*

Ideally, from the community’s and water users’ perspectives, the least cost (or most efficient) means of achieving these objectives should be pursued.” (p22-23)

A key hurdle to implementing IWCM is the absence of suitable or well-defined objectives. In our experience, where suitable objectives are in place, then solutions that involve IWCM are more feasible. One such example is the Rouse Hill sewerage system which utilises the IWCM tools of recycled water and stormwater management to protect the water quality in the Hawkesbury River and minimise flooding impacts. These approaches were adopted to meet specific environmental objectives placed on the scheme through the planning instruments in force at the time and EPA requirements. The planning instruments have since been repealed or amended meaning that it is unlikely these IWCM aspects of the scheme would be feasible today.

Having suitable and clearly defined objectives also provides the framework for all parties to work collaboratively to effectively achieve common goals. This is achieved through aligning all related planning processes (city-scale planning, local planning, and land-use planning) to achieve common environmental, sustainability or liveability outcomes. Later, we explain how this should be incorporated into a more contemporary description of the service level water utilities must provide.

IWCM versus least cost

Sydney Water has experienced challenges in the NSW regulatory context, in which ‘least cost’ is one of many criteria for decision-making on funding allowances. While the weighting of each criteria is at the regulator’s discretion, ‘least cost’ often appears to take primacy. This may be because we operate in a postage stamp price environment, where all customers pay for services equally, meaning vulnerable customers cannot be excluded from bearing some burden for non-least cost approaches.

In this environment, it can be challenging for utilities to pass regulatory prudence and efficiency tests when they propose IWCM approaches. Options involving IWCM are only feasible if the cost of the alternative option is similar to the cost of a traditional centralised option. If not, utilities are required to justify the additional benefits, which is hard without a suitable policy framework that

recognises benefits that aren't specifically water related such as amenity, or social/physical wellbeing.

IWCM is assumed to usually be more expensive, a perception that needs to be corrected. IWCM can in some cases be higher cost, but also provide additional benefits that make the service offering better value overall. In other circumstances, IWCM can lead to significant savings. IWCM is not a code-word for the inclusion of additional, discretionary liveability benefits; rather, it is a well-established contemporary approach to water servicing, occurring higher in the central planning hierarchy to best achieve the government's overall growth objectives for a region.

Modernising the service level to meet contemporary expectations

Water utilities can also make significant and cost-effective contributions to overall growth objectives for city scale planning such as waterway health, urban comfort (cooling and greening), flood prevention, creation of local waterway corridors and greenspace (and access to them), and system resilience.

There is a natural tendency for regulators to question whether it is rightly the role of a water utility to provide these services, and a consequent tendency to consider any servicing proposals that address these growth outcomes, as 'bells and whistles'. However, there is a growing case that customers expect their governments, including their water utilities, to provide these benefits. In NSW, the Greater Sydney Commission's vision for Sydney in 2056 explicitly lists amenity, liveability and sustainability as mandatory outcomes.

In the scientific domain, there is increasing evidence of the relationship between urban heat impact and physical health (morbidity and mortality rates), the interaction between urban greening and mental health, and the capacity of city greening to decrease urban heat. Sydney Water intends to work with its health and economic regulators to develop a more holistic description of the 'public health' services water utilities contribute to – these go beyond clean safe drinking water and sanitation, to include urban heat and city greening.

For example, the community in Sydney's Parramatta River provide an excellent case study of the changing nature of water servicing in Australian cities. The aspirational target of "Swim in the Parramatta River again by 2025" has been enthusiastically taken up by the community and is now reflected in the NSW EPA's strategic plan and various local and state government land planning documents as a key outcome for the region. Such outcomes are unlikely without a high level of coordinated investment between the stormwater and wastewater networks, in particular.

It is within a water utility's remit to contribute to achieving these outcomes. Water use planning is integral to city planning. Water utilities are often best placed to provide these outcomes at lowest cost. Water utilities have a high granularity of asset networks, spanning the city, running down every street. Other government assets, whilst key enablers or significant beneficiaries of such services (parklands, schools or hospitals for example), are not as ubiquitous in the urban form. Management of water networks, however, are key for greening, cooling, and waterway health. If involved early in planning processes, water utilities can identify the most cost-effective way of meeting various city planning outcomes.

This argument ties in neatly with the recommendation for integrated land and water use planning. It is important to recognise that the costs of providing liveability via urban water management is geographically specific and, in many instances, will be a means to greater affordability.

For example, in Sydney there are early indications that large scale integration of the water and wastewater networks (such as through increased water recycling) could save a billion dollars in future system augmentation costs, compared with the traditional 'separate product' approaches. In this way, IWCM is a means to greater affordability, and we seek regulatory frameworks that enable this. If regulatory frameworks cannot recognise and enable IWCM approaches where they offer better value, in the long term, customers will likely end up paying more.

Both the public and private water industry can contribute to this; competitive frameworks need to address information asymmetry and make sure that whoever is best placed to provide planning and or delivery can do so, even if this involves separation of these functions.

To help achieve this, a debate needs to be opened about whether direct user pays pricing is still the most relevant system, or whether there is community openness towards water pricing encompassing a wider range of benefits and beneficiaries. This debate also needs to encompass the future of developer charges and other forms of value capture. Virtually all residents of a region become water customers; therefore, water pricing is an effective vehicle to recover costs for city-wide outcomes from the beneficiaries.

The comments above do not mean that governments should move to mandate IWCM, which is no better than prohibiting it. There should still be an onus on utilities to demonstrate customer support for higher costs, if the IWCM approach will cost more. Another approach is for state governments to create a clearer mandate for the amenity, liveability and sustainability outcomes they are promoting, through other regulatory instruments. This needs to go beyond listing these outcomes as 'objectives' in high level strategic growth plans. This does not provide sufficient certainty for water utilities to achieve funding through their regulatory review processes.

How could the NWI help?

A revamped NWI could provide guidance on how governments can translate their identified growth and planning outcomes into service level requirements for all enabling infrastructure providers, including water utilities. National reform could set policy and guidance for the provision of water services that deliver broad customer and catchment benefits. Guidelines could outline the minimum environmental and community performance standards expected by utilities and suppliers. This could include how water utilities should contribute to the provision of urban cooling, urban greening and waterway health.

Today, the goalposts for IWCM and how to reach them (where IWCM is the best means to meet a defined objective) are not very clear, and regulators have significant discretion in their decision-making. This can discourage utilities from investing time and effort in pursuing contemporary approaches as they present or are perceived to present a higher risk in the regulatory framework. Clearer national and state policy and direction would not diminish the decision-making role of the regulator. It would simply provide guidance to all parties. The current paucity of guidance

effectively discourages innovation, as the bar to gain acceptance of IWCM approaches can seem insurmountable.

As a support to the above guidance, the NWI could also set national guidelines that help to codify methods for consistent and robust evaluations of the costs and benefits of IWCM. This would help utilities to be able to demonstrate where IWCM is valuable. Guidance on the types of investigations and comparisons undertaken; economic and financial analysis; methods for quantifying and monetising externalities (who benefits, and who pays for, servicing that provides broader social, environmental and economic outcomes for regions and communities) would also be useful. The Commission, or the NWI, could also include on its work program, the work by the NSW Government Architect on 'green infrastructure' and how it links to integrated water management. A discussion paper is currently out for comment. This could help to substantiate the economic rationale for the importance of green infrastructure and how they interact with land use decisions.

The NWI could also potentially mandate that planners must consider IWCM and measure how much it could contribute to modern urban outcomes of waterway health, urban comfort (cooling and greening), flood prevention, creation of local waterway corridors and greenspace (and access to them), and system resilience.

As noted above, IWCM is not an end in itself; it is one of many approaches available to meet a defined outcome such as waterway health or liveability metrics. Guidance on how to evaluate the appropriateness of IWCM to deliver that outcome would give regulators some standardised parameters to assist in decision-making. Without such guidance, there is an ongoing risk utilities and regulators will take philosophical positions on the merits or otherwise of 'old fashioned' engineering versus new approaches and technologies. If we can develop systems for enabling integration of the products within the water cycle (water, wastewater, stormwater, waterways, recycling), the industry will be better placed to innovate.

Evaluation of IWCM versus traditional approaches

Sydney Water has recently undertaken a body of work based on NSW Treasury Guidelines and other best practice guidelines, seeking to better enable robust evaluation of IWCM approaches against traditional approaches; and, where they are deemed to offer better overall long term value to consumers, pursue them with maximum likelihood of full cost recovery in our regulatory context.

Sydney Water would be happy to share this work with the Commission, as a starting point to develop some national guidelines or criteria on evaluating the effectiveness of IWCM to achieve a defined objective. Our work has sought to develop methodological approaches to aspects such as:

- using economic assessment in investment decision-making and prioritisation processes
- identifying internal and external impacts (costs, benefits) of urban water investments
- monetising those impacts
- identifying the economic value of water investments
- identifying beneficiaries, funding sources including potential co-funding sources.

3.1.3 Stormwater roles and responsibilities

Urban waterway and stormwater management in Sydney is currently fragmented with no single lead agency actively taking on a policy-setting or coordination role to ensure planning, asset management and ongoing maintenance are undertaken to effectively to meet objectives and targets. Accountability for waterway health is often unclear.

Sydney Water agrees with the Commission's view that many players can create benefits through innovative stormwater approaches and recycling, it does not have to be brought under a single agency's ownership. In Sydney, there is significant innovation occurring with stormwater management led primarily by local government and in part by Sydney Water.

As noted above, in the short term, a range of collaborative approaches could be trialled to improve the complex governance arrangements, including making a single agency responsible in a particular catchment or location. However, this relies on all parties being able to cooperate, having compatible policy objectives and similar funding constraints. There may be cases where a more compelling arrangement is required to really create innovation, and overcome cost recovery risks.

In lieu of a consistent approach, several collaborative catchment-based organisations have emerged in Sydney to co-ordinate stormwater and waterway management. Sydney Water works closely with a range these groups as well as state and local government on various waterway improvement projects, one of which aims to make Parramatta River swimmable again. Interestingly, throughout this project, other agencies have expressed a clear preference that a single agency take the lead, to provide impetus and prevent piecemeal approaches.

In all likelihood collaboration needs to be the starting point, as governments will naturally be unwilling to change industry governance arrangements without demonstration that improved outcomes are possible. A range of approaches need to be trialled and the best identified for each particular project and context. One of the important drivers for such contexts will be the agreement of waterway health outcomes based on local community preferences.

3.1.4 Outcomes focussed environmental regulation

We fully support the Commission's recognition (Draft Report, p194) that environmental regulatory regimes tend to focus on point source pollution of waterways. This is a legacy from a time when this was the largest and clearest area of greatest environmental concern. But this legacy is standing in the way of optimising environmental improvement today.

We also agree with the view (Draft Report, p 196) that discharge of treated wastewater should not always be regarded as a second best outcome. Treated wastewater can provide effective environmental flows. In Sydney Water's operating area, parts of South Creek have natural flows so low that irrigation extraction needs are largely met by discharges from our wastewater treatment plants.

We endorse the Commission's support for exploring outcomes-based solutions to address environmental impacts. A case in point is a new Hawkesbury Nepean Nutrient Regulatory Framework, which the NSW EPA is currently developing with Sydney Water's support. This project is innovative in that it seeks to take a holistic view of river health outcomes, and pioneer a trading

scheme or 'offset' projects framework to enable the utility to undertake a range of different project types that will meet specific river health outcomes at least cost.

Exploring outcomes-based solutions would also enable a utility to ensure solutions have maximum benefit. The current NSW regulatory framework tends to restrict regulators to addressing river health issues by controlling a single point source. There is limited ability to take a holistic approach and include all contributions including diffuse and other point sources. As a result, a utility may be required to make a large investment with limited environmental benefit because the point source being addressed is not the cause or only a minor contributor to an environmental problem.

By taking an outcome focussed approach the utility can address all causes and contributions to poor river health, and direct investments towards solutions that will achieve the greatest benefits. There is a risk, however, that despite good intentions, due to the newness of the approach, inherent regulatory conservatism, limited scientific understanding of complex river processes, and the environmental regulator's legislated ability to regulate based on the 'precautionary principle', the requirements for new approaches will be set too high for the innovation to be viable.

For example, a current risk is that 'equivalences' set by the regulator between traditional capital solutions (building high cost, advanced point source treatment technology), and the new offset projects (which may involve expenditure on assets owned by farmers and councils), are extremely high. The water utility could be required to commit to meeting a multiple of the desired nutrient reduction through the offset projects, because their success level is not yet guaranteed. This may be compounded by excessive monitoring requirements to overcome regulatory conservatism and build confidence in the innovative approach. This in turn may dramatically increase the investment required for new approaches, to the point where the traditional capital solution is selected due to guaranteed outcomes. This would lead to a stifling of innovation, a missed opportunity and higher costs for customers.

Approaches like these are a good short term solution, creating learnings that will hopefully lead to the more important objective – evolving the regulatory framework away from regulating discharges from point sources, towards regulating to meet holistic waterway health outcomes, enshrined in realistic and up to date targets or metrics.

How could the NWI help?

A revitalised NWI could help provide clear policy directives to state governments to:

- move towards holistic waterway health outcomes, through standardised national approaches. This may require funding commitment to bodies to carry out assessments for discrete waterways.
- create standardised and codified approaches to setting 'equivalence' targets for innovative new approaches, for evaluation against traditional approaches.
- improve regulation of diffuse stormwater pollution sources (typically managed by local governments) as this also contributes to the challenge of implementing potentially valuable combined stormwater/wastewater solutions.

- in the longer term, as noted in our first submission, encourage a load-based licensing scheme where pollutant reductions would be linked to environmental outcomes, with costs established through market-based trading schemes.

More broadly, environmental cost-benefit frameworks remain under-utilised and are another area where the NWI could provide guidance and direction.

3.1.5 All options (including potable reuse, stormwater and other recycling) on the table

We support the Commission's view and the COAG National Urban Water Planning Principles, which provide that all options should be on the table, to be assessed on their merits and the economics of the jurisdiction.

As mentioned earlier, in the Sydney context, increased recycling may offer significant long term cost savings, with consequential benefits to consumer affordability, that need to be weighed up in the mix of decisions on long term servicing approaches.

3.1.6 Governance

We support and endorse the elements of good governance proposed by the Water Services Association of Australia (WSAA) and endorsed by the Commission (Draft Report p172), which build on early guidance from NSW Treasury and the Commission.

3.1.7 Competition

We support and acknowledge the Commission's view that, in general, competition can promote efficient entry and service delivery, but that a reliable and predictable regulatory regime is a key element underpinning the success of any competition framework. It should not be assumed that competition is viable and beneficial in all parts of the market. Rather, we would support a broader industry review to determine a framework for the water and wastewater industry that offers long term consumer benefits.

The Commission acknowledges that IPART's recent wholesale pricing determination represents the kind of thorough and comprehensive consideration of the issues that is needed. After a two-year investigation and stakeholder consultation, we consider that IPART's final determination balances the competing issues that arise in trying to retrofit competition in a postage stamp environment. IPART's determination has set prices that minimise the subsidy all customers pay for new water market entrants. It also recognises that the extent to which onsite recycling reduces the incumbent's supply and treatment costs is highly location-specific.

A reinvigorated NWI could develop a national approach to regulation and competition reform that would support the emergence of sound competitive frameworks, and would help enable private players to enter the market where they can provide better value to customers.

We would strongly support the Commission or a revitalised NWI leading an investigation at a national level to identify optimal competition approaches that could be adopted across jurisdictions.

3.2 Draft findings on which Sydney Water has a different view

There are two issues where we are not fully aligned with the Commission's draft findings:

Bypassing the regulatory process

The Commission criticises the bypassing of independent regulation for desalination plants in two states (Draft Report, p 169), due to a mechanism that enforces the regulator to pass through the costs required for a particular activity. While this is a distortion of the intended regulatory process, we believe it is an equally valid part of the regulatory framework. The mechanism was created to enable governments to direct utilities to undertake activities that are in the public interest or not commercial, and to enable utilities to do so in full confidence of cost recovery.

This is a useful mechanism for government trading enterprises that have a fixed regulatory cycle, and are often required to make decisions whether to proceed with particular actions outside that cycle before they have the chance to undergo regulatory scrutiny. The mechanism, which is intended for exceptional circumstances only, reduces the risk for the utility.

Developer charges

Sydney Water supports the Commission's position (Draft Report, p190) that policy-makers should remove any material barriers to competition from the general policy framework. We agree that one potential barrier in the Sydney and Hunter regions is the decision to set developer charges to zero (for water, wastewater and stormwater services). This removal of cost reflective developer charges in Sydney changed the cost recovery method from a fairly direct and upfront allocation whereby a developer (and hence a home-owner) paid the full costs of servicing their property upfront. Now, Sydney Water's entire customer base pays for growth related infrastructure, so a home-owner pays only a portion of their property's servicing costs, through their water bills. This does not send a price signal to the market on the differential costs of servicing new growth areas. New entrants also do not have the ability to spread the costs of servicing new growth across a large customer base. However, we also note that new entrants benefit from other advantages, such as having the ability to levy developer charges or other infrastructure levies, or raise other charges not available to Sydney Water.

We believe there may be benefit in considering the reintroduction of developer charges in NSW, as part of a broader exploration of value capture. Re-introducing developer charges may benefit competition by creating a more level playing field between incumbents and private utilities, and encourage new entry where private utilities can service a new development more cheaply than the incumbent.

At a national level, given the prevailing concerns over housing affordability, water-related developer charges also need to be considered in a more holistic fashion with other state charges, so that the full costs of developing an area (not just for one sector eg water, transport) are fully understood, and appropriate signals sent to the development market on *aggregate* costs. In this regard, the NWI should consider the directions being pursued by the Greater Sydney Commission as part of the 'Growth Compact'.

3.3 Additional reform priorities

The Draft Report does not appear to have addressed the following issues. These are also key areas for future urban water reform that should not be overlooked in a reinvigorated NWI work program.

Appropriate national/state regulatory and governance model

The Draft Report acknowledges the importance of economic regulation, and for many jurisdictions this is still lagging behind benchmark levels. Nonetheless, we believe that for a revamped NWI to have an effective national leadership role, it should outline what the 'frontier' or 'benchmark' should be, so that states have a goalpost to work towards.

In this regard, the Commission does not appear to have considered whether the current state-based regulatory model (with limited federal policy oversight via COAG) creates the right foundation for water utilities and the industry overall to deliver on what customers want and need.

Customer centricity

The Commission does not appear to have taken a significant interest in the developments in the UK and Victoria, which represent a fundamental shift in the way other Australian utilities operate – moving away from a regulator-centric model, to a customer-centric model. In our view, for the NWI to take a national leadership role, it should first acknowledge the essential role of the customer as a starting point for considering all other regulatory and operational aspects.

In addition, some uniform guidelines on approaches to customer engagement could help both leading and lagging states to advance towards a more customer-centric operating model. We stated in our first submission: "The NWI can influence the national agenda around customer engagement, including providing guidance on models of engagement. There are currently a wide range of models available – from a simple consultation/respond model about proposed prices...to more focused surveys on issues of concern, quantitative choice-modelling studies or deeper, more ongoing engagement models that enable customers to have an ongoing role in influencing decisions and direction. Guidance at a national level would help to ensure service providers are not discouraged from pursuing greater levels of customer engagement due to a lack of certainty about the best model to adopt or level of evidence needed to influence regulatory or policy settings. It would also help to achieve consistency in approaches and applications."

United Nations Sustainable Development Goals

Sydney Water notes that the Commission's Draft Report does not cover the United Nations Sustainable Development Goals (UN SDG). Although we did not address this in our first submission, we discussed this at some length with the Commission during the review.

The UN SDG are a blueprint for a better future. They represent a compelling agenda for a sustainable and prosperous future for both people and planet. They are also a platform for water utilities, governments, regulators and the community to talk about current and future priorities.

The Water Services Association of Australia membership, which includes Sydney Water, recently declared our support for the UN SDG as a plan of action for people, planet and prosperity. As an

industry we provide water, sanitation and stormwater services to over 20 million customers and understand that water is critical to sustaining life.

As providers of essential services we want to see the realisation of SDG 6: Ensure availability and sustainable management of water and sanitation for all.

We believe universal access to safe water and sanitation is key to creating a better future and we know there is more work to be done.

As an active member of our industry, we have committed to:

1. Support and promote the 17 SDG
2. Support and work with governments and other agencies to increase the capability and capacity of our region to achieve SDG 6.
3. Commit to achieving SDG 6 within the scope of our operations.

As the SDGs provide a common framework for bringing together water managers, customers and communities to plan and deliver urban water services, it is recommended it is included as a consideration in integrated planning under the NWI in future.

3.4 Conclusion

We look forward to the Final Report in December 2017.

As indicated throughout this submission, we would be happy to share the learnings from some current, innovative projects that we are involved in, to assist in developing the work program for a revamped NWI.

Although it has not been a strong driver in the past, a reinvigorated NWI presents an opportunity for national policy to drive real reform in the urban context. In particular, the development of clear and effective national guidelines with regard to a number of priority reform areas will help states and utilities gain the traction they need to realise national reform objectives in their jurisdictions.