

PRODUCTIVITY COMMISSION

NATIONAL WATER REFORM

DR J DOOLAN, Commissioner MR J MADDEN, Associate Commissioner

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON TUESDAY, 17 OCTOBER AT 8.51 AM

INDEX

	<u>Page</u>
WATER SERVICES ASSOCIATION OF AUSTRALIA	
MR ADAM LOVELL AND MR STUART WILSON	3-3:
AUSTRALIAN WATER ASSOCIATION	
MR JONATHAN McKEOWN AND DR PAUL SMITH """"""""""""""""""""""""""""""""""""	·····3: -4:
SYDNEY WATER	
MR PHILLIP DAVIES AND MS KAIA HODGE	28-43
INDEPENDENT CANDIDATE FOR BEROWRA	
MR ROGER WOODWARD	43-47
GREATER SYDNEY COMMISSION	
MULYNDALL PICKERING	47-48

COMMISSIONER MADDEN: Good morning, and welcome to the public hearings for the Productivity Commission National Water Reform Inquiry, following the release of our draft report in September. My name is John Madden and my fellow Commissioner is Jane Doolan.

I would like to begin by acknowledging the traditional custodians of the land on which we meet, the Gadigal people of the Eora Nation. I would also like to pay my respects to elders past and present.

The purpose of this round of hearings is to facilitate public scrutiny of the Commission's work and to get comments and feedback on the draft report. Following this hearing in Sydney, further hearings are scheduled in Melbourne, and Adelaide and Perth at this stage for next week. We will then be working towards completing a final report to government in December this year, having considered all the evidence presented at the hearings and in submissions, as well as other informal discussions. Participants and those who have registered their interest in the inquiry will automatically be advised of the final reports released by government, which may be up to 25 parliamentary sitting days after completion.

For any media representatives attending today, some general rules apply. No broadcasting of proceedings is allowed and taping of the hearing is only allowed with permission. Please see one of our staff for a handout which explains these rules, but I'm not sure anyone from the media is present, so we might not see much movement.

We like to conduct all hearings in a reasonably informal manner, but I remind participants that a full transcript is being taken. For this reason, comments from the floor cannot be taken, but at the end of the proceedings for the day we will provide an opportunity for any persons wishing to do so to make a brief individual presentation. Participants are not required to take an oath, but should be truthful in their remarks. Participants are welcome to comment on the issues raised in other submissions during their remarks. The transcript will be made available to participants and will be available from the Commission's website following the hearings. Submissions are also available on the website.

For today, in the case of evacuation, please evacuate the building via the nearest exit, I think which is straight out the doors, and proceed to the assembly area which is located on the corner of Liverpool Street and Castlereagh Street, in front of the Commonwealth Bank.

I would now like to welcome Adam Lovell and Stuart Wilson, representing Water Services Association of Australia.

MR LOVELL: Okay, we're set to go. Okay, so we'll make an opening statement but we're ready to get into the questions because I think that's where we can explore some of the more interesting parts of where we're heading with urban water - well, National Water Reform, but in particular Urban Water Reform. So, as a prelude, of course, and introduction, Water Services Association of Australia is a peak industry body for water utilities around the country and including two in New Zealand, two major water utilities in New Zealand, and we have a range of members, including the private sector, so Veolia, Suez and Trility are also important members of ours. So we're speaking with some breadth from a utility perspective.

We are really pleased to see National Water Reform back on the agenda and overall we're very supportive of the recommendations that have been made. But I'd say in a nutshell, we need the volume to be turned up. There is some urgent water reform issues that need to be looked at, that we've been talking about now for a decade, and I think back now to the 2011

Productivity Commission Report and some of the fantastic recommendations made in there. Not all of them we agreed with but many of them we did. Nothing has moved forward. The National Water Commission came up with a range of policy directions. Nothing has been actioned. And the real danger that we have now is that we will be sitting here in three years' time under the current arrangements and talking about the same thing, and I don't think we can afford that.

From our perspective, one of the things that's really required is to set some objectives for a new national water initiative, or a revised, reinvigorated national water initiative. We really need some of those core objectives and I think one thing that we've suffered from in the country is regulators and utilities suffering from a range of objectives not immediately clear to anybody who tried to decipher through the forest what it all meant. And I think that's a key thing and I think that's what a reinvigorated NWI could do, is set up very clear objectives for what we are trying to achieve.

I think we need to make a much better case for urban water reform. We acknowledge that, but we do encourage others to participate in that debate as well. Mostly we need to also work out what's the implementation of this look like? And we do argue that a new independent national body, like the National Water Commission, but not a revised National Water Commission, be put in place because, again, under the current arrangements we're back here in three years' time talking about the same thing. To implement a new national water initiative or a revised national water initiative needs constant care and oversight and independence. That's from our point of view.

From our point of view what's the burning platform here? And it's growth. It is growth of Australian cities and urban centres. It is important enough of course that there is a cities unit now within the Prime Minister's Cabinet and it's already well established that Australian urban centres including our cities are responsible for 80 per cent of Australia's GDP and will only grow. Our cities are getting more urbanised, they're getting more complex and in the good old days when Gough Whitlam, you know, first sewered Western Sydney it was actually the way we structured our cities, was around water. It was around water courses and the way you could actually service from water. And I looked, you know, the first thing I looked at in my email box this morning was an invitation to a CEDA event; you know, structuring our cities around transport. Hooray. The way we actually plan and structure our cities needs major revision. I know that's not within the remit of the Productivity Commission, but I think at a bigger, at a higher level we've got some serious problems the way we integrate our infrastructure, and it could be something that Infrastructure Australia or another body looks at into the future. But ultimately, if you look at the way we plan our cities and our urban centres, you know, water - Urban Water suffers from being last at the playing table, and there's some pretty significant ramifications from that, which you've highlighted very well in your draft report around the way we can implement integrated water cycle management. And I think that - you know, we've got some really big barriers to cross.

I think one of the things that I was encouraged to see some of our members doing, particularly because we're here in Sydney, you know Sydney Water asked Deloitte to come and work out what's the value of the deep ocean outfalls and the 25th anniversary? \$1.2 billion per year it's worth to Sydney. But more than that, it highlights avoided sickness costs by having deep ocean outfalls and not the cliff face outfalls. That type of work we need to do more of because it actually expands just that direct pricing. It expands it to the value that

water utilities create beyond taps and toilets. And I think that's what we need to do more of, and I think that will build into assist with integrated water cycle management.

I think having that - pulling in an agenda with the Cities National Performance Framework that they're developing at the moment through Infrastructure Australia about growth in our cities, is probably the most important thing that we can follow through with. Again from that, not only an integrated water cycle management can be better established and better understood, and we need more guidance in that respect, but issues like competition, which - which we've all struggled with, all of us, be it a regulator or a utility or a government department or a shareholder, everybody struggled with competition.

I will hand over in a second to Stuart to talk about some of the other key points, including economic regulation and the role that that plays. I think one of the - one of the other aspects that we're really keen to look at, is what would be a framework that you could put to Urban Water? What are those goals that we're trying to establish, the value that we create? And we released just a month ago a paper here, Global Goals for Local Communities, around Urban Water's role in aspiring to the Sustainable Development Goals. And I think from our perspective, that is a really positive framework that we could put in place because it establishes value, more than just safe, clean drinking water and sanitation. So that's the type of framework that we're looking to put in place.

Before I take a breath, the other two or three critical things I think is that where we've moved Urban Water is to be far more customer centric and far more looking at community value that we establish. And I think in the language that we use, and I can only read the coverage in the final report, if we can sort of try and get away from "its users", because that - for me, I read that and I think irrigators. Customers now in metropolitan areas at least are paying full freight, and so they're genuine customers and I think that's where the industry's moved to and I think some of that language needs to be washed through the final report.

We also note some of the recommendations that you made about regional urban services and we fully agree with those. We can only encourage more transparency in that space. We believe that collaboration is probably the best way forward to start with, before trying to establish really formal mechanisms because I think the industry itself is just in its infancy in that collaboration space. There are the ROCs in Queensland; there's the alliances here in New South Wales. That needs to be encouraged more, but I think what you've said around the CSOs is really important and we'd really support that.

And finally, the issues around governance cannot be understated. What we've seen in Tasmania with TasWater and the proposal from the Tasmanian Government. What we've seen in other places such as MidCoast Water, a county council that's been pulled back into council. You know, we've seen more of that and we've seen backsliding against the National Water Initiative, so what we need - what we actually are calling for is that - to establish a new or a reinvigorated NWI will need to come with incentives and sanctions. We have almost no doubt about that. Going back to 1994 and 95 COAG agreements and competition payments clearly put utilities on the right path. I think the National Water Initiative was a good thing, but largely has been unenforceable and it's only because of us - you know, established professionals right throughout the industry are willing to carry forward the industry, has sort of allowed it not to backslide further. But we've come to the time now where that reinvigorated NWI will need incentives and sanctions.

Having said that, I might hand over to Stuart because an important part of what we've called for is improved economic regulation as well.

MR WILSON: Thanks Adam. I mean Adam has set out the growth challenge that we have in our cities and a lot of that is upside; there's a lot of great opportunity to provide amenity and greater places to live. But we feel that we need to get better alignment of institutions if we're going to realise those. And the downside is if we don't get that alignment of institutions then there's going to be greater costs for customers, and it's going - and opportunities are going to be lost.

Adam has covered - talked about governance. Economic regulation is one of the foundation stones of any monopoly utility industry and WSAA has always supported independent economic regulation. Your draft report or the Productivity Commission's draft report covers the - or sets out well the slippage in coverage that we've seen in economic regulation around Australia and we think that that makes it more difficult to have the clear alignment of objectives that we need for the future. But we'd also like to make the point that even where economic regulation is in place, we think improvements can occur in virtually all jurisdictions to get that greater customer focus and greater clarity of objectives.

In 2014, I think it was, we released our statement on better regulation, setting out a set of principles that we think were fairly obvious. But the interesting thing about it is at that time not many jurisdictions really met what we saw as the minimum standards. Since then, Victorians have released the PREMO model which, along with their clear objective and merit review, really fills in that need for a customer centred regulation and incentives for productivity and efficiency. I think it would tick all the minimum standards and go above, but looking across other jurisdictions I think there's work to do everywhere. That's really what, I think, we wanted to cover as an opening. We can explore some of that in more specific terms through questioning.

COMMISSIONER MADDEN: Yes, thank you. I might just start with some of the history that you mentioned, Adam. And just wonder, if you think back to the 2011 and you talk about urban reform potentially stalling, where we did have an NWC at the time, so you talked about that as a potential solution. But I just wonder what some of the barriers were and not potentially case studies, but just that kind of overview. I mean is it a government inertia? Was the case not made? Was there just not the time because there were other issues coming out of the drought? I just wonder what lessons can we learn from that recent history in terms of then going forward?

MR LOVELL: So my feeling at the time was what you hear from the irrigation sector, that they were reform fatigued. We still hear that from the irrigation sector. We're not, you know we're ready to go. But at the time I think it was, "Phew, you know we got through the drought. We've got this massive capital works that are in the ground; desal plants mostly. The drought's broken, all good, we're off the front page". And I think, you know, even - I can actually remember at the time on the back of Productivity Commission and National Water Commission reports trying to get State Government's interested in, "Okay, you know it's a quiet time. Now's the time we can actually, you know, quietly go about and rebuild the new National Water Initiative; that we'd have, you know, strong support and is well - is well built", you know. I think we all acknowledge that the NWI as written for Urban Water is a little bit - - -

COMMISSIONER MADDEN: Sparse.

MR LOVELL: Hit and miss. You know, there's some really good things in there and I think the pricing - the pricing has really helped that along the way. But on the whole, you know, it needed a better framework. It needed objectives - or it needs objectives. It needs a fuller understanding of what integrated water cycle management is. And at the time I think let's not be too hard on ourselves because we were still struggling with the technology there; what does this all actually look like?

So I think that for me is the history. I think we're in a much better situation now, that amongst the industry and with the Australian Water Association here, with IPA, we've pulled together reports. So this is public sector, the private sector ready to go and, you know, that's why we're sort of in a position to say let's turn up the volume because we do need to - we do need to get going. That's a bit of a potted history I think, yeah. It was reform fatigue at that point in time.

COMMISSIONER DOOLAN: So, it's been - as you say, there's been a huge amount of reform in the rural sector. Much of it in shared resources, so the impetus for governments to act together in a collaborative way is much clearer. What is the value proposition for individual state governments to actually, if you like, yield some of their sovereign power over their utilities and agree to a national agenda here? Because this is, I think, a fundamental question we have to really get our heads around, is the value proposition for governments.

MR LOVELL: Yes, and look I agree. I will get Stuart to get involved in this one too. But at a broader level, at a higher level I think it is about that growth agenda and I think you noted in your report that, you know, competition has been at various levels within the states. You know, people have talked about it, they've looked at it. Some people have frameworks and some people have regulation in place. But it's not - it's not at a level that anybody really understands what's the best way forward? What's the framework for moving forward with this? The same with economic regulation. The same with - we all talk about wouldn't it be great to have integrated water cycle management and decentralised systems. But really where is that happening?

So I think, for me, it's the growth platform and it's about Australia's competitiveness. Because as we turn to be a knowledge economy and become more urbanised, the competitive Australia relies on its cities being liveable and without all of those supporting frameworks at a national level, and with some consistency. So we're not - we're certainly not arguing, say, for a national economic regulator. But there are certain minimum standards you could put in right across the board which would - which could only enhance Australia's competitiveness, particularly for cities and urban centres. Did you want to add anything?

MR WILSON: Yes. Fortunately or unfortunately, I sort of remember the reforms of the early 90s, the competition reforms, and it's almost, "Why did we embark on that round of reform in the early 90s? Why did the Commonwealth and the states say we need to do something different? Why did the states cede some of their sovereignty, in a sense, to a national agenda?" It was about productivity improvement, it was about making the national economy work better, and it was about getting better outcomes and lower prices or minimising price rises for customers.

I think we look back at that period as a success and I don't think the agenda's changed that much. I think those issues about productivity are still important. Urban Water isn't a small

sector. We're a \$16 billion sector. I think we're just under, you know, three-quarters per cent of national GDP.

For the Commonwealth Government we think the agenda would be clear. They want to maximise Australia's economic performance and we're a part of that. For state governments, I think they - I think as was in the 90s, everybody can see common problems. It sometimes takes a national approach to address those common problems.

We look back at the history and say okay, you know, is it best the states should just pursue these issues individually? I think what we're seeing is the complexity of these issues, such as introducing competition into Urban Water, frameworks for economic regulation, dealing with governance issues. They just really haven't been advanced as quickly as we would've liked under a decentralised state by state approach. And I think many in state government would recognise that. So we think there's a national imperative for - in the same way that there was a national imperative in the 90s, we think that this is competition policy that still hasn't been finalised. I think the Harper review was also talking along these lines and you come back to the size of this sector. It's hard to cost benefits but when you've got a sector as large as Urban Water, any cost benefit analysis will come out on the right side from reform.

MR LOVELL: One thing I might add too is, you know, a report which we've provided in our initial submission, NextGen Urban Water. And the one report that's resonated, from my perspective, is state government departments. It's anecdotal but certainly I've got most calls from state government departments about this report, because it offers a future. You know, it offers a future which is more than - that provides community value greater than - greater than the taps and toilets. There are members that have - well, most of our members are pretty well established, so it's core business, but a lot of this is based on collaboration, and utilities or others leading a collaboration. But from our point of view collaboration will only take us so far, and I think that's - that's what we need. We need to take it to that next level which gives state governments a more solid framework to be working towards, a common framework across the country.

Ultimately, you know, many of our members spend well over - 75 cents in every dollar is spent with the private sector, so there's great - there's already great private sector participation, but to encourage more of it we need more certainty. We're a huge country of 23, 24 million people. Why we need 21 different sort of regulators across the country still defeats us, but that's the way it is. But it can only be to Australia's betterment, to our competitive betterment that we've got at least some sort of alignment across all of those 21 health, economic and environment regulators.

COMMISSIONER MADDEN: So just on that, and - well I'll come to two parts. It seems a little bit of the message is, "Well, we're ready to go if someone says 'Charge'". I just wonder, given your knowledge of members in terms of capability and where they sit, to be able to respond, if there is a change in direction, an agenda setting, is that capability and, more importantly, probably culture, do you think that's something that can respond reasonably quickly, or is that mixed, obviously?

MR LOVELL: I would say on the whole, you know, they're ready to go, and I'll give you an example. In Queensland of course there is no economic regulation of note. But one of our members up there, QUU, Queensland Urban Utilities, which effectively runs Brisbane, they go out and do their own customer engagement like the rest of the - like Victoria's just gone

through with PREMO, with their pricing path. Like Sydney Water does. Like all of our members do around the country. QUU have said, "We don't need necessarily to have economic regulation to make us do customer engagement better". So there are plenty of examples like that where members have come along with the path. And, you know, just from our own strength in - at WSAA, and also others, other associations; the AWA with growing members as well. It only lends to the fact that people are willing to collaborate across the country, without being necessarily forced to, but everybody's actually still looking for that certainty, which we don't have.

COMMISSIONER MADDEN: And I guess just touching on that, obviously with standard drinking water guidelines and health.

MR LOVELL: Yes.

COMMISSIONER MADDEN: And if we learnt from those other sectors, you mentioned health and environment, is that still an area where, you know, that kind of harmonisation is still a problem in certainty for people, or is there lessons to be learnt from those areas for economic regulation and planning?

MR LOVELL: Yeah, I think - I'll let Stuart tackle the economic side of it, but if you look at where the Australian Drinking Water Guidelines have come from, the way they've been developed, largely - and the current day is a little bit different, but in the past it's been developed through the NHMRC with - led by regulators but with industry and researchers on board developing those guidelines, and go out for community consultation, they're put in place and largely the health departments around the country pick that up and say, "Sydney Water, Melbourne Water, that's it, 100 per cent, you've got to comply with this 100 per cent".

So there is already a national approach to that. What we're not seeing now, and which is a fair reflection because environmental regulation does need to be more site specific, is that flexibility that we need to see in the environmental regulation which stops - you know, we've got to - we've actually got to grow up and mature and move away from just, you know, just treating point source pollution as the only means of tackling the broader environmental outcomes that people are looking for, particularly for our rivers and inland waterways. And I think - you know, we've argued here for outcomes-based regulation. It needs to bring in stormwater - and stormwater is a whole another topic we can talk about - but when you sort of look at the broader - all the broader inputs and impacts on waterways, we've really got to mature to look at what are the outcomes that people are expecting from these waterways? Do they expect to fish? Do they expect to swim? You know, is the water used for other irrigation means? We have just not - we've got to take that next step, as far as I can see. Do you want to tackle the next part?

MR WILSON: Yes, as you said Adam, the Australian Drinking Water Guidelines show that you can have some national consistency without inhibiting jurisdiction by jurisdiction variation, and I think that's - that's a good model to apply across the environment sector and the economic regulation sector. It's not our intention that there be a one size fits all. We think that the bar can be raised across the board for economic regulation but we don't in any way want to inhibit innovation.

Going to the earlier discussion. I think utilities are all on transformation programs. They're all increasing efficiency. But the environment they operate in is important to determining the ultimate outcomes, and they're coming up to limits when they try and collaborate with

different sectors. They are trying to - they come up with limits about the extent to which they can use the customer engagement and make it effective, if there's not agreement to the system that supports that. And while they're pursuing efficiency, there'd be a virtuous cycle if there was more incentives for innovation and productivity built into - as a reward in that - in those frameworks.

COMMISSIONER MADDEN: Are you happy for me to follow?

COMMISSIONER DOOLAN: Keep going. Yes, okay.

COMMISSIONER MADDEN: I guess another issue that you've mentioned is planning. And again there's a lot of stuff that we see about principles planning. From your membership, do you actually have examples where on the ground - not so project, but precinct or regional based kind of planning is actually done well in an integrated way?

MR LOVELL: It's more case by case and I think if the - without dobbing Sydney Water in, I know they're talking later but it would be worth exploring with them that sort of question as well.

COMMISSIONER MADDEN: Yes.

MR LOVELL: But just off the top of my head and out of our NextGen paper, Bowen Water recently developed down in Geelong and Victoria, recently developed a precinct which was done with water, actually almost a water centric type approach to that planning. So it happens, but again this is opportunistic, rather than being systemic. And again we would argue, okay, it doesn't always have to be water centric but it's more about having water included with transport, with waste, with energy, with telecommunications. And we're not seeing - we're not seeing that unless it's opportunistic. It's often needing a person or an organisation really striving for those sort of outcomes. Now, they - that will definitely open people's eyes to what can be done, but our feeling is, you know, if you take it all the way back to COAG in 1994, 95, and all the benefits that we saw out of utilities being, you know, efficiency gains and the backsliding that's happened since then. So, opportunity will take you so far, collaboration will take you so far, but you need some sort of systemic frameworks to put that in place.

COMMISSIONER DOOLAN: So just following that integrated planning.

MR LOVELL: Yes.

COMMISSIONER DOOLAN: It's not really that water is left out of what is systemic planning. It is that there is no systemic planning.

MR LOVELL: Yes, correct. Yeah.

COMMISSIONER DOOLAN: So, it's - we're not seeing city shaping planning. It's far more opportunistic, is it not?

MR LOVELL: Yeah, I agree.

MR WILSON: Yeah. I think water does have a specific problem relative to transport and health, in that we have a framework of cost recovery in place. So the city planning that does go on is about budget commitments to transport and there's an assumption that water will be there because it funds itself. But what we're seeing is that funding growth is a challenge in many cases, and we lose opportunities because we're not at that planning table. So it's almost

we're a victim of our own success, in that we don't get the voice in the planning cycle that we think would benefit outcomes for everybody. That's sort of above or in addition to the problem with systemic planning generally.

MR LOVELL: Yeah. And I think, you know, I would be looking for - or we would be looking for in the future a body like Infrastructure Australia itself, or some other body. If you read their reports, great infrastructure plans but it's still so siloed. It's still - you know, and then to have various high level representatives talking about a liveable city as a transport centric city, sort of makes you choke on your cornflakes because, you know, that's sort of just treating rails and road as the be all and end all. And, you know, the other thing that I would worries me, as I hear things happening, is that these city deals are being developed through the cities unit with, you know, Launceston, Townsville, Western Sydney is under development now, is very little involvement with water. Or if there is an involvement with water, specifically, you know, looking to just disregard the National Water Initiative in that development. And that - you know, city deals are just one mechanism of the way urban development is happening, but it also makes it even more urgent to develop a reinvigorated NWI, No.1 clause, all options on the table, but gives more of a framework that you can hand to those collaborating partners, Federal Government, State Government and Local Government, to say, "Here are the planning frameworks that you should be considering when you put this city deal in place from a water perspective".

COMMISSIONER MADDEN: So just the next step from that, and you touched on it, Stuart, which is really pricing policies and funding sources and any constraints and barriers in that area. Again, I think we're aware of some of the problems with **(indistinct 09:39:33)** end pricing and then localised benefits and the like. Again, are there examples where there are good frameworks in place to allow this flexibility and analysis of options at an appropriate level?

MR WILSON: I don't know where - I don't know that we can cite any examples where we think it's got - it's been done perfectly. I think if you look around the country, the mechanisms of funding growth vary enormously. In some jurisdictions the development community funds a high proportion of the growth, and that means that the existing customer base doesn't fund that growth. In other parts of Australia though, in Sydney for instance, there are no effective developer charges and we know that growth costs more. So that means that your existing customer base is needed to fund whatever services are going to be delivered in new growth areas. And that inevitably is going to be a constraint on the thinking about what can be achieved in those areas. So I think on a national level, just what are the funding mechanisms for this growth challenge is something that we could deal - that needs to be dealt with.

COMMISSIONER DOOLAN: So just following that. I mean we've, if you like at the moment, recommended - a draft recommendation, a review of that developer charges for exactly that. It's more about what are the policy principles. What is the role of developer charges? Who should pay for growth? What's the split between existing customers, new customers? What's the split between current generations and future generations, the debt issue.

What do you think, do we need to go further than a review? Do you think there are principles here? What's the avenue for actually talking those issues through? Because they're pretty

fundamental policy questions. Have your members sort of engaged in that debate amongst themselves?

MR WILSON: I think, look, knowing what the facts are is often the first step in the policy discussion, though I think that a review of what those principles are is really important. And I guess what we're saying is we can do that in seven different jurisdictions and all hope that it gets - somehow there's a process of osmosis. Or we can do it once really well. And this applies to the competition area as well, as well as, say, developer charges. So I don't think we're at that stage where we know exactly what the who funds growth or who funds existing services and how do we implement value capturing Urban Water. I don't think we're at the stage of having a perfect model.

Similarly in the competition arena, there is - we characterise it as a state of angst between new players and existing players about what the rules of the game might be and what we might want to achieve with competition. Again we can attempt to resolve that seven times with seven different frameworks, or we can try and resolve it and get some core principles once and then let that then be rolled out, or at least let that be there to be picked up on.

COMMISSIONER DOOLAN: Okay. So you see that as something that, should we be successful and jurisdictions all agree to do this, that they would have as a key component of new national pricing principles, so that - and then NWI?

MR WILSON: Yeah. So on the economic regulation side we're very clear on what we think should happen with minimum standards. And so we'd say in the new agreement you could have rewards and sanctions for complying with those minimum standards. But in these newer and more complex areas we're not claiming that we know what the answers are. So I think there's a collaborative process of finding what those answers are and then when we reach a landing and there is a best practice you can then - then take that up in a national agreement, if there's a need to provide incentives for doing so.

COMMISSIONER DOOLAN: Yes, okay. Can I just follow the competition question, not being an aficionado in this area. It really has seemed that there's a holy grail we could enhance in increased competition in the water sector. As you say, the private sector actually has a very significant role in providing services in the current model that we have. I suppose I'm not really grasping the opportunity that's being missed. The fact is, as you say, not much has changed. So what is the voting platform here? What is something that we are missing to really enhance the role of competition?

MR WILSON: Again, the COAG - competition reforms of the 90s were 20 years ago. What has happened since then isn't much in the Urban Water space. So we have - we are a very large sector which is pretty good at engaging with the private sector but is there any real competition, and what are the benefits of that? We are seeing a major push in the UK to introduce retail competition and to break up their value chain to encourage competition in the - where they're seeing is the more contestable elements.

We don't pretend to know what the answer is, but we think that it's a clear area of development that needs to be resolved, because we see from - that there's a number of private sector players that are saying, "We want more". There's concerns in the public sector that unless we get the models right, it's going to cost consumers more. So it's really just an unfinished area of reform that - again, we represent water utilities; we may not be the best

people to appreciate what those opportunities are, but we're happy to work with a good framework if it exists.

MR LOVELL: I think one of the dangers is in the absence of good frameworks, you know, good regulatory settings, then you'll end up with politicians or agencies picking winners. Or, you know, "Recycled water is good. Therefore, you know, we're going to just put it in because we think it's a good thing". But if you don't have those frameworks, then all of a sudden you sort of end up in this sort of very short-term view, "Because we think it's good, we're going to implement it. We're going to pick winners". And then all of a sudden you're left with supplies of last resort issues and all the sort of problems that come with it. So I think, yeah, we've got an opportunity now to build that in. We've got an opportunity now. I think we can't tackle that without tackling the issue about stormwater. The institutional changes that are required; the funding and the pricing issues that come with stormwater. We had a Senate inquiry a couple of years ago that came out with a recommendation of developing a national stormwater initiative. Crazy stuff. I mean that's - we've got to pull stormwater into the total of water environment. So that's another component that needs to be brought into the fold.

So, you know, there are a number of issues when we're looking at the growth issue and competition, about setting up those fundamental platforms to ensure that we don't pick winners, or that issues are not politicised. And, you know, the last thing we want is to go back to 2006, the New South Wales State Election where we had a choice of desal or potable recycling, when in effect it could have been both or some other mix. So that's what we've got to avoid.

COMMISSIONER DOOLAN: Let's pursue the stormwater challenge, if you like, because again we have various models all around the country and whatever the model is, there's a very significant relationship with local government. So in Melbourne you've got Melbourne Water and the 60 hectare rule. Sydney Water, I believe 40 per cent of the area of Sydney Water will - - -

COMMISSIONER MADDEN: Ten per cent isn't it?

COMMISSIONER DOOLAN: Ten, is it? Anyway, some percentage of - Sydney Water can tell us later on, but some percentage of their district they actually do have stormwater, but the vast majority are not.

SPEAKER: About a third, for the record.

COMMISSIONER DOOLAN: About a third for the record. Thank you, Sydney Water. I think Perth, similarly, some portion, but small. And for the vast majority it's local councils. And even probably the history of that is probably about geography more than anything else, and typography. Where do you think we need to - like how would we start that stormwater? Is it through Victoria's model of integrated water cycle management plans for catchments, sort of bringing people in? Have you and your members had some thoughts about actually where to start that discussion, given that you could fiddle with a lot of institutional boundaries

MR LOVELL: Correct.

COMMISSIONER DOOLAN: But wherever you do, you're still going to have that interaction with local government regardless.

MR LOVELL: Yeah. I agree with you. I think the Victorian model, particularly around Melbourne, is probably the best model to - there currently is, and I think that's the potential to be applied across the country. I think the one thing though that we're lacking is some sort of a funding/pricing model for stormwater which is totally devoid there, and I think the problem is we can wring our hands and say "Well, that's history. It's mostly concreted. It's best they stay that way. We can manage them better", but I feel that that's not a resilient future because we're not taking into account flooding.

It's not only, just of course, the re-naturalisation of creeks and connecting people back to their waterways which have shown to be a financial advantage in various sites around the country, but I think the issues around flooding are a huge X-factor and we haven't even talked about climate change impacts yet. So for me or for us, that Victorian model of the integrated water cycle management and what they're doing around Melbourne, is probably one of the better models. Again, it's based largely on collaboration.

COMMISSIONER DOOLAN: Yes.

MR LOVELL: I think the feedback again, anecdotally, the feedback that we would get from our larger members is that dealing – except for Brisbane which is a total different model – but dealing with the local councils, is a smorgasbord of expertise, you know, from a great range of expertise funding capabilities interest, and so if you've got a major waterway running through four different council areas, then you've got four different approaches to that. So that model has to change and I know that's what they're trying to do, you know, attempting to do, through the Victorian model. So that would be a start. Again, collaboration will get us so far. Without some models in place, we will struggle.

COMMISSIONER DOOLAN: The Victorian model is sort of, almost mandated collaboration.

MR LOVELL: Yes, true. True, yes.

COMMISSIONER DOOLAN: Yet to see though how successful that is, it's just at its start.

MR LOVELL: But it's a better model than most. And you know, the Greening the West Program, that was originally started with City West Water, it is still, sort of, the centre but there's 21 different organisations. I mean, it's been a tremendous collaboration with tremendous benefits, Stony Brook Creek – Stony Bark Creek, I forget the name of that one – but that has shown through collaboration what can be done in revitalising the stormwater infrastructure that's there. But if you speak to some of our members, that's not the ideal model either, so.

COMMISSIONER DOOLAN: Yes, okay. But the pricing is ---

MR LOVELL: The pricing and funding, I think, you know - - -

COMMISSIONER DOOLAN: On storm water management. So it's drain (indistinct) in Melbourne.

MR LOVELL: Yes.

COMMISSIONER DOOLAN: It's various models elsewhere - - -

MR LOVELL: And in Perth, it's treated as drainage as well. I mean, the only time the water flows is actually when it comes up from the aquifer, from the shallow aquifer, so it's not

actually rainfall run off necessarily. It's actually when it comes up through the aquifer then they've got to get rid of it. So that's a different approach altogether, but you know, I was really pleased to see that Water Corporation have put in now a manager of liveability, you know, which incorporates drainage into the total urban water environment.

So all of our members are active in this space. Water Care over in New Zealand, also a member of ours, about to be handed over the stormwater assets. So they will be in total control of water, sewage and stormwater, and we're hearing various discussions around that sort of model happening around the country.

COMMISSIONER MADDEN: Maybe just one last one and it touches on the collaboration, but as you mentioned in the regional space. I just wonder what the risk and limitations are with that collaboration because collaboration has been going, I think, since 2009 so it's not like wildfire going through ---

MR LOVELL: No.

COMMISSIONER MADDEN: --- the rest of the local government areas in New South Wales. What do you see then as the next step in terms of a kind of strategic view beyond collaboration, if any?

MR LOVELL: Well, it will – ultimately it is going to come down to some sort of mandated amalgamations of organisations or forming – you know, it was such a shame that MidCoast Water, even the County council, has a fantastic model and I think Neil actually, I remember Neil speaking at the last Productivity Commission – there we go (indistinct) times – little things change over time.

But you know, that sort of a model works because it brings in the expertise and you can share the expertise across the huge expanses. You know, you could argue a Victorian work could work in New South Wales and Queensland, but you know, Victoria's a pretty small state comparatively to New South Wales and Queensland I think it's a lot harder to try and sort of just a short of hand fist to ram that through.

But you know, naturally organically growing organisations like Lower Macquarie Alliance, like Centroc, you know, they're the models that we should be encouraging. Both of those organisations have joined WSAA because they want to learn more through collaboration with our larger members, but we're not the only organisation, they can learn through collaboration. Ultimately though, it will probably come down to some sort of an incentive model for a more formal amalgamation and I think ultimately your recommendation around moving to SCOs is the right one, because I see those capital grants as being one of the most inefficient ways of putting in urban water services onto those area rural areas, so you know, transparency collaboration and ultimately some sort of formal amalgamation has to be the way forward probably.

COMMISSIONER MADDEN: I probably wouldn't use the word "amalgamation".

MR LOVELL: It wouldn't be so hard to envisage that, you know, we wouldn't have a utility corp First State Water that runs the whole of New South Wales. Why shouldn't you? Water Corporation runs Western Australia, twice the size, successfully. SA Water runs the whole state. That's just another model, just to be contentious.

COMMISSIONER MADDEN: Put it on the agenda.

COMMISSIONER DOOLAN: I'd like to just explore the national consistency for economic regulation. So it's how far do you push that? So you had some principles, I think we've outlines somewhat similar principles that could be further developed. It is important, in your view, that they're there, but how far do you think you'd push that, or let it roll just as long as it's got a set of principles that various regulators can be held accountable.

MR WILSON: I think we've had principles. I think we're arguing we need to go beyond principles to – we're calling it minimum standards. Things that we can all agree on should be in the regulatory framework, and we've set out what we think they are and that should be firstly, independence and that's pretty easy to judge. You know, regulator. Secondly, a clear objective and we don't think you can go by the long-term interests of customers as an objective.

So in a new agreement you would say does that jurisdiction have a regulator with the long term interests of customers as it's overriding objective? Again, that's quite judgeable. Are there strong incentives for efficiency and productivity? And in regulatory economics, that's a known quantity. You can assess efficiency and productivity mechanisms and we've set out – there's a whole menu there. We're not trying to constrain one particular model. Is there financial viability testing within the regulatory framework? That's almost a binary question, and is there some sort of review procedures?

They are yes/no's, but they wouldn't mandate one size fits all. It would still, we think, allow a lot of experimentation but be assessable and provide the sort of overall discipline that we think we haven't seen - - -

COMMISSIONER DOOLAN: To date.

MR WILSON: - - - to date, yes.

COMMISSIONER DOOLAN: Okay. I mean, one of the things we've also pointed out is that, at some point, particularly with a small – the cost of economic regulation potentially outweigh the benefits for some of the smaller authorities. Would you agree with that conclusion?

MR LOVELL: Look, I think we definitely think it would need to be proportionate. I mean, that's – absolutely. So what major metropolitan utilities, we haven't mounted any argument about regulatory burden that I'm aware of, because I think they are very large businesses and it's about what's good regulation. But for much smaller utilities then I think you can achieve the same basic ends, but the proportion-ness of it – if that's a word – comes into play definitely.

COMMISSIONER DOOLAN: Yes, okay.

COMMISSIONER MADDEN: Okay?

COMMISSIONER DOOLAN: Yes.

COMMISSIONER MADDEN: One more?

COMMISSIONER DOOLAN: Overall or on regulation?

COMMISSIONER MADDEN: We will move onto NWI - - -

COMMISSIONER DOOLAN: Yes, that's where I was going. So we are comfortable with the idea of a new NWI, a new NWI with a significant urban component to it. You do put a

lot of weight on the need for a new national agency so I would like to pursue that, a little, given that we had a national agency and clearly governments didn't see the overall benefits outweighed the costs, and closed it. So I am sort of keen to know what do you see are the benefits of that, and then what would be the shift to make sure that again, governments saw the benefits were worth the costs?

MR LOVELL: At a Federal level or a Commonwealth, it's certainly a challenge, but you know, it's almost worth looking at some of the examples. Who's calling out the Tasmanian government for the direction that they're taking? I can write stuff but we're an industry association, of course, we are probably expected to stand up for TasWater.

We've got to have that voice out there that is calling out anybody, utilities, state governments whoever, involved in urban water management. I think the problem that we face with the last – well, with the current NWI, is that besides the pricing, we've discussed this, you know, it's a bit patchy and there's not much to actually call out on and I think there's a challenge there between, you know, the role of the National Water Commission, the Federal government department at the time kept changing its name, you know there was that tension that naturally existed because I think there was not enough teeth attached to the NWI for urban water.

So I think the difference would be this time that we'd have a far better structure framework through a reinvigorated NWI, with incentives and sanctions, with clear objectives and then all of a sudden, a national independent body has a lot more baseball bat behind it and potentially a few carrots to offer out there as well. So I think, you know, the overall structure of it, would lend a lot to a change in circumstance.

But it would also involve, I think, different expertise, because what we're talking about is a different approach to the NWI. We should talk about economic regulation. I'm not saying it is a new economic regulatory overview, but it's a different set of expertise that we are bringing to the table.

COMMISSIONER DOOLAN: Okay.

MR LOVELL: So they're the differences.

COMMISSIONER DOOLAN: So for me it's about design, policy, the incentives and penalties, if you like, and assessment review function.

MR LOVELL: Yes.

COMMISSIONER DOOLAN: Wherever that might lie. But that framework is really what you're pulling to rather than - - -

MR LOVELL: Exactly.

COMMISSIONER DOOLAN: Okay.

MR LOVELL: Exactly that.

COMMISSIONER MADDEN: Just to note, of course, with the model robust assessment framework, it's actually the Productivity Commission's job in three years to actually look at that at this stage.

MR LOVELL: At this stage?

COMMISSIONER MADDEN: So again, probably more for the record, that those functions were transferred over from the NWC but I take the point in terms of the assessment.

MR LOVELL: Yes.

COMMISSIONER MADDEN: And actually then, the role of pulling it out.

MR LOVELL: Yes. And of course the Productivity Commission is obviously independent or has that degree of independence which is what we're looking for. But it can't happen every three years. We've got to be better than that.

COMMISSIONER MADDEN: Yes, I understand what you're saying there. Okay. Well, thank you very much.

MR LOVELL: Can I just add one short point?

COMMISSIONER MADDEN: Yes.

MR LOVELL: To close off on. We haven't really gone into depth on the issues of climate change which hit water first, out of any – nearly any other utility business. You know, there is some modelling that's been done. We developed a tool with our members with Federal government funding called AdaptWater and you know, that's indicated that some assets, about 30 per cent of the assets – I'm talking not just water security here. So I'm trying to move out of the realm of water security planning into what's the net impact on the asset base. It's a fair chunk.

But it remains as the big X-factor because 70 per cent of water utility infrastructure is underground. So I don't want to discount it. I know – I firmly believe that growth is our (indistinct) platform here and how we structure our cities and urban centres, regional urban centres going forward, but you can't underestimate the X-factor of climate change here, and the potential impacts going forward on urban water infrastructure. So somehow we've got to keep that as part of the agenda.

COMMISSIONER MADDEN: Yes, it would be good to actually have a submission on that and probably think about again, what's the role and responsibilities in terms of, rather than doing it, not seven times, but however many utilities we have.

MR LOVELL: Yes.

COMMISSIONER MADDEN: And thinking of that efficiency. Thank you very much.

MR LOVELL: Thank you.

COMMISSIONER DOOLAN: Thank you.

COMMISSIONER MADDEN: So just to note, because we went a little bit over time, that we might actually have morning tea at 10.45 to allow enough time, given that we've come all this way to hear people. But if we can call on Jonathan McKeown from the Australian Water Association. So we also have Dr Paul Smith joining Jonathan. Jonathan, would you like to open with a statement?

MR MCKEOWN: Thank you very much, Commissioners. I'd just like to echo the opening remarks that Adam made and to congratulate the Productivity Commission for the work that's gone into the interim report or the draft report. Largely speaking, we are in agreement with it. One of the things that displays what a good job you've done is when we've

extensively promoted the report and its finding to our members, we've got very little response. So you haven't really upset anyone sufficiently.

COMMISSIONER DOOLAN: Indifferences success.

MR MCKEOWN: So you can try harder. That's what I want to try and help you do this morning with a couple of comments. But I'd like to start just by saying AWA is working closely with WSAA to present a united front for the water sector on the findings of the Productivity Commission and I strongly support and endorse everything that Stuart and Adam have said.

I'm going to have a few nuances in terms of different emphasis and I'd like to cover some comments, not only on what Adam's very adequately covered on, on urban water issues, but I want to touch on some of the rural water issues. But I'd like to start off by saying the Australian Water Association is the national peak body for the water industry. We have 5,500 individual members across the country and we have 575 current corporate members that include over 100 water utilities.

We're located in each state and territory across the county and we are not a lobby group. We are not blessed with the resources to devote to policy analysis that Adam and Stuart do a terrific job at within WSAA. What we do as an organisation is provide information, networking opportunities and recognition for our players within the water sector through more than 200 events, a range of publications both printed and online, to bring out constituency together on issues that are really concerning for them.

I would like to start by saying when we look at this whole area of water reform in Australia that the Productivity Commission is grappling with, it's really talking about our country's future and particularly or economic development over the next 20 to 30 years. That's what makes it so incredibly important that the industry and the wider community really comes to grips with what the Productivity Commission is recommending.

We see the development of Australia in the next 20 to 30 years principally along well-defined pillars. The first is the growth of our urban centres that Adam and Stuart have ably discussed, and with that, it's not only the liveability of those cities, but the very important industries and economic generations that those cities will be continuing to provide, and as Adam has said, there'll be in increase in focus on that and particularly around the liveability that we can actually attract more investment and more expertise into our cities to govern those industries that are going to be fuelling the economy over the next 20 to 30 years.

But in addition to that, we do have this very strong arm of agriculture across the country which will continue and strengthen, in our view, Australia's position internationally, and the link with water, as we all know, is crucial with that. The third is in the resources sector that's going through a bit of a dip at the moment, but we're estimating that that will come out of the dip, and we will see resources in this country play a very important role over this immediate period in front of us, which in turn depends very significantly on the use of water. And the last one is the growth that we're all witnessing over the last 20 years of tourism that's bringing enormous economic benefits to the country.

Now, to try and grapple with those issues of national economic development, we see some of the objectives to be obtained through a reform process around, not only first and most importantly, providing water security for those competing interests in our economy, but we also see the need to increase national productivity and I'm going to talk wherever I can on a national level here, rather than to talk about states or territories or indeed more colloquial issues, but it's the increased national productivity that's so important and through that we see this competitive, the need for more increased competitive neutrality which will be a main driver for that increased productivity and I will back and talk more on that.

The third objective is to aim for truly national transparency of regulation and I think Adam and Stuart have covered that. I'm happy to make some further comments further down. The fourth is a very important part of what we see this water reform journey is offering, and that is much clearer certainty around the investment and the investment rules that will govern the fuel that we can put towards our infrastructure in the water sector, fuel that we can put towards these developing and emerging industries, dependent upon water to give us economic growth.

And the last one is the clarity and very clear communication that we require on Australia's economic targets that can be divided into quite clear milestones that we can then communicate with the wider community on what we're trying to achieve through national water reform.

If you look at those overall challenges, of those competing sectors of the economy, the importance of water to all of them, look at a method of implementing those objectives, the real challenge that we as a country face is to try and get this balance right between those competing demands, particularly on the growth of our urban areas and the increased investment in those urban areas, climate change and balancing the needs of rural Australia, and that goes to both economic, social issues that Australia is still grappling with, and this is an opportunity, we believe, to try and face some of those wider issues.

The reform journey to bring those competing demands together should provide very clear milestones as mentioned. It does imperatively need to include adequate funding to act as incentives, and I will come back to talk about this in terms of the relationship between the states and the national government, and like what WSAA has said, we strongly support the establishment of some national independent coordinator, and I'll add a bit more of that as we go into the further discussions on it.

The key points I'd like to highlight to the Commission this morning are Australia's water sector really does warrant this national policy attention. For the reasons I've summarised before, it covers so many different sectors of our economy and next to our educational system which is so highly regarded around the world, we view water as the most important national asset the country has. So managing that national asset in the interests of all Australians, balancing those competing demands within the economy, should be at the forefront of any national government. The priority that we place on water policy has slipped down the ladder very significantly for reasons that Adam and Stuart touched on, in terms of going through the millennium drought and the need and the push that was behind all of that investment has supposedly evaporated. But it is only a matter of time before the next crisis hits us and can affect those very important pillars of the economy for the next 20 to 30 years of economic growth.

It's the water sector provides the essential services to all Australians, whether they're individuals or businesses across those platforms of economic development. We have seen very significant reform over the last 20 years on a nationally coordinated approach to water

reforms. There is talk amongst our industry that elements of it feel some sort of reform fatigue but the association, along with WSAA, are strongly of the view that particularly in the urban sector, there is still a very strong appetite to take on more reform. There is the leadership within the urban sector to handle the kinds of reforms that are going to be required, and I think there is a real need and acceptance from the communities that alternative ways are possible and the discussion and the debate is open at a community level.

This is a very large part of the success of what our urban utilities have done with their customer focus strategies, particularly over the last five years. What we have seen in that journey of 20 years of reform has been valued at \$80b to the economy. The association strongly believes that if we're going to get the backbone of our national politicians and more importantly, the media, and through the media the wider community, we need to establish some economic credentials to undertake the kinds of reforms that are being discussed in the interim report. To communicate those to make people realise this is a journey that's worth pursuing because of the economic benefits.

We haven't got the panacea ourselves to say how you do that, but we do have some thoughts around how it could be obtained. The future of our future water journey is really at a turning point now after that 20 years of positive gains. We do think that the only way forward is through a nationally coordinated approach to water reform that enables us to basically build on those achievements that we've done but balance those future competing demands from within the economy.

The association sees a very significant economic benefit from the export of Australian water innovation and expertise. It is something you haven't picked up in the interim report. We talk about the Australian industry employing some 40 to 50,000 people directly. It is a multiple of that in terms of the industries that are dependent upon water, and as a contributor to the Australian economy, it's always underestimated because of the way our statistics are gathered which unscrambles the egg into clear outputs of products rather than the inputs that go into our industries.

But there is no doubt that Australia's role in the region of Asia in the next 20 to 30 years will be very significantly around issues of governance, access to markets and our role of the Australian water sector in opening new markets for Australian business through water expertise is very important and a very significant economic value to the country.

Whilst the Australian government has relinquished the leadership role in water policy in recent years, we really welcome the Productivity Commission's focus on Federal processes on the future of water reform and support your recommendations with a few extra comments we want to add around how you could get that right form of coordination.

Adam has spoken. WSAA has spoken about a national body. We think a national body really is the best way forwards and I'll perhaps just pause here and cover a couple of points on that national body. As I've said, reform must be fuelled or lubricated by very good incentives. Those incentives must be of a scale that will enable our state treasurers to stand up and listen with real interest. Those releasing those payments, I think – sorry, the association believes, should be through a body that is truly independent from the legislative or from the executive arms of national government. So that we have a degree of expertise which is unimpinged or uninfluenced by the political cycles that we operate around the country, and they have two things in particular.

One, the resources to not only incentivise but also to encourage more national discussion and dialogue from competing areas of the industry or from the community, on the forward journey of water reform. But those incentive payments must be in response to the release or acquiescence of certain powers at a state level to an independent, well-resourced, well-expertised organisation that they can respect and participate within. It is a new model. It's a model that's built upon two issues.

One is the adequate funding that is going to be provided to it, to unlock that support of state governments, and secondly the expertise that it would need to ad house on a permanent basis to carry the authority to make actual decisions that need to be implemented, not by a Federal government, but by all state governments with the Federal government and the state governments seeding certain powers around the governance of our water asset.

Returning to a couple of the other points I'd like to cover. The new body does need to incorporate how it engages with organisations from the water sector, including WSSA and AWA. We bring qualities and experience and facilitation to get that body fuelled with more practical day-to-day expertise and experience, as well as taking on a method of communicating more effectively across the industry that actually injects action across the economy through the water sector.

I want to cover next the issue of governance that's been raised and the need that we see for all state and territory governments to clarify their own expectations of their water sector and recommit to a separate policy, regulatory and service delivery functions, including the articulation of a clear statement of objectives for the water sector to acknowledge, not just traditional water security, public health and environment management roles, but also to cover what's been spoken about this morning, on flood, waterway health, catchment health and liveability.

We need very clear specification of authorities between the roles of governments, our regulators and our water supply authorities and I am going to say, push it a little bit further, and to say that what we really to see is that independent economic regulation really taken out of the hands of the state governments and vested in an independent economic regulator as we are seeing, probably the best example here in Sydney with IPART, but go further and to remove any likelihood of ministerial interference with the governance of our water utilities.

We are further down the track with some of them, but there are still plenty of examples where we're seeing a very detrimental effect by ministerial interference into a decision that needs to be made by a board of utility which then needs to be implemented by the management which is constantly changing because of political cycles.

Adam has mentioned the issues around TasWater. We've put a very strong submission and appeared before the legislative council to talk about this very issue and to say moving back to bringing that entity within the arm of government, is a backward step of some 20 or 30 years and we've articulated to them the different that they would then be living, against what's happened across other states, and it goes this real interference of ministerial authority into what is a much needed stability and separate management structure for our water services to be delivered to the community.

We need to see the creation of a charter of objectives, roles and responsibilities and accountabilities for the water utilities that is non-discriminatory also between the public and the private ownership or between incumbent providers and new entrants. We need further

clarification on private sector participation, access to capital and competitive neutrality. And I want to pause here and talk a little bit about that because I really like the question that you gave Adam and I want to also give you a few comments about what is the burning platform for competitive neutrality in the water sector. Why do we need more competition?

I want to give you four reasons why there's an absolutely imperative need for more competition now, and they are ranked from the most important down to perhaps important but to a lesser degree. The first is the burning platform here for competition is to utilise the vast amounts of private capital for water infrastructure at a time when our state governments have very stretched balance sheets. We're sitting on a cliff of a real need for further investment that is simply beyond the ability of our state governments to deliver.

We need to be able to take a leaf out of what we've seen done so successfully in Europe and to enable private sector investment. I'm not here talking about privatisation. This is not an argument to say privatise all our utilities. It is an argument to say let's look at better methods to actually utilise private sector investment when we know our state governments have got more compelling targets to invest their funds through infrastructure and education and health.

The second reason is to implement innovation and technology that has been proved by the private sector. And that's where we're seeing tremendous success from our utility members and WSAA utility members where they are using the private sector and as Adam said, up to 75 to 80 per cent or 85 per cent of their services are delivered by the private sector. What do they bring to those utilities? They brought new approaches to innovation. New adoptions of technologies and systems of management that have delivered real productivity.

The third reason is linked to that, this continued journey of improved productivity driven by private sector expertise that are utilities and are actually doing really well. It's something that is not widely understood or appreciated by the wider community, but that role that WSAA has already articulated, is a very important element why competition is so important.

My last reason is, strengthening Australia's international contribution to our Asian region which will bring very significant export dollars and new markets to the Australian water sector.

I want to them quickly now move to a couple of other points, given I've only got 15 minutes for questions before morning coffee. Mention has been made about the clarity of water agencies in delivering integrated water cycle management outcomes and the role of the urban water sector in contributing to liveable cities. The association would like to go further and basically say where there are possibilities for amalgamations, where it does make economic sense, we need a report to encourage that amalgamation.

In New South Wales we've seen very significant slowdowns in this, a lot of controversy. It is a tough political tablet to swallow, but if any tablet was required it is this need for further rationalisation of the number of players we have when we're particularly talking about our non-urban areas trying to supply services and facilities to a very disperse and small population.

The evidence that we've seen in Victoria's process has delivered significant benefits, both economic and relating to governance, that can more than justify it. We'd like to see the role of our local councils and other utilities really thought through and potentially rationalised to give better services to customers.

I want to talk quickly now about water, the water market and water trading in particular. Moving away from just our urban areas, the opportunity or the Commission here is to really address one of the great conundrums that Australia really hasn't come to grips with, and that's putting a proper value on water in rural areas. We have seen progress and we've seen significant change and benefits through the use of water trading, most particularly in the southern Murray Darling Basin where we've seen the yields of land increase purely because of two things; the ability to trade water and the value that that water carries because of the added yields to the crops. This has changed not only land use, but it seriously changed the investment patterns in that part of Australia.

Investment is going into it because they can see that link between water trading and value that's inadvertently placed on water because of the increased yields they can get from different crops using the same land. When we look at this issue of the value of water, any value relating to water would be defined by market place. Any value of any asset in the Australian economy is defined by similar means.

We need to assess what security we are giving our water holders currently in terms of its comparison with a property asset. We need to also look closely at how the Australian accounting standards are actually providing for this growing value of an asset that's been, in our opinion, misdescribed. When you look – and I'll come back to those two issues in a second, but the main issue here, when you look at what's happened in Australia's water trading, there are numerous local water markets that all operate with different value drivers and a lack of coordination. There is an argument, we believe, to have a national water market and we would encourage the Productivity Commission to take on that area of examination and in our submission to you on the draft we'll include further details.

But a national water market is the prime price discovery area for the commodity or for the product of water, a centralised market will enable us to better control and understand the price discovery required by market and it enables us to avoid what we believe has been occurring with some distortions of market, some misrepresentation of values on price and on the trades themselves.

When we look at those issues relating to how we actually value and accommodate water rights, we go to an issue around the price registers. In the trading system at the moment there's a vast difference (indistinct) between a contract price and a settled price, and that difference can be determined by a difference of some 34 weeks to nine months between those two price settings.

The property status of water must change in Australia. We need water to be defined as a tangible property asset. If we look back across the economy, shares are equally as intangible. Shares are however treated as a tangible asset and can be accommodated on the balance sheets of those owners. Land is a tangible asset that can be valued on a balance sheet. Land is no more tangible, I would argue, than water for the owners who might own a large (indistinct) and have nothing to do with the land, they have no physical contact with the notion of land as a tangible asset, but the system of business development and our law, the legal system recognised it.

The association believes it is time now to redefine water as a tangible asset and one of the benefits of this, the main benefit is that it would enable a very quick increased recognition, a value or additional capital that's been put into water that at the moment is undervalued by

what we estimate between five and \$10b just in the last ten years on water trade. The accounting standard need to be reformed to reflect water as a tangible asset.

Commission, we look forward to making a reply or a report on those comments that I've included, but we do see this report as a very good step to engage the wider community, the wider different elements of our economy to replace the emphasis on water as an economic driver and we look forward to taking any questions and to submitting our further details with you at the end of the month. Thank you.

COMMISSIONER MADDEN: Thank you, John. That was comprehensive and I'm glad we're in the water sector with a number of burning platforms that we have. I guess just coming back really to the economic regulations and the barriers to private sector involvement et cetera that you've mentioned. You mentioned the European experience and the like. Again, we're just swinging back to what we talked about before about significant private sector involvement currently.

So again, just from your membership, what are the real barriers that we're facing? I know there's opportunities and there's significant investments that maybe coming. Just that practical, on the ground from your membership, what are the one or two things that are actually real bugbears facing people.

MR MCKEOWN: Look, I suppose it's really the access to look at different investment models, Commissioner, on the water infrastructure requirements or new developments that are coming up, both in urban and rural areas. That traditionally has been controlled by entities that are owed often by state government or an arm of state government and I think there's been not unexpectedly, some resistance to look at those models, and I think the opportunity, the burning platform, is to get private sector investment, but that would require a very significant change in terms of regulation and approach from state owned entities to look at it.

We can see very clear evidence of it and probably the best example of this would be the Thames Tideway Project in London which saw this was not about privatisation, it was about using private capital but it was requiring government to create some very clear regulatory frameworks around that invested asset for a very long period of time that gave the investors security of return, security of ownership and the passage of last resort if issues did fall into place that were outside the reasonable control of them or a utility which would require government intervention. It then enabled much more competition to be opened up in the capital markets which brought down very significantly, the amount of costs that were associated with sourcing the capital which couldn't be done through the government sector.

The benefit of that was you've now got under construction a piece of asset which will service a massive population in the greater London area at a fraction of what the cost would have been if they'd gone down traditional routes, and you've brought in entities with new skills and expertise to run that piece if infrastructure. So that's a model. It's not saying it's transforming what is public ownership into private ownership, but is looking at an alternative form of financing our infrastructure needs.

COMMISSIONER MADDEN: It may be difficult to comment, but we do actually have the private sector involved with the SDP here in Sydney. Are there lessons to learn, not specifically on that contract or anything like that, but just in terms of the wider industry?

MR MCKEOWN: Yes, I think the lessons to be learned on any involvement of the private sector in water services has been borne out by our utility members and WSAA's members which we share and that is there is a great fear and it's built in history and culture of this country, that if the ownership of those water assets is removed or is influenced unnecessarily by the private sector, that there's going to be issues around tariff control and around the reliability of service delivery.

Those two things we believe are very strongly misplaced and they can be clearly removed with the proper regulatory framework as we've seen in the UK and that framework needs to give all consumers and customers the confidence that regardless of whether it's state or whether it's privately owned or whether it's private capital that's gone into a state owned utility for particular assets, that service delivery is sacrosanct and the pricing mechanisms around it are sacrosanct because of the regulation in place. This is a community engagement exercise and an understanding that needs to be further expanded, but the solution is within the grasp of the state government and particularly a new national entity to incentivize such behaviour.

COMMISSIONER MADDEN: Are you happy to continue?

COMMISSIONER DOOLAN: Yes. I am going down another route so you keep going.

COMMISSIONER MADDEN: Just on that national entity, a couple of questions. I can understand the precedent and the template that we've used successfully in the past. I guess there is that question in budget constraint environment, what kind of level of incentives would actually, do you think, engender some response at a state level within the water sector, not a particular number, but is it significant or larger or is it very much program based? So some discussion of that. I guess, not to flag our position, but what's a second best?

MR MCKEOWN: Second best option. Well, look, I think the answer to your first question, Assistant Commissioner, is to say unless its substantial, unless the bucket is deep enough, you will simply not attract the attention of the treasurers or the advisors around them because it won't solve any of their problems.

So it does need to be substantial and the only way you can, I believe, justify the substantial nature of what's required, is by looking at the economic benefits that will flow directly from the use of those incentives. That can be, I believe, shared as an incentive from both the Commonwealth and the state governments together, and I don't think they're in conflict on that. I think the conflict is around state governments not wanting to acquiesce water authority and power to a national legislature which would be subject to again, whims and political interference and then power struggle between two levels of government.

The beauty of what is being articulated here this morning is to create a national entity that has sufficient capital and clout and has the, clearly the teeth to actually intervene in the water sector irrespective of jurisdiction or owner around certain things. Without that you won't get it. But I think if that model was put to them and they were seeing this as not as an acquiescence back to a competing legislature, but to a truly independent authority which is very much aligned with their own interest in preserving sustainable water use and regulating in a very transparent and open way, particularly around policing as we've seen some real issues in New South Wales which gained notoriety through Four Corners, if there was a national entity whose job it was, was to police the regulations or police the rules that are in

place, I think it would be a very different story. But to do that, you'd need very significant allocations of money.

But I go back to the starting point to say it's a question of how you value water as a contributor to our national economy and I'd say it would take ten minutes to 15 minutes of anyone who is a doubter to hear why water is probably, I believe next to education, the most important national asset, and most people in our community would understand this, and would be willing, I believe, to support such a transition of power if it was run on a truly independent basis with the kind of expertise and the treasure chest of funds that they would need to unlock for support from the state governments.

COMMISSIONER DOOLAN: I suppose, to be frank, in a previous incarnation I would have found that a difficult argument to agree to, I think – and it coming back to what is the role of government and under the constitution the states are the water managers. We do find that states are at very different levels of water development and the development of both the resource itself and the institutions within the states.

So actually thinking about then, could a national body of the type that you have described, actually seriously undertake and understand state-to-state issues? So even the models that we have now, the independent economic regulation and as you say, we have frequently seen government pushback on that model and some of its politically driven absolutely, but if you even go behind well, what is the politics driving it, it comes to issues of affordability or other elements of community concern that perhaps the water sector itself hasn't fully taken into account.

So some of the things that those models operate, if you like, you have to have a very strong belief in independence, but you also have to have a real flexibility within the mindset of such an organisation to pick up the drivers and I feel that in the examples that we've had to date, could you point to one where you feel it is successful? Because looking cross the national landscapes where similar bodies have roles outside of water, it's rare that they have actually survived.

MR MCKEOWN: Commissioner, I think you're absolutely right and I wouldn't name an example that's been successful, but I don't think we've seen what I was suggesting implemented before. You've got to get the scale of the vision right to make it work. And I think the point, Commissioner, you are making is that an entity based for example in Canberra, that operates separately from the day-to-day operations of the water issues that a state government contends with, would lose touch and I would be the first to support it.

But what about a model that actually looked at incentivising the state governments to hand over departmental resources based in their own states as part of that new entity for that very reason to better connect with those issues, to better understand them, to give them the real ability to have more nuanced understanding within the jurisdictions that they need to operate that feed into that national body.

The best example of an entity that's created that kind of authority with the true independence, is the Reserve Bank of Australia. Now, if you look at what they do, standing aside different area, standing aside from the arms of interference of the executive of the national government, what we need is a Reserve Bank of water that sits aside, with proper resources in each state and territory in all jurisdictions to help implement and monitor, but be driven by truly national policies that all the states and all the territories adhere and agree to through the

incentivisation of payments. So it's a much better – going back to assistant Commissioner's question, it would be a much bigger scale of change which, you know, we only get the luxury of talking about this sort of change when the Productivity Commission brings forward these kinds of reviews.

COMMISSIONER MADDEN: Yes. We've actually run out of time for this session. The only thing I'd say on this is encourage you to articulate that in a submission, and I think potentially disentangle from the NCP kind of payments model when – think we're blurring two things. Because NCP payments are really a project to buy reform which had an end date et cetera, which is a very different model to a kind of a national body and a regulator and a very different model again to NWI type and NWC assessment kind of thing.

It will assist discussion going forward to really pull out what intervention means in terms of a long role and so that would be welcome to assist the discussion. Thank you very much, Jonathan and Paul.

MR MCKEOWN: Thank you.

COMMISSIONER MADDEN: So we did go a little bit overtime which I think is actually a good thing in terms of discussion and feedback. So we will come back at 11. So we have basically 15 minutes for a quick coffee and a break.

ADJOURNED [10.47 am]

RESUMED [11.04 am]

COMMISSIONER MADDEN: Thank you for getting back promptly. So we'd like to readjourn the - next we have Sydney Water. We have Phillip Davies and Kaia Hodge. So welcome.

MR DAVIES: Thank you.

COMMISSIONER MADDEN: Again, would you like to start with a statement?

MR DAVIES: Yes, we will do, thank you. I think, as an approach to the opening statement, we thought, perhaps rather than sort of repeat our response, and rather than go over much of the ground that our colleagues previously have covered already, and particularly that the WSAA position, obviously. We are part of WSAA and so we are a supporter of that position. I thought, to kick us off, it might be helpful if I take a particular example of some work that we're looking at, which I think illustrates some of the themes that have been (indistinct) by WSAA, and we can - that will help draw up the discussion a little bit.

So the project I have in mind that I think is perhaps particularly relevant here is (indistinct) and Hawkesbury River around (indistinct) where, if you'd permit me just for a few minutes to outline some of our thinking and some of our plans there, and I think it will lead into some of the key topics. I mean, I was conscious, just as a forward, some of the points that came out of the earlier sessions around, to use that great phrase, "What is a burning platform", came up once or twice. What is the point of introducing competition? Where are we going in competition? What's the imperative? Hopefully it will respond to some of that, and then the

particular themes that I'll come back to that sort of come out of the discussion are concerns around stakeholder collaboration governance - that's one theme - themes around sort of cost effectiveness and liveability, can we have both?

Innovation, are we unlocking the potential for innovation in the industry in the right way? Then one that was also touched on around sort of community value and customers, and I think this Hawkesbury-Nepean work covers much of those grounds in different ways. So just to sort of set the scene on that a bit, the background here is that the EPA is looking to reduce our annual load limits for total nitrogen and total phosphorus at each of our wastewater treatment plants across the six river zones in the Hawkesbury Nepean catchment. The new limits aim to deliver a more appropriate regulatory setting to protect the river from eutrophication, algal blooms, and weed infestations, and from our perspective this framework is a (indistinct) is looking at a more holistic, whole of catchment approach, which I think people recognise as being the right direction to go, particularly for something like nutrient management.

So the proposed framework we're looking at recognises that, historically, and even today, this focus on point source of pollution has its limitations and is not where we'd like to be necessarily, if we had the benefit of a clean sheet of paper. So this framework, if it comes into place, will allow us to trade these load limits with other treatment plants in the zones, and allow us to invest in improvements in diffused pollution sources, such as urban stormwater or agricultural runoff as alternative means of reducing nutrients, and in that way to claim a credit against our wastewater licence limits. So what this does is, by allowing us to invest in new ways, allows us to avoid and forego capital investments that we might otherwise have to make.

So to give you a sense of the order of magnitude of those investments, we estimate that around \$3 billion of capital investments over 50 years, starting in 2024, will be required, given the tighter load limits planned by the EPA, and in terms of bill impact, obviously these are very approximately numbers, but something of the order of \$45-\$75 per year in real terms would be added to customer bills if we go ahead with that sort of business as usual approach. So that's a big price tag for these measures. So how do we find an alternative way forward for that?

Well, to unlock this potential for a different approach requires, in the first place, a set of what you might call trading rules, that allow us to be permitted to do these other things, and for them to be credited and recognised as being equivalent in some way to an investment of a more traditional capital intensive nature to improve nutrient reduction at a wastewater treatment plant, and that - it's a bit analogous to what we've seen in sort of emissions trading and energy, that requires us to come up with a set of rules, an offset trading framework, whereby property rights are defined such that a unit of capital investment of the traditional kind at a wastewater treatment plant can be foregone in exchange for something that is deemed to be equivalent to is.

So an offset, and those offsets can potentially come in in many different forms in terms of the nature of investment that would be involved, and in terms of the timing of those investments, and in terms of the geographic location of those investments. So if you think about it in that way, you immediately recognise there could be quite a big set of questions around the definitions of what is an offset that can be considered as a valid trade off against this alternative type of - this traditional type of investment. So there's an awful lot of groundwork

which is required there to put that scheme in place, and we're very pleased to see that the EPA has led the way on this by coming forward with a framework for the introduction of offsets, which is really promising and does conceptually lay out how this might work.

Potentially, whilst it's always difficult to anticipate in advance what the savings would be, we anticipate perhaps of the order of 50 per cent of that investment that we might otherwise require to undertake could be avoided under this new set of rules. In terms of timing, the EPA new load limits are due to go live from 2024. We are now in a phase of seeking to further discuss these offset trading rules with the EPA, get some more certainty on those rules so that we can get to the point where we can properly invest in some alternative solutions, go through the process with the EPA of seeing if they are happy to deem some of these measures as equivalent to things that we might traditionally do, as replacements for them, and to be in a position where, in our next price control, we're able to say to our economic regulator, "This is our normal business as usual way of doing things. However, we propose to do these alternative measures. Can we get a return on assets - a return on our assets for those investments?"

That raises a series of questions because, of course, these might not all be - as they're not traditional cap exclusions, they might not easily fit with the normal regulatory asset based sort of approach to remuneration, and may require some creativity and thinking about, well, what are the incentives of Sydney Water to make these investments in a normal commercial framework if it's not a RAB based investment? Now, those kind of conversations have been solved in other areas, so they're no insurmountable, but as conversations to be had, and they're just as part of just a wider question of, for a provider like us to be clear, what is the real framework that we are operating against? What is the financial treatment those investments will secure compared to traditional forms of investment, and overall, how is that framework presented to us by both the environmental regulator, the EPA, who will obviously be the dominant party in this, but also by our economic regulator, IPART, because ultimately, of course, they will determine whether our spending is appropriate and prudent and efficient, and all the rest of that.

So that raises for us a lot of questions around, on the one hand, you know, it's something that we are, as (indistinct), passionate to deliver on because we are in the business of trying to be innovative and trying to find new, more cost effective ways of providing solutions for our customers. So, to come back to the burning platform, given the growth agenda which we're all well aware of in Sydney, and investments that are required, there may well be pressures on bills in the coming years as we adapt and change, and grow to meet with the challenges that Sydney has. So alongside that growth we really need to capitalise on every opportunity we can to send bills in the other direction, downwards, and achieve equivalent outcomes at lower cost.

This particular example of nutrient reduction in the Hawkesbury-Nepean River is an example where, one would imagine - or, of course, you never know until you deliver a project, but one would imagine that, against that baseline of a pretty significant wall of capital expenditure that you otherwise face, we're pretty confident we'll be able to find some alternative means of driving benefits that are equivalent to those that would be associated with this capital investment but are just significantly cheaper. But the benefits may come in different forms and maybe nutrient reduction will be a big a part of the story, but one can imagine that there's

many other benefits that stakeholders will value that may be also part of the valuation of the solution.

So for example, things like improving the aesthetics of waterways, providing better access to waterways for recreation, removing introduced weed species from waterways, providing habitats for bird and fish species, using recycled water to ensure that public playing fields are in good condition, investing in river banks to that river banks are maintained and can provide a community value rather than being eroded away. All these kinds of factors, potentially, might enter into the overall valuation of projects that in some way can contribute to avoiding some capital investment and finding a better, more cost effective solution to nutrient reduction.

So I think that is very much in the spirit of what we - the WSAA contribution earlier around the need for collaboration to deliver these benefits, and what it points to in terms of the governance, I think, is what we know is that we are in a highly regulated sector, we're doing activities that have a strong community dimension, we have multiple regulators operating in our space, and against that background, finding ways to actually deliver on some of the aspirations, that we have to do things differently to achieve better results at lower cost, really can be quite difficult, and this is, in a way, quite a good test case of many of those things that we talk about, and this one is relatively easy in the sense that you would call this one a win-win in the sense that, if we get the same environmental outcome, or a better environmental, but the cost is substantially lower, hopefully our environmental regulator will be happy, or economic regulator will be happy, and our customers will be happy.

So in that sense I think it's a really good test case of, you know, can we actually deliver this, and do the policy frameworks - are they suitable to deliver this kind of reform? So I think, as I mentioned before, some of the challenges around getting environmental regulation better joined up with some of the better established economic regulation frameworks is what this kind of goes to the heart of. A couple more themes related to this are, given this regulatory complexity we face, one thing we mentioned in our response is around the importance of thinking creatively about what it takes to unlock innovation, because you take these - the set of stakeholders we have.

Everyone has got their own responsibilities. They're all, in nearly all cases, perfectly understandable responsibilities. Everyone's got their own job to do, but does it always, in aggregate, add up to an environmental in which it is conducive for players like Sydney water to come forward, be innovative, and feel like they're being rewarded for being innovative, thus encouraging them to do it again? And I think some of our frameworks don't always put us in that position, and that's obviously not a great situation, and what I observe in other regulatory jurisdictions in - and in other industries, is increasing recourse, for example, to trial environments, or they're sometimes called regulatory sandboxes, where one or two regulators, together with some industry parties, agree to sort of suspended rules to test out some concepts on the basis that this is a trial environment, we'll see how we go, and then the regulators will take a view about what to do next.

So that's just an example of ways of thinking around how we can sometimes try and escape some of the silos that we get into sometimes, and try and unlock and encourage private and public sector providers to come forward with new solutions. That's one sort of important thing that I think is worth thinking about in terms of the reform agenda when dealing with the complexity that we face. The other angle which was touched on that this touches on too, is

around, sort of, the community and customer value focus, which, as I also mentioned, comes through very strongly in your report. I mean, this to me is a far deeper concept than just getting some customer endorsement for some aspects of a price proposal. It's something deeper about how a company like Sydney Water, which is nothing if not about its customers. It's about how do we tap into what customers and communities that we serve really want, and reflect that in our business plans.

So in the example of the Hawkesbury-Nepean case, we are deeply engaging with the local communities on the Hawkesbury-Nepean River to find out what it is that they value, and how we can reflect some of the things they value in our business plans. So as well as looking, if you like, top down at nutrient reduction, what actually are some of the valuations that that community has, and how do we reflect them in some of the projects that we deliver, and then in turn, how do we play that back to our regulators and says, "This is what is valued to the community - communities and customers, and is a basis on which perhaps business cases should be looked at in a new light".

MS HODGE: Can I (indistinct) with land use in Western Sydney?

MR DAVIES: Please do.

MS HODGE: Yes. So, like with Western Sydney, we're talking about building a city the size of Adelaide and Canberra, and 90 per cent of that development is in one of the subcatchments of the Hawkesbury-Nepean, which is South Creek, and when you look beyond the traditional water servicing framework that we need to satisfy, and that has these particular challenges in relation to the wastewater management for the Hawkesbury-Nepean, some of the other things that start to come up that start to raise the issues of going beyond the remit of what are utilities as they currently stand relate to things like stormwater management, and it's desegregation, and it's lack of a link to the types of outcomes that we need for Western Sydney.

It's hotter, it's drier than the rest of Sydney. It's going to have a large population, and it's been flagged as a parkland city in order to ensure that it attracts people to live there and isn't sort of like a brown, dry place where people live and, you know, just move around the city to get to their jobs or to the places where they'd rather go swimming or playing sport of whatever. It needs to be a place that actually attracts and retains its communities. So in Western Sydney we might be talking about a scenario where we need to use more water rather than less water than we currently do for other parts of Sydney, and we need to look at a diversity of where you might use - where you might source that from, and how you might actually manage that at different scales at local, at regional, and precinct scales, to get the type of broad outcomes that you need for the whole of the river, but as well as that, the communities themselves.

So a cooler, green environment which requires water to support it, and it isn't part of the current planning paradigm for most of the utilities around Australia. When we look at the stormwater management across the Hawkesbury - across Western Sydney, there's already probably been \$3 billion earmarked for local government to build stormwater infrastructure, and there's probably another \$3 billion that will be required in plans that are yet to be delivered, and that's on top of the \$3 billion that Phillip talked about needing investment in wastewater, to actually find the types of outcomes that we need. It's all being planned separately, in different timeframes, and without clear outcomes in terms of not just water

quality management, but also in terms of urban amenity and efficiency, and affordability, and cost effectiveness, and we need to actually bring that together.

So in terms of the regulatory sandbox that Phillip was talking about as a concept as well, with South Creek it's been a recognition within government and sort of action through Infrastructure NSW where the premier has said that we need to do a sector review which effectively looks at the planning for South Creek, with a water and land use lens, and how to actually marry these up so that we get the outcomes that we need, and it's actually - it touches on all of those things. Like, what are we aiming for in South Creek? What are the objectives for the waterway? Is it a pre-European waterway that we're trying protect, or something that's highly modified, providing parkland open space and cooling for local communities? It's a part that a utility like us has a critical role in, but it isn't a space that we've played in traditionally, and we certainly don't have, currently, the regulatory and the economic mechanisms that would allow the outcomes that will be needed there.

In terms of collaboration, it brings together the role that Sydney Water, as a utility, and local government, need to play in terms of managing the whole of the urban water cycle there, right up into the catchments in the street drainage, down through trunk drains and into the waterways themselves. Irrespective of institutional arrangements, irrespective of current regulatory settings, what's really, really clear is that they need to be planned together, because without doing that we're all going to be doing our own things, and we're all going to be pulling in different directions, and we'll all regulatory uncertainty in terms of what costs that we can recover, because we're doing things that are not clearly driven by our current operating licences, the section 94 contribution schemes that IPART oversees, and IPART's saying quite clearly, what it needs to enable it to do the appropriate pricing determination around that is clarity of objectives enshrined in certified government policy, in whatever frame hat might be.

So it might be through land use planning instruments, it might be through other things that are required, but basically, South Creek is a bit of a hot box to actually try and get urban planning and water planning to work together, and it's the first we've seen of it in Sydney for a long, long time, and it's basically seen as being a template for what we might need to do elsewhere.

MR DAVIES: And building on that, I think, coming back to one of your other questions perhaps we haven't touched on yet, is around the competition agenda. I mean, I think we would take the view that, I mean, a key feature of this offset trading scheme if we get it in place, is that it is about a creation of a set of property rights, so deeming that certain activities, or certain units of certain activities, can be deemed to be equivalent to other activities because they produce the equivalent environmental outcomes. In creating property rights you enable competition, basically, because the implication of that is that not just Sydney Water can provide those solutions.

If it's defined in a way that another provider, public or private, can deliver the same outcome, well, then why shouldn't they have the ability to deliver that solution, or to come to us and say, "Sydney Water, how about forgoing that piece of capital investment, because we've got a smarter way of delivering the same outcome for you?", through a different technology, or a different means. So the benefits of these sorts of schemes go very far and wide, because they can potentially make it easier for new entrants to come into the sector in different ways.

Now, the flipside of that is that these sorts of schemes, while fantastic concepts, and there's many great case studies across the world of these schemes' living value, is that they do require some supervision and oversight, and maintenance on a fairly regular basis, because these property rights need to be created, and they then need to be - there needs to be some sort of market body overseeing them and answering all the questions that arise about them as some new provider comes up with a new idea and says, "Wow, this is a great way of solving that problem. What do you think?" Someone needs to be able to give them a response that says yes or no that's acceptable within a reasonable timeframe. Otherwise, the incentive to seek out those solutions is obviously diminished, and that's where we run up against, perhaps, some of the governance challenges that we've talked about in the sector, which is how do we unlock this desire to innovate in the sense of being able to have regulatory mechanisms that provide ways of dealing with these issues?

In this sort of world, for example, one thing that we have to manage, understandably with the EPA, is the scientists are obviously very concerned about the real, actual scientific health of the Hawkesbury-Nepean River, and there'll be some natural scepticism about, well actually, are certain measures really delivering the same outcomes as we think they are? How do we know? Or if they're delivering them today, will be as good in five years' time? Is it really the same sort of measure? So there's an understandable tension, to some extent, with the scientists around, you know, what's really equivalent here when looked at through different lenses. So again, that - there needs to be ways in which those kind of issues are sorted out to everyone's satisfaction, which again sort of highlights that it can be quite intensive to - or risk being intensive if can place these sorts of schemes.

So we don't want to make it more composite than it needs to be. The reality in the Hawkesbury-Nepean River in that - is that we are, far and away, the largest party. Most of the water treatment plants are ours, so it's - arguably it's sort of trading within Sydney Water, some of the solutions, but that's fine. If that delivers the results to customers, that's fine. Equally, if it can be opened to third parties to participate, from a customer point of view that's even better, but I think, hopefully, on a number of fronts, that kind of illustrates, you know, why we think competition and contestability is important and it's something that we should strive for. It illustrates the importance of collaboration and thinking about how we organise and interact with our regulators in perhaps new and different ways to what we've traditionally done, to unlock these solutions.

It highlights the importance of thinking about the community and customers, and also, hopefully, about, you know, the water industry obviously isn't seen as very innovative. Well, I think one of you asked a question before, "Well, are we ready to go?" In this example, we are definitely ready to go. Our chief executive is very passionate about this, constantly wants to know where we're at on progress on delivering the scheme, and I treat, you know, our plans on the Hawkesbury-Nepean almost as a commercial project. We've got a timeline to deliver against. We need to lock certain things down with the EPA by certain dates, otherwise we won't be able to say certain things to IPART on our next business plan, and if we're not in a position to do that, if we don't have enough regulatory certainty to do that, then we risk at least deferring some of these benefits, and the result of that will be, customer bills will be higher than they need to be.

So that's an example of, you know, real cost, a burning platform, if you like, if we don't break through on some of these issues, you know, and there's lots of good will out there, but I can't

sit here today and say I'm 100 per cent confident this will happen, because I don't think we're in that position yet. That of course is - as Kaia says, this is a big agenda. It's part of the South Creek agenda, which is obviously a big focus for the government, but it's not the only case study we could sort of bring to you around some of the challenges that we face in making regulation work better.

COMMISSIONER MADDEN: Okay, thank you. I think it's very good that we actually get tangible examples of what we're talking about, rather than abstract.

MR DAVIES: Yes.

COMMISSIONER MADDEN: I didn't know the terminology sandbox, but I will mention -

MR DAVIES: I take it back.

COMMISSIONER MADDEN: I will mention that there's an annual water quality incentive payment that IPART did allow Sydney Water and Water NSW to actually have payments for works in the Sydney catchment authority area, and in a sense set that aside, so you could actually get works that actually would reduce costs in treatment plants at Prospect, et cetera.

MR DAVIES: Okay.

COMMISSIONER MADDEN: So there is precedent already in terms of a regulator allowing the exploration of that type of activity.

MR DAVIES: Okay.

COMMISSIONER MADDEN: So you might want to use that. One thing I do want to come back to is the roles and accountabilities in terms of planning, because I've personally sorry, the Commission, actually, think it's fundamental, in terms of them progressing from there about who pays and who has ongoing roles and responsibilities, and then this issue of pricing those. The example that you talk about in terms of liveability, the different beneficiaries, and really that kind of role is an accountable risk. What is it that Sydney Water are looking for - and you talk about timeframes - what is the kind of improvement and expectation that you need in that area, within a certain timeframe, to allow this type of project to be pursued?

MS HODGE: The certainty around objectives is really critical. The remit for water utilities is not quite clearly beyond, you know, security, quality, health outcomes. The expectations are quite clearly around doing things that include things like protecting waterway health, not just as a pollution control responsibility but as an outcome that is required by communities to actually ensure that the type of cities and communities that we want are enabled by their living environments, and things like the role that water plays in cooling and greening, similarly, needs to be quite explicit, and the importance of that at sort of like a state and national level is starting to become more clearly articulated and enumerated as well, as the link between living environments and human health outcomes and levels of mortality are more clearly captured by the health sector, and you can actually place dollar values around things like the impact of controlling extreme heat on vulnerable communities in terms of level of morbidity and mortality.

So in terms of articulating why those types of objectives are (a), important; and (b), must be linked to deliverables by the water sector, there's work happening there and it needs to be

captured, and it should be universally applied as a set of, I don't know, principles of guidance at a national level, because it's not just important in Sydney. In fact, Sydney probably has a little bit less acknowledgement of how important it will be for it in the future as we get more extended heatwave conditions, but Melbourne and Adelaide already get it in that regard. They know that they had more deaths during the Melbourne fires from heat than they did from the bushfires themselves. Their auditor general started to do work around capturing those sorts of statistics.

COMMISSIONER MADDEN: So that's about the issues and objectives. I am just interesting in exploring South Creek in particular from your perspective. Again not to make judgments, but et cetera - you know, the roles and responsibilities and overlap and gaps.

MS HODGE: Yes.

COMMISSIONER MADDEN: Who are the other players in the area? Where do you see actually overlap between that kind of objective? Is it health's responsibility? Is it planning's responsibility? Is it local government's responsibility? How do you actually integrate?

MS HODGE: So something that we're seeing in Sydney that we haven't had previously is, the Greater Sydney Commission has been coming sort of in over the top of all of the agency objectives setting and basically saying, you know, like, "We have three Sydneys: a harbour city, a river city, and a parkland city. That means these are the sorts of outcomes that are required for those communities." That then gets taken by urban planning agencies, so Department of Planning and Environment. It needs to be embedded, then, into planning instruments, but that alone isn't enough to ensure that we get the outcomes.

So at each of those levels there needs to be the drivers for the things which, when it gets down to servicing a precinct, whether it's by the private or the public sector, that it's very clear the way that they go about it, what the outcomes are in terms of measureable things like nutrients, like water balance, like water available for the environment and how it will be used, water available for public spaces and how it will be used, and there are many tiers for that, but it needs to be articulated in terms of what the drivers need to be at each of those tiers, because otherwise it has a wonderful vision that never actually finds its way to the ground, because sooner or later you come a cropper with something that doesn't actually enable an entity like ourselves to implement for the outcomes that are desired or required.

So it might require a reflection in a land use planning instrument, it might require a reflection in our operating licence, it might be in a development control plan or a set of codes, but the principles around the need to drive a broader set of outcomes for an through water utility providers needs to be articulated, and it might be expressed quite differently in each jurisdiction, but the need for it to happen and to be embedded into those things is actually critical. Does that answer your question?

COMMISSIONER MADDEN: A little. I guess this distinction between what's the role of water utility versus a local waterway manger, versus a local government, and I can see in a greenfield situation designing that, for a particular area, for a - to get a - to reach a particular objective.

MS HODGE: Yes.

COMMISSIONER MADDEN: I just think, well, what do you design there in terms of roles and responsibilities? Does that have wider - for Sydney - let's just focus on Sydney at this stage, obviously.

MS HODGE: Yes.

COMMISSIONER MADDEN: Does that have wider implications? What do you do if you go to the eastern suburbs? What's your role there? I mean, are you casting different roles and responsibilities in different areas across the city?

MS HODGE: So already we have different roles and responsibilities across different parts of the city.

COMMISSIONER MADDEN: Yes.

MS HODGE: In terms of water and wastewater management, it's much more uniform, although with private sector entrants it's becoming a little bit more nuanced. In terms of stormwater in the eastern parts of Sydney where the older stormwater systems are, we're quite often the trunk drainage authority, and our responsibility is tied to the assets that we have in those parts of the city. So we don't have an explicit responsibility around waterway health outcomes for waterway management, but if a waterway has been lined with concrete or bricks, or it has been enclosed in a culvert or piped into a pipeline, and we own those assets, then that is our role as a stormwater manager to maintain those assets.

In terms of how we've tried to take that in recent years, and this touches on the shared responsibility and the concept of collaboration and what it can and can't deliver. If we take an example of the Cooks River where we own the asset, which is the Cooks River, because it's got a concrete lining, but council also owns bits of the Cooks River, and council also owns stormwater assets within its catchment. In that instance, we've worked with local government to set a master plan for what we would like the Cooks River to be, and as our assets come up for renewal we look at the opportunities for naturalisation, but the only driver for us to get a different outcome for the environment and that community is that there is an asset that is needing repair or renewal, and it's as cheap to do it in a naturalisation way as it is to reline it with concrete.

In terms of getting the broader outcomes though, the master plan has been development with local government and they have things that they want to do in the catchment that will actually work together with what we're doing to try and get the outcomes. So in terms of intent and a common vision it's all good. In terms of the ability to deliver on that, it's really fraught, because where we might see value in investing in a council part of the system, it's an Opex expense for us, but it would be a Capex expense if it was in our own part of the system for the same piece of infrastructure, or the same wetland, or the same type of management solution. In terms of sharing costs with local government, their buckets are usually much smaller and spread over a much longer timeframe, so if you have a piece of work that's multiple millions of dollars they simply may not be able to accommodate it on their works plan to deliver in an efficient and effective timeframe and cost, so part of our challenge is actually getting agreement on how you share costs.

COMMISSIONER MADDEN: So to move those lessons, then, out to South Creek, are we talking because growth is our burning platform?

MS HODGE: Yes. Yes.

COMMISSIONER MADDEN: What do you really, then, see as the best model in terms of roles and responsibilities going forward for a utility like yourselves, a water utility?

MS HODGE: Yes.

COMMISSIONER MADDEN: Is it that there should be some kind of delineation or extension of your role, so you're not repeating mistakes in the past? I'm' just wondering what's the vision in terms of roles and accountabilities in new developments where we're seeing major growth.

MS HODGE: Yes, so we're quite clearly with a role in coordinating the planning at a water cycle level to respond to the objectives that have been set by government and land use planning authorities. In terms of how those plans are delivered, there's a number of different ways that it could happen, but one thing is clear, both in new areas and existing parts of Sydney, that what everybody is looking for is a single point of accountability for water by health. So if you're going across multiple council jurisdictions, then putting council in charge of the outcomes for the trunk drainage and the waterway itself is actually - it's fundamentally problematic.

So I think that there's arguably a role for a utility to take on that role, and the Melbourne model actually has a lot of advantages in that regard, and in terms of what it might look like, but modernised a bit, it's a role that we do have in the Rouse Hill development area, which is another part of Western Sydney that was developed in the 90s and the 2000s.

COMMISSIONER MADDEN: Yes.

MS HODGE: But beyond that, the point that you made around responsibility for operations and maintenance, whether the parts of the system - like, Melbourne would be the - you know, like if we say, put the Melbourne model into South Creek, you still have the problem of funding and maintaining the stormwater infrastructure imbedded into the catchments, which is critical for the outcomes, and councils are chronically underfunded and concerned about their revenue streams to enable them to do that. So I think we need to be a bit more clever about how we identify what the efficient costs of managing those systems are, and how and where we recover that revenue from.

Like at the moment Sydney customers, where we've got responsibility and council have responsibility in the same catchment, customers will get a stormwater bill from council and a stormwater bill from Sydney Water, and they're going, "What's going on?" Now, you know, the concept of actually looking at what the efficient costs of running the system are and then putting it through a single pricing recovery mechanism, and then allocating that according to who needs to do what makes a lot of sense to me, but I don't see that model anywhere at the moment.

MR DAVIES: Just to build of what Kaia's said, I think part of this is that, whilst we are looking, there are some points of clarity and principles we can say, to answer your question about specifically the way things should be organised, in certain cases. The nature of decentralised solutions is there won't always be a one size fits all approach that you can apply to different projects, and part of it, as well as making demands of our stakeholders to organise themselves in different ways, comes down to a company like us taking charge of the outcomes we want to deliver and being very clear with all the people that we need to work

with, to say "This is what we need from each of you, and this is how it all comes together into a plan".

But the nature of that solution may be different in different locations, and indeed, you know, if we're serious about taking community and customer preferences into account, it should be different in different locations, because customers and communities are organised differently and have different ways they want things organised sometimes, and what we do is, by its nature, a very community based service. So there's a bit of tension between your general guidelines and some things we can point to that clearly should be organised a little bit differently versus allowing some scope for bespoke solutions and empowering companies like us to come up with the right solution for the right problem.

COMMISSIONER MADDEN: Yes. Yes, I understand the point, and the point is, I think, I'm just trying to get to is there are underlying reforms that would help you to be localised, actually efficiently, provide localised solutions.

MS HODGE: Yes. Can I just add one thing in that?

COMMISSIONER MADDEN: Yes.

MS HODGE: In Sydney, like, through my working career I've seen at least three occasions where institutional reforms to stormwater have been investigated with a lot of effort and a lot of really good analysis behind it, but when it comes to the crunch they haven't gone through. So I wouldn't put all of our eggs into an institutional reform basket, because there's a real risk that it's politically too hard, and we need mechanisms that can actually be more politically robust than that.

COMMISSIONER DOOLAN: So just following that thought, because like you I've seen some of those schemes fail, is it truly about certain areas, the growth areas? Is it about getting the agreed to plan for those growth areas? As you said, the key difference in South Creek is government said it wants a water and urban plan - urban land use plan together for that area.

MS HODGE: Yes.

COMMISSIONER DOOLAN: And if that plan in mandated by government, and then - so the good work is done, and then it gets agreed to and has some status, does that help and work through to your regulatory arrangements and authorities? So, I mean, we can try to sort of go - mix roles and responsibilities that have been set for traditional areas, we're having - finding it difficult making them merge to fit new ones. Institutional reform is very difficult, and also hard to pick exactly what the successful model would be. So do we recast it around, well, we all work together on a mandated plan, and the plan becomes the vehicle that filters back into our roles and responsibilities? Is that how that South Creek is operating, and how do you think those sorts of models have worked, if you've seen them work before?

MS HODGE: So South Creek will be a means of exploring how, from the plan - - -

COMMISSIONER DOOLAN: It could work.

MS HODGE: --- you go into the allocation of responsibilities.

COMMISSIONER DOOLAN: Yes.

MS HODGE: I think that it will have other things that need to happen. So, for instance, if the land use planning is pushing for things that really need to enabled by, say, an operating licence, then we need to have that conversation with IPART when we're reviewing our operating licence.

COMMISSIONER DOOLAN: Yes, of course.

MS HODGE: Yes. It's not just a greenfield problem or solution though. We're seeing redevelopment through the existing parts of Sydney which has just as critical issues to resolve, and has probably more segregated problems in terms of accountabilities, but more council boundaries, more existing, you know, chopping up of asset ownership and stuff like that. I think that the - that similar mechanisms that get driven from the land use master planning within those areas can help. They're not going to be a panacea for everything, but the - I think that without the plan we've got - without the clear policy objectives and without the plan we've actually - everybody knows that there's other things that need to be done, and that someone should be doing it, and we're all trying to work together to figure out how to do it, and it's probably in those situations where collaboration is actually our best solution at the moment.

COMMISSIONER DOOLAN: Vehicle.

MS HODGE: But, you know, until we actually demonstrate - and it might be through collaborate efforts what models work well in different locations - I'd be disinclined to take the next step in terms of institutional change or asset transfers and things like that. See how far we can get with collaborative (indistinct).

COMMISSIONER DOOLAN: If we move with that plan - so government said it wants one - what sort of level of government endorsement of the plan - like what's the other end of that planning process? Government has to endorse it in some way, for then it to filter through to affect the allocation of roles and responsibilities and how regulators behave.

MS HODGE: Yes.

COMMISSIONER DOOLAN: So is that what is anticipated for that plan?

MS HODGE: With the South Creek example, which as I said is sort of like a new sort of template for doing things, it will actually go to the cabinet infrastructure committee.

COMMISSIONER DOOLAN: Right.

MS HODGE: And that will actually give it its mandate.

COMMISSIONER DOOLAN: Yes.

MS HODGE: But through, like, the normal planning processes, we don't necessarily have that type of imprimatur. One of the things that the Greater Sydney Commission has been working on is Growth Infrastructure Compacts, which are basically looking at the outcomes envisaged for development for a growth precinct, and all of the infrastructure that's required to enable the outcomes that they're seeking, and whether we can actually pull that together into a single business case for the infrastructure that looks at the full package of the value that it provides and the costs that are imposed, so that there's no gaps or double counting in terms of the way that you do the economic analysis.

That type of thing is the type of thing that can also get very clear government imprimatur in terms of "This is the infrastructure that's required. These are the objectives that we're seeking", and from that, you know, the divvy up of who delivers what elements of the infrastructure can follow.

COMMISSIONER DOOLAN: Yes. That can take a long time, and the development is almost finished by the time you're finished.

MS HODGE: Yes.

COMMISSIONER DOOLAN: So there's a time imperative here.

MS HODGE: Yes.

COMMISSIONER DOOLAN: It is a wicked problem, but it's one, clearly, that the water - they're boundary issues. Boundary issues are always wicked problems, so it's clearly one that the water sector needs to really engage in. I mean, it was very helpful to get that example to be concrete about it.

MR DAVIES: Thank you.

COMMISSIONER DOOLAN: Also nice to have an example where, form what you've told us, it is an obviously win-win for everybody.

MR DAVIES: Yes, exactly.

COMMISSIONER DOOLAN: So it's just how to make it happen, rather.

MR DAVIES: Absolutely.

COMMISSIONER DOOLAN: Yes, so it's a good case study from that perspective.

COMMISSIONER MADDEN: It may be a good case study where it may not cost more - cheaper for customers. It might be a better case study to explore the issues of who pays for liveability.

COMMISSIONER DOOLAN: Well, \$75 per bill is quite cheap.

COMMISSIONER MADDEN: No, no, I - - -

COMMISSIONER DOOLAN: Avoided - avoided.

COMMISSIONER MADDEN: It is actually when costs actually would be put onto customers - - -

COMMISSIONER DOOLAN: Yes, that's right.

COMMISSIONER DOOLAN: - - - for maybe, potentially, services outside those mandated, that would actually flaw the issue.

MR DAVIES: But I think the particular reason for raising it was because it's a bit of a test case of our governance and our effectiveness of our regulatory framework, isn't it?

COMMISSIONER DOOLAN: Yes, yes.

MR DAVIES: Which is what the purpose of the report is about.

COMMISSIONER DOOLAN: Yes, without raising some of those issues already.

MR DAVIES: Yes. If we can't deliver that, then you'd be a bit concerned about the effectiveness of our framework.

COMMISSIONER MADDEN: Yes, okay. Is there anything else, or any other comment or statement, or gaps in their report that you want to mention?

MR DAVIES: I think that's - - -

MS HODGE: The only thing that we didn't cover with stormwater was flooding, and I guess I'd just like to say, it's really critical.

COMMISSIONER DOOLAN: Yes.

MS HODGE: In the water industry itself we tend to talk about it in terms of nutrient impacts on receiving waters, because that's been where it bites with us at the moment, but flooding for communities is really critical. It's not just riverine flooding, it's flowing within existing - you know, like, out of culverts and things like that.

COMMISSIONER MADDEN: Yes. COMMISSIONER DOOLAN: Yes.

MS HODGE: When you start to pull together water, wastewater, stormwater for the waterway outcomes, and recycled water, you have to tackle flooding as part of that mix. You can't manage it separately, and therefore that accountability needs to be clearly allocated with the other things that you're trying to achieve within a greater water cycle management. I think I'll just leave it at that.

COMMISSIONER DOOLAN: Yes.

COMMISSIONER MADDEN: Right. Thank you for that. It sounds like a busy time for the regulatory and planning team at Sydney Water going forward over the next few years.

MR DAVIES: Always is.

COMMISSIONER MADDEN: So next I'd like to call Roger Woodward. Roger has asked to make a short statement, and he's from Hornsby.

MR WOODWARD: I certainly am. I'd like to first thank Sydney Water. They actually allowed me to do an inspection of one of their water - wastewater treatment plants. I was the - an independent candidate in the 2016 federal election for Berowra, and the Hawkesbury River actually forms part of the northern boundary of the Berowra electorate. To really understand water you actually need to have a look at a topographic map, because once you start understanding the structure of the area that you live in and the people live in, you start to get a better understanding of what's possible and what needs to be done as far as the planning and design and ultimate solutions.

My grandfather actually owned a poultry farm up at Mount Kuring-gai, and that was back in the 19 - late 1940s, and there was a lot of discussions going on then between the commercial fishermen and my grandfather about the nutrients that were going to flow into the Hawkesbury River. So these are to new questions, and it then continued forward into the 1970s when we started to introduce high-rise or multi-storey apartment blocks in the Hornsby area. Now we're actually seeing it go a step further, with much higher housing density, which brings in some of those issues as far as nutrients and what that impact is going to be. I'm extremely pleased to hear some of the comments that I have heard from Sydney Water this

afternoon, because a lot of those issues were what was raised with me when I was door knocking.

I'm actually one of those people that believes we should have a national riparian buffer to protect our waterways, and particularly our rivers. We've seen that work extremely well in Western Australia with the Swan River. It's one of those areas where water is critical, and we're actually seeing a really great result where people can go fishing straight onto the waterway, whereas when you go overseas and you see these built up concrete culverts and areas where they've simply dumped waste or - wastewater or other contaminants, they've effectively killed the river. The Hawkesbury River is very special to many people, myself included, and in fact, from an Aboriginal perspective a lot of the totems as based around that river way, so it's incredibly important and significant, and you'll find people get really emotional, and I really do appreciate Sydney Water sitting down and talking to people and listening to their concerns.

The water quality, to me, is critical, not only from a business perspective; we have commercial fishing in the area, we have oyster leases which have been devastated by the ponds and the POMS and the QX disease, and so it's not only about the income going forward, it's fourth and fifth generation commercial fishermen and oyster farmers that have been wiped out, and again, you will - until you actually speak and see people's faces, you don't know the impact that these sort of policies have. I am a little bit concerned with the concept of trading, you know, what's good in one area against, "Well, we'll just make the pollution available in another". I understand the economic rationalism for it, but it's not the solution for my community. We need to get it right everywhere.

As far as, you know, the use of the Hawkesbury River, there's no only commercial fishing, there's the tourism, there's the recreation and also just the desire of more people, as the density increases, to get out onto the water. It is a balance, but if you can't make it work for everyone, you'll find people will get more and more agitated, and when the people in the Berowra electorate get agitated they write a lot of letters. It's a great area to live, and I've been there all my life. The housing density has raised some really challenges, and I'll come back to that. As far as the boundary for the Sydney development is concerned, it actually runs along the Old Northern Road, and again, if you look at a map you'll see that's where the ridgeline is. I can actually understand now why they're saying, "Well, this side of that ridgeline will be for the park type development, whereas the other side of the ridgeline is going to be for the water development, whereas when I was looking at it, it seemed to me to be quite an arbitrary allocation of where that division was, and I actually have a better understanding of why it's been done now.

I'm glad to see that commitment is going in to the Hawkesbury River. I think it is actually a really great area to do some modelling. I acknowledge the work that's been undertaken in the ACT where they're doing the excavation and building to protect the waterways before it actually gets there, and to Hornsby Council's credit they did adopt one of my suggestions about putting in these sort of filtration traps, and we're now actually starting to see frogs in the areas that flow into the creeks, into the Hawkesbury River. The ecosystems will recover, but it does mean we've got to spend the money, and if you spend the money, then we're going to be much better off in the long-term.

I'll come to the funding a little bit later on, because I am also a chartered accountant, and I'm a member of the sustainability discussion group for Chartered Accountants Australia and

New Zealand, so traditionally what we, as chartered accountants do, is we talk to our constituent body and they make representations on our behalf. I got a little bit frustrated this time and decided I'd run for parliament. The ability to use the Hawkesbury River, I think and do this type of modelling, I think, will really have benefits for Australia. My brother lives in regional New South Wales, and they certainly suffered with the drought, and I actually believe that concept of a national riparian buffer would equally apply to some of our inland rivers as well as the rivers in northern Queensland. The pushback you obviously get is access to the water for the farmers and the graziers, but at the end of the day they don't have a long-term business unless it is sustainable, and they understand that.

I think you would miss an opportunity if you don't travel up to the Northern Territory and speak to some of the custodians of the land in that area, where they're dealing with the billabongs and the waterways, and if you can actually get them to talk to you about what their issues are you'll learn so much more that you can transfer back into our area. We've only, just now, in the Berowra or Hornsby area, started to introduce patch-like burning of the bush so that we can actually mitigate the risk, not only of the bushfires, with the potential impacts on the environment, but also it gives the opportunity for the animals to move from area to area, and that's just, you know - it's taken us 200-odd years to listen to what the Aboriginals were doing well before we got here, and it just makes sense when you look at it from that point of view, whereas a lot of our history comes from the Anglo environment where they have plenty of water. You cleared the land, you grew the crops, you let it settle over winter, and that's what they've tried to do here in Australia.

We don't have the depth of the soil to do that, we have fast flowing runoff, and we have huge sandstone areas underneath the ground that actually act as a filter. So traditionally this water has been purified as it gets down to the Hawkesbury River, and we're losing that to some extend because, yes, we have applied some really great infrastructure, and I hear the comments about the \$3 billion new Capex, but we also have very large repairs and maintenance that hasn't been done because people don't see it. If we have this water quality monitoring in place, I think that would enable a lot more date to provide evidence that this maintenance work needs to be done, and I would encourage people to start thinking about using the river system and the creeks kind of like the Internet of things, using buoys or monitoring equipment to gauge water quality and those sort of issues, because the more data you have the easier it is for me to get up and argue that something needs to be done.

I heard some comments earlier on about accounting standards. We actually - we as in the chartered accountants - we actually were in touch with government, and they introduced an Australian water accounting standard, and that's actually managed by the Bureau of Meteorology. It doesn't get us all the way there, but is was one way of introducing a system that started the measurement of water, and I'm a chartered accountant, so I like to measure things and, you know, that's just part of what we do. As far as actually introducing an accounting standard that requires companies and businesses to report, that's actually the responsibility of the Australian Accounting Standards Board. I've made representations to them on that issue for CO₂ emissions and use of water. That hasn't occurred at this stage, and often the response you get is that that's commercially sensitive information, but it's something that either has to be mandated or it's not going to happen.

But what the market has done is rely on what we call sustainability reporting, and that has driven - sorry, it doesn't form part of your financial statements, but it is a separate report that

deals with these issues, and when large listed corporations on the stock exchange then turn around to seek funding, it's those companies that can provide a sustainability report that get cheaper funding. So it's all driven by the information that is relevant to the people providing the capital. We haven't got there yet as far as, you now, companies that aren't listed on the stock exchange, and I know that information is only anecdotal, but it certainly has an impact, because large listed corporations don't prepare those reports unless they get a benefit, and the benefit they get is cheaper - the cheaper cost of capital.

I think we also need to start considering manufacturing water. I've heard the comments that were made in relation to South Creek, and there's only going to be so much water available for that area, and I think some sort of analysis needs to be done that, okay, if we're not going to get enough water out of the Warragamba Dam then maybe we do need to start considering pumping water to that area using manufactured water, and a simple - well, simple - nothing is every simple when it comes to water, but an analysis of what it would cost and what the impact would be, would meet that definition of cost benefit from my perspective. I'm a big supporter of water pipelines. I think if we can develop a national grid of gas pipelines, then water pipelines should be a no brainer. It just gives us that ability to use the same type of technology, i.e. a big pipe, and move water around to where it's needed.

I know there is a cost involved, and I have a real interest in knowing what it would cost to manufacture water in Queensland, take it to the Wivenhoe Dam, and ship it down through the south Darling, or top that area as well, and I think when you start looking at the amount of water that is drawn out for cotton manufacture, and the cost that applies to that water, it should be treated as a business, and the cost of manufacturing the water, whether it is actually done or a calculated cost, would be a better determinant of the market of that cotton, and what price should be charged, and if they can't - if that doesn't meet the cost of the infrastructure, then that cost can actually be used to improve the system itself.

As an accountant, the sustainability accounting - we simply don't want to repeat the same mistakes that we can see in Europe where they've concreting everything. We don't want to repeat the mistakes in the US where they just treat it as a dumping ground. It's going to cost money now, but it will actually improve how we live in the 21st Century. When it comes to the harmonisation, that's always a difficult issue, but we had exactly the same problem with the corporations law for each state, and so what they did was they got a bunch of the treasurers together and they came up with a compromise, and we have - now have national legislation for the corporations law. So it can be done; it's not easy, and it requires political will. If you have any other questions - well, any questions.

COMMISSIONER MADDEN: Thank you, Roger. Particularly in the water industry in the urban sector it's always good to have consumer/community perspective, because we often deal directly with utilities as opposed to customers, which is a little bit different in the rural sector, where irrigators are more than happy to come meetings like this. Jane, do you have any questions

COMMISSIONER DOOLAN: Not really, but it was excellent to get an external perspective on the issues that were raised in Hornsby from Sydney Water, and just to, I suppose, get that almost validation of some of those issues.

MR WOODWARD: And I really - I mean that. It was really good to be able to, as an independent candidate, to just sort of ring up and say, "Look, can I go along?", and they said,

"Well yes, you can", made the time to actually show me around, and then quite readily explain, "Well look, if the building is constructed on this side of the ridgeline the water is going to flow into the Hawkesbury River, and if it's on the other side of the ridgeline it's going to flow into the big wastewater treatment plant and be shipped offshore, and that's why we now have such pristine coastal beaches. So my challenge to you is make the Hawkesbury River as pristine as what our beaches are.

COMMISSIONER MADDEN: Thank you, Roger.

MR WOODWARD: Thank you very much for the opportunity.

COMMISSIONER MADDEN: So just before we conclude, is there anyone else who would like to appear today before the Commission?

MS PICKERING: I might just make some brief points.

COMMISSIONER MADDEN: Yes. If you'd like to come forward and introduce yourself.

MS PICKERING: Thank you. I'm Lyndall Pickering, representing the Greater Sydney Commission, and I thought it would be useful to make some comments today, because we've heard a lot, I guess, about the burning platforms and the imperatives of both population growth and climate change, and the role of the Greater Sydney Commission is to lead the coordinated planning for Greater Sydney, and the GSC vision for a sustainable, productive, and liveable, Greater Sydney is set out in our draft district plans and regional plans, and because I've taken a place based approach to that planning, water is really central to the achievement of that vision of sustainability, productivity, and liveability.

It was obviously through the development of our plans and the vision set out by the Greater Sydney Commission that the role of urban water services has obviously underpinned the development of Sydney to date, but it really needs to be much broader benefits need to be achieved through the management of water and the planning of water in the future. I guess it's also important to make the point that, with the scale of population growth, and, sort of, as our cities inspire and grow and actually expand to new boundaries in the urban fringe, that the greater benefits that can be achieved from broader water management and a more integrated approach to water management and land use planning aren't really just about customer preferences. It's really almost an essential underpinning of those cities being able to the vision.

So I think sometimes maybe the term of customer preferences implies it's a bit of a whim, or a little bit of a "nice to have", whereas we really see that more sophisticated water management is actually essential to being able to have our cities functioning and productive in the future. Having said that, because - as the Greater Sydney Commissions role in setting the broader visions for land use planning and water, we can see that there is the potential for some misalignment between government setting objectives for planning and the delivery of many of the water objectives being achieved by the urban water sector, which is sort of separate and regulated in a somewhat different manner, and as Kaia pointed out, there is a very strong role for collaboration in the short-term, but in the longer term, yes, we agree that a statement of sort of national principles, or codification of those broader benefits that can be achieved from water would be a really useful thing.

I guess I would like to allude to the South Creek catchment as well, because that's a really important area for the Greater Sydney Commission, and the objectives we see there are both

about the liveability benefits and ensuring that the development of that parkland city means that more people can have access to the amenity that's created by water services and the restoration of natural creek systems, as well as the improvement in water quality. Once again, that encompasses a range of benefits, and I think it also brings to the fore that in the development of those greenfield areas it's so important to have water considered in - at the very start of that land use planning, otherwise the options for cost effective water cycle management may actually be ruled out, because if you're certain land use decisions it may mean that there is - you might be reverting back to more traditional pipes and - pumps and pipes method of water service provision, so that those extra benefits can't be gleaned, and I guess that's some of the difficulties in achieving some of the broader benefits when you're retrofitting existing pipes of the city as well.

So that's probably the core of my comments at the moment, especially given our time, but happy to take any questions that you may have.

COMMISSIONER MADDEN: All right, thank you. It was Linda?

MS PICKERING: Lyndall.

COMMISSIONER MADDEN: Lyndall, sorry. Yes.

MS PICKERING: Yes. Do you need me to provide my details?

COMMISSIONER MADDEN: Yes. We can do that after.

MS PICKERING: Okay.

COMMISSIONER MADDEN: I guess I've got a similar question, and given that the role of the Greater Sydney Commission is relatively new - that might be a good thing, that perspective of coming in.

MS PICKERING: Yes.

COMMISSIONER MADDEN: And you actually would see the diversity in different areas.

MS PICKERING: Yes.

COMMISSIONER MADDEN: Do you see different developments given different local government areas emphasis? I mean, do you see it heading differently? What actually kind of sets things on track, from your perspective, as opposed to where there might be gaps or nothing happening? I just wonder if that kind of helicopter view, whether you can kind of comment on, not the specific areas, but just what are the elements that you actually see that actually lead to that collaboration working.

MS PICKERING: In some areas Greater Sydney Commission - I mean obviously the collaboration can be set by setting those broader objectives, which has enabled a bunch of multiple players to work together for common objectives, which is really useful, although we still have the problem of, you know, disparate parts of the water industry to the land development industry working together, and in some areas the Greater Sydney Commission is trying new forms to improve collaboration, so the identification of collaboration areas, such as Randwick, or Liverpool, or Penrith, to actually bring more players together in a room and enable them to actually identify some of those solutions and some of the coordinated investment that might be needed leverage off existing infrastructure and achieve some of

those productivity and liveability and sustainability objectives. So I guess in that way the Commission has taken the role of a broker and a leader to improve collaboration.

COMMISSIONER MADDEN: Yes.

MS PICKERING: That is a fairly new process though, so we haven't, I guess, seen the results. I mean, it's encouraging to see everyone is keen to participate, but in terms of actually how that's going to influence investment and what the outcomes of that investment will be, that still fairly new, and the other process Kaia also mentioned is the idea of that Growth Infrastructure Compact, which is being trialled in some high growth areas at the moment. But once again, that's a fairly long-term sort of approach, looking at what the existing capacity is now and what the needs of future customers might be.

COMMISSIONER DOOLAN: Given your job, you take that helicopter view, and I'm from Melbourne so I don't know it as well, but who does pay for growth? I mean, is that something that the Greater Sydney Commission is actually grappling with? Or are you working with the existing suite of responsibilities and the existing flows of income?

MS PICKERING: At the moment we're working within the existing constraints, or the existing mechanisms that are available.

COMMISSIONER DOOLAN: Yes.

MS PICKERING: Though I did note your comments before about, you know, who the beneficiaries are and who should pay. Obviously its plan is, in some ways, of taking the proxy of future generations.

COMMISSIONER DOOLAN: Yes.

MS PICKERING: And so what we might set out as our vision may in some ways imply a different investment than sort of business as usual, but clearly we're taking into account that the beneficiaries of that will be the future population of Sydney. But I think, thinking about the funding is an important future consideration, and through mechanism such as the City Deal as well, like looking at, you know, how the infrastructure to underpin growth can actually be done better or differently, but that process is still in negotiation between the state's - the local councils and the federal government.

COMMISSIONER DOOLAN: All right. Thank you.

COMMISSIONER MADDEN: Thank you. Okay, thank you very much for your attendance today and contributions from those who appeared. I'd like to adjourn these proceedings, and the Commission will resume its public hearings next week.

MATTER ADJOURNED

[12.22 pm]