Australian Government

Productivity Commission

PRODUCTIVITY COMMISSION'S NATIONAL WATER REFORM 2020 INQUIRY WEBINAR

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MS WILL: Hi everyone. I will just wait a minute or so before starting proceedings as people are still heading into the webinar. Good afternoon everyone and thank you for joining us. My name is Lou Will and I lead the staff team working on the Commission's National Water Reform Inquiry. In a moment, I will hand over to Michael Brennan, chairman of the Commission, who is going to introduce our work and today's presenters, Commissioners Jane Doolan and Drew Collins. Jane and Drew are going to talk for about 40 minutes and then take questions. Could you please post your questions using the Q&A function at the bottom of the screen? You can also use the thumbs up icon in that function to vote questions posed by others that you would particularly like Jane and Drew to answer. I will relay your questions to them and we may not have time to get through everybody's questions today, so I will focus first on those questions that have the most up votes. Thanks again for coming along and I will hand over to you now, Michael.

MR BRENNAN: Thank you very much, Lou. I'd like to start by acknowledging the traditional owners of the lands on which we meet and which we are all respectively assembled today and pay my respects to elders past and present. Secondly, to welcome everybody to our webinar on National Water Reform. As you know, this follows on from our draft report which combines the tri-annual assessment of the National Water Initiative with some advice also about future directions for water policy reform. For us as the Productivity Commission, this is our second tri-annual assessment and along with our five-yearly assessment of the Murray Darling Basin plan, it kind of is the assembled water functions that the PC has, in addition to which as many of you know, we undertake some research including the recent piece which we did on integrated water cycle management that we put out in 2020.

These things reflect that we take very seriously the responsibilities that we have in the water sector that we received from the National Water Commission some years ago. We think that they have got significant policy importance as the draft report bears out. There are also interesting issues and we enjoy them greatly, but we have always been at pains to ensure that we maintain capability and that we take the policy responsibilities we have that we receive from the NWC very seriously. So it's with great pleasure today, I am going to introduce the two authors, primary authors, along with Lou, the Commissioners who oversaw the work of this draft report.

So Jane Doolan who is the Environment Commissioner at the PC who brings a very extensive background in natural resource management and environment policy, having been a senior official at the state government level; also a former member of the National Water Commission. And Drew Collins who was the Associate Commissioner on this project, so somebody that we brought in for his particular expertise, given Drew's significant background in resource economics including in places like ABARE, his intellectual grunt which he

started off with his time at the University of New England. So without further ado, I am going to hand over to Jane and then over to Drew to talk a bit about the draft report. Of course, the point of a draft report is to elicit feedback, views and ultimately submissions from stakeholders, so thank you very much for being a part of today and we anticipate a vigorous exchange and plenty of feedback after this. Thank you.

MS DOOLAN: Thank you so much, Michael. So what we are planning to do today is go through the context, approach, the outputs of this inquiry, the case for change and what we feel a new National Water Initiative needs to deal with and a bit of an overview but not all of a dive into our findings and drafted advice. So just in terms of context, I thought we would remind you of what the National Water Initiative actually was. So it's a national blueprint for water reform. It was agreed by all state, territory and the Commonwealth government in 2004. It's actually an extension of the 1994 first National Water Reform framework that again all governments agreed to.

Its goal is to increase productivity and efficiency of Australia's water use, service rural and urban communities and ensure the health of ground water and river systems. Now, basically all governments agreed to that, it's a blueprint but they are all then dealing with those at their pace of reform and under their own legislation. The NWI also, as does its predecessor COAG, had an inbuilt independent review of progress. A COAG agenda was assessed by the National Competition Council. The National Water Commission assessed NWI and that is the function that passed to us.

So with this goal, the NWI had eight elements, so with each of this, they had policy directions, they had actions and they had principles that were all agreed to. Access entitlements, water planning frameworks, setting up water markets, facilitating trading, integrating management in environmental water, resource accounting, pricing and water reform knowledge capacity building community partnerships. The goal of NWI was actually meant to be achieved through action in each of these key eight elements. Now, as Michael mentioned, we inherited that function when the National Water Commission closed to look at inquiries and assess the progress. In 2017, as he said, we did our first one and we made a recommendation to governments that they renew the NWI.

In 2019, basically the Federal Government accepted that recommendation and has started that process. So for 2020, the review that you are seeing now, it's a brilliant opportunity to provide advice and detailed advice into that renewal process. That's the opportunity that if you like, we hope you've sort of grasped with two hands in this report and certainly one that we are really encouraging feedback on. Our terms of reference were to assess progress as we are required under the Act, to look at the NWI and look at how adequate it is to meet future challenges like climate change; specifically to look at water services in

regional remote communities, provide some principles for government investment and specifically to provide practical advice into that renewal process.

When we do this, it is about the National Water Reform agenda. It is not to be confused with the implementation of the basin plan which does get a lot of attention and there's a lot of controversy around it. We do look at that. We did it firstly in 2018 and we will be doing it again in 2023, but the relationship between this inquiry and the MDB is more we have looked to where best practice has evolved in the Murray Darling Basin, or to where there has been issues that have arisen that basically we could take lessons, lessons that could be applied to the rest of the country. So our dates, what happened, our terms of reference were released in May last year and we released an Issues paper soon after. We got submissions due in August, jurisdictions provided their information on activities they had undertaken in September, a draft report was released a couple of weeks ago, we are looking to see submissions in March and public hearings and we are looking to submit a final report to government in June 2021.

In crafting our report, we have drawn on everything we could think of, really. What we heard in the submissions and we got 109 of them; we undertook formal consultations, at least 57; the findings from assessments from the NWC as well as our own; 17 years of experience within the sector since NWI was signed; and then other developments and reviews and what governments have been doing, so things like Closing the Gap, in the MDB, there has been the ACCC review, Sefton review and others. Then just looking and touching on the relationship between NWI and the Murray Darling, NWI mark 1, a lot of the actions related to setting up water trading, dealing with over allocation in the Murray Darling Basin.

We recognise now that the Murray Darling Basin is now governed by Commonwealth Water Act, which came in in 2007 and the Basin Plan in 2012. Whilst arrangements in the MDB will need to be consistent with national policy, they will no longer – and NWI will no longer govern what happens there. It has got its own institutional arrangements, so the renewed NWI has the capacity to be truly national here and provide real consistent overview to all areas of Australia. So what have we provided? As required, we have provided an assessment of jurisdictional process against the NWI. We have provided what we considered to be practical advice into that process of NWI renewal around the vision, the goals, objectives, the elements of the NWI or what a new one could look like, the architecture around it, the governance and implementation arrangements and then for each of the elements, we have actually provided specific policy directions and principles that we feel a new NWI should really deal with.

All through that, and we will get to it in more detail, it really reflects the need and the imperative to deal with the challenges that are coming, or that we find ourselves in now, really. The challenges of climate change and it really looks at, "Well, how do we deal with that?" We need to know how to contend with drought, we need to be able to adapt to a changing baseline with a high level of uncertainty around it. And we need jurisdictions to be able to adopt fit-for-purpose management approaches that reflect where they are in their level of development and their level of water resource management. So as we said, we have avoided MDB-specific issues, but we have looked for best practice and we have looked for lessons learnt, where it is going to be useful to raise them to a national standard.

The broad message coming through is, I suppose, in our deliberations but also in all the feedback, much of the foundations of the NWI are really sound. We have built so much on those foundations. They need to be maintained and recommitted to, but it's 17 years old and it needs a major revamp to enable it to provide guidance for communities to deal with the challenges that are coming forward. So in terms of our inquiry outputs, there is an assessment. There is a document that is the assessment against the current NWI. There's the draft report. Now, I would have to tell you for those of you who don't read PC reports on a regular basis, this is a departure for us, this is a much shorter report than you would normally find. What it does is in many areas summarise the work that is in supporting papers.

There are 10 supporting papers, so if you are interested in a particular area, I would encourage you to go to the supporting paper where the rationale, the submission analysis is all undertaken and the analysis is undertaken there. Okay, in terms of the assessment findings, so overall, jurisdictions after 17 years of working on the NWI, they have largely achieved most of the commitments they made back in 2004. At least two thirds of all of the sub-elements are assessed by us as being largely or fully achieved. There is some unfinished business in the areas of independent economic regulation, provision of safe drinking water in some areas, particularly in improving engagement with Aboriginal and Torres Strait Islander people, some unfinished business that still needs to be picked up and what we saw it since the NWI was signed, we had the depths of the Millennium Drought and more recent droughts and they have exposed weaknesses and gaps in some of the original arrangements within the NWI as well.

All of those implementations has actually provided significant benefits for the country overall. So we now have with water planning transparent processes for water allocation; transparent ways of dealing with and setting the balance between consumptive use and environmental use set on the basis of good community engagement and best available information. We now have clear and secure property rights for all entitlement holders and they are valuable

assets in their own right. For example, the entitlements in the Southern Murray Darling Basin are now valued at over $26 billion, so they are assets, they provide collateral for loans. The setting of caps, the establishment of good entitlement processes has helped drive trading and the establishment of water markets and it has helped water move to its highest value yet. That in itself has improved and provided drivers for improved efficiency and it has provided tools for allowing entitlement holders to manage their businesses and provide more options for them.

We have markets across Australia; you might mostly have heard of the Murray Darling Basin one but across Australia, we have them and they generate something like $5.2 billion in turnover, at least in 2018-19. That whole establishment of those markets has driven increases in the value of irrigated agriculture across the country. The provision of water for the environment has firstly, in a whole lot of areas, stopped condition worsening but in others where there has been recovery of water for the environment, it has improved environmental condition in many areas and with that improvement, there has been significant cultural and social benefits starting to emerge as well.

The introduction of cost-reflective consumption-based pricing has both increased water use efficiency across the country, but it has led to a more financially sustainable industry as well, reducing reliance on government subsidies, and the whole independent economic regulation, the benchmarking of performance, the reporting on how utilities provide their services has provided outcomes, or improved outcomes, for customers. So if you sort of look at the evolution from COAG in 94 and NWI in 2004 and all the key foundations that have been established, they have actually provided great benefits to the country overall, but it is 17 years old and as we said, most of the commitments that jurisdictions made, they have met.

There has now been 17 years of experience. There has been all of the experiences in the MDB and if we look forward, it is no longer fit for purpose. It does not provide the guidance for communities, for managers to actually meet the challenges that we are likely to encounter in the next decade also. So let's just go through some of those. We have seen drought. As I've said, we have seen the Millennium Drought or at least the depths of it since the NWI was signed. We have also seen more recently in eastern Australia really significant drought, and with drought, we have seen the environmental impacts, we saw fish kills in the Darling, we have seen water carting in towns all across New South Wales, we have seen the costs of providing emergency relief, and we have seen impacts on farmers as well, so we know that droughts can be extremely painful for all.

We have also had a look, though; droughts are a symptom to some extent of a drying climate as well. They will always occur but if we look across the

country, the last 20 years have been drier than the historical record. In Perth over the last 40 years, there has been a decrease of about 70 per cent in inflows, and what we have seen is their storages, that in 1970 provided about 70 per cent of Perth water's supply are now opportunistic supplies. They are not used as base supplies for Perth any more. They can't be relied on. In southern Victoria, for example, over the last 15 years, there has been a reduction of about 15 to 20-odd percent in inflows in southern Victoria. At the River Murray, we have seen, again, over the last 20 years, inflows have been just over half for long-term average. So across the country, we have experienced drying and we have seen significant and severe drought over the last 20-odd years.

The projections for the future are much of the same, so these are the climate change predictions. They are predicting that for most of Australia, there will be a reduction in the annual rainfall, an increase in evapotranspiration and taking those two things together, a significant reduction, again, for most of the country in mean annual runoff. Look here at the south-western side, up to 54 per cent. In southern Murray Darling in Victoria, potentially around 20 per cent. Effectively, the future that we have to plan for for most of the country is one of a drying climate with more severe, more frequent droughts and extreme events.

That's not all. So we look at demand alongside of this as well and notwithstanding COVID, if we look at population growth, we are looking to see potentially an additional 11 million people in capital cities across Australia by 2050 with most of those in Sydney and Melbourne. And since the Millennium Drought and with increasing population, people are becoming much more aware of the need to have liveable cities, particularly as those cities grow. Liveability encompasses amenity. Green open space and water in the landscape and there are additional demands for water. So we have to factor that in and it has become even more important during the COVID experience when people were using and appreciating their parks during lockdowns.

We have also seen an evolution in traditional owner aspirations for both access to water and influencing water decision making, and not only, if you like, have their aspirations involved but there has been significant commitments being made recently by all governments. Last year governments signed Closing the Gap and that has two key implications for the National Water Initiative. One is the way it deals with and engages traditional owners. There is a commitment there to co-design policies that influence traditional owner lives. And secondly, it has got two target areas directly related to water, access to fresh water systems and service provision. So new NWI has to really embrace and meet those commitments under Closing the Gap.

Finally, the last three years have been one of – what shall we say, shock after

shock. We have had bushfires, extensive bushfires which had short-term implications for water supply for many rural areas but will have long-term implications for water resources in the decades to come, and we have also had COVID and COVID showed up some vulnerabilities in how we supply water and some of the supply chains for water as well. Effectively, we believe a new NWI really needs to provide the blueprint, the guidance to allow communities and industries and environmental managers proactively to think about and learn to deal with and cope better with drought and adapt to this changing climate baseline under greater uncertainty. It has got to be the theme and where the new NWI should take us.

Some of our findings and advice; we have looked, then, at the actual structure of the NWI and basically its goals and its objectives and we feel the goal with a few changes would still become quite current, so yes, increase the productivity and efficiency of Australia's water use; service the changing needs of urban and rural and remote communities; ensure the health of our groundwater systems and our river systems and their surrounding landscapes, but whilst recognising and adapting to a change in climate, and in doing this, we need to acknowledge the importance of water in the lives of Aboriginal and Torres Strait Islander people.

We went and we looked at all of the objectives and we feel a number of them, all of them need, if you like, tweaking and bringing up to date and really getting those themes running through them, but there's areas where there are no objectives and they need to be included, so traditional owners and the influence of traditional owners in water management needs to be lifted and recognised as important as a key objective of a new NWI. An NWI mark 1 was mostly about water resource management but as we look forward, water management will continue to be crucial but the quality and the way we provide our services to community is also going to be really critical, so we believe there needs to be a big emphasis on service provision as well, and again, acknowledging the importance of safe and reliable drinking water, integrating water supplies in cities.

I would refer you to the document to look at how our suggestions on actual words for this, but we actually believe that it is important to get the objectives of a national framework a new blueprint right. Then we have looked at the elements, the eight elements – you know, they are the key issues and areas that water management needs to deal with so we suggest retaining most of them but we add two extra; traditional owner interests and a new one on new infrastructure development. In a number of these areas, they are all, we have suggested, changes but some of them like entitlements, they are minor changes, they are quite good, maintain all those foundations, bring mining in, bring alternative water sources. Markets and trading will be critical in that future that we have described. There's lessons to be learnt from the MDB here but

the fundamentals are there. Same with best practice pricing and the institutional arrangements, but areas like water planning, environmental management, what was water accounting, urban water services, these need major, major enhancements and the traditional owners and new infrastructure.

So we will go through, Drew and I, a little bit about this. I will do water resource management, Drew will cover service provision, but we believe there also needs to be six areas where there are overarching principles that go flow all the way through the objectives and through all of these elements and that is that theme of stronger capacity to cope or contend with drought and adapt to a change in climate noting that all jurisdictions are not at the level of development that we see in the Murray Darling. There are many developing areas across Australia. We need fit-for-purpose management effort where the level of management effort matches the risk to the environment and other users and the degree of regulation does, but as development increases, they also increase. Once again, a commitment to the use of best information in all of these areas and encouragement for continuous improvement in all these areas, a commitment to community engagement in all decision making and then a commitment to helping the community have sufficient water literacy to help them be engaged in a meaningful way.

I will just go and talk very briefly, I hope, sorry, about some of these areas and hand to Drew for the rest. In planning frameworks, for example, there's quite a bit around best practice. It has really evolved and we need to take account of that but one of the really big issues for water planning is now climate change should be dealt with. Water planning is where the balance is set between consumptive and environmental use. The first thing is risk assignment. Current NWI says, "Entitlement holders bear the risk of climate change", and we believe that needs to be maintained. We also, having learnt through drought, water plans really need to understand what you do and how you share water in drought and have you got the best arrangements for sharing a scarce resource in either very low flow conditions or very dry conditions.

That's an important learning from the past. We are going to have more frequent drought, we need to know how we manage these systems in drought. Then we split it into the areas where we have got developed systems where not all the water is currently allocated. Here we are suggesting that you set the consumptive shares based on climate change predictions with a 20 to 30-year timeframe. You set the environmental provision that you need. You set the consumptive and security arrangements that you need and that may be that in the short term, there's a bit of unallocated water and we have made suggestions for how that could be managed. The really tricky one is in the fully developed systems that we have now where virtually every drop of water is allocated now.

Here, we have to really think about how we review these systems knowing that there are entitlement holders in place, that there is investment in place. The current guidelines for water planning suggests that you should review them every 10 years and the current guidelines suggest that you would review the balance every 10 years. We actually think there are two types of reviews in these systems; one where you review within the current balance, and seek to optimise and get better outcomes and you should be doing that. Then where you have got evidence that the climate has shifted and you can't meet objectives, then there's another suite, a rebalancing review, and the key element is here to understand when you need to do that.

So we have put forward some potential triggers, how you might set a trigger that triggers that rebalancing review, and we have asked for feedback on those and ideas, but when you are in a rebalancing review, it is going to be about new objectives, new environmental objectives and new consumptive objectives. So they are serious things. We need to undertake them in a way that does not – as far as possible, does not erode confidence. Okay, traditional owner interests, we have tried to adopt a framework that was developed as part of national cultural flows to get our thinking right and this framework has in some cases, traditional owners want water rights, entitlements, entitlements that enable them to have consumptive use and development and economic development.

In some areas, it is more influence in water management landscapes. Then there's the transformation of the foundations in which we are working. For us, this is Closing the Gap. Closing the Gap and that commitment by governments to co-design a policy. So what we have recommended recognising that is a new element and a new objective, and that the content of that new element in NWI mark 2 is developed by traditional owners, reflecting that Closing the Gap commitment for codesign, and it should reflect the Closing the Gap targets. Now, jurisdictions have set up very recently a Committee of Aboriginal Water Interests to do this, so that's great. We have provided some advice for that committee to consider. So this is a little bit more about traditional owner committees seek cultural outcomes as embracing everything from spiritual outcomes, cultural outcomes, condition of traditional uses and the condition of country through to having water for economic development.

We have split that even though that is not something that they would agree with, but we have split that to enable us to fit those outcomes into the current water allocation management frameworks that we have. So for more traditional outcomes, we see there is a role for far more influence in water management landscapes of traditional owners and that is in the area of water planning, in the area of catchment and landscape management which is around the condition of country and in the area, in areas where there is held environmental water and actually the deployment of that water. Where there are water rights enabled for unconstrained use for economic development

purposes, we believe there needs to be conversations between governments and traditional owner groups to work through what is the best route to economic development for that community and if water entitlements is on that route, then those entitlements should, if government considers that is appropriate, be provided through the existing water allocation frameworks. So in developing systems that can be putting aside water in reserves, and we have seen that in Northern Territory with their strategic Aboriginal reserves, Queensland in their Cape York water plan. But in fully allocated systems, it means going on the market and buying those.

In environmental management, NWI mark 1 was a lot about actually getting legislative recognition for the environment and providing water for the environment, NWI mark 2 and addressing over-allocated systems. NWI needs to continue the work on over-allocated systems but also really ensure that water is managed efficiently and effectively to get agreed outcomes and hopefully work better, and we recognise that for most of Australia, even though you hear about held environmental water in the Murray Darling Basin and in southern Victoria, that's the only place that occurs.

Everywhere else in Australia, environmental provisions are provided by putting constraints on consumptive users. We need to recognise that and make sure that is robust, so clear specifications of outcomes, making sure we know what happens in drought and this is critical. The integration of environmental water management with the broader water way wetland catchment management. You need environmental outcomes and those things are delivered with the integration of water and all the other work, habitat, pest, plant and management, restoration, water quality, and to do that appropriately, you need to have a function and identify responsibility for who is actually looking out for that water way or wetland.

You need effective compliance regimes and processes to adapt. In the complex situations withheld environmental water, then it's more about really aiming for best use, giving those water managers the tools to help that, trying to get more community benefits, cultural benefits and social benefits where they are compatible with achieving environmental outcomes and increasing the independence and getting independent audits. Finally for me, the last area that I want to talk about is NWI have water accounting as a key area of transparency. We think recent events in the Murray Darling Basin has actually shown water accounting on its own is not enough.

What we really need is for community and entitlement holders to have confidence in the integrity of the system that is being managed, and there is several elements to that. Firstly, we need to know that water users are demonstrating – complying with their obligations and that is fit-for-purpose metering and measurement of interception and water registers and importantly,

compliance and enforcement. All of that tied together to demonstrate that yes, entitlement holders are complying and we know they are. In highly developed systems which is the Murray Darling but not only that, we have also seen system managers need to demonstrate to entitlement holders in the community they are managing that system to best effect.

So that is actually getting more knowledge and out there and transparency about the flows that are the in the system, the losses, where the accounting is, where is the water, so that investors and entitlement holders can have real confidence in that. Those two things then come against this broader background which has been pointed in numerous reviews of the need to increase water literacy, to provide information to the community to help them understand, help them engage and engage in a more meaningful way. So that's a brief run through. Drew, I will hand to you. You're on mute.

MR COLLINS: I keep on getting caught, even after a year of this. Thanks, Jane. We are proposing three elements under water services provision. The first of those is pricing and institutional arrangements which is a current element under the NWI. We are largely recommending that the principles contained there be retained but we have made some recommendations to clarify how those principles can be applied in a more fit-for-purpose manner across the diversity of situations and utilities we see across the country.

The second element is urban water services. This element, we are recommending a major enhancement to currently what is in the NWI and that is needed to both improve application to current but also to position the sector for the challenges that Jane went through; the drying climate, more extremes, population growth, some 11 million additional people in our capital cities and changing community expectations for the blue infrastructure, green infrastructure. So for those utilities to provide the services and security the communities want, we provided advice to promote doing so in a way that will be aligned with community preferences and at lowest cost.

Now, that is going to necessitate some significant changes in planning, best practice planning such as integrating, water supply, waste water and storm water management. It is going to require a commitment to all options on the table. In some instances, the next best option may be a non-infrastructure option. It might be a transfer of water from a different sector. It may well be demand management. Not always will it be concrete and pipes. There needs to be an alignment of planning objectives and service delivery and to do that, commensurate with the community's willingness to pay. So on a community-by-community basis, what is the appetite for paying to limit the frequency and severity of water restrictions to provide greater water in their environment? So to align delivery with community expectations and willingness to pay.

Water planning needs to be linked with land use planning and across scales, particularly the integration of local and regional scales. We also spent some time in the report talking about economic oversight and that it needs to be tailored for the circumstances. We strongly believe that formal economic regulation is required for the larger metropolitan utilities and indeed needs to be extended in a few situations where that is currently not happening. For the smaller utilities which are often managed by councils, we need a wider cut oversight, so at a minimum, we believe there needs to be reporting and benchmarking of service delivery and pricing and promote the benefits of competition by comparison. We also believe it's very important that the utility finances are ring fenced from the finances of the broader council to allow for auditing and to prevent decision making which isn't in the best interest of efficiency and effectiveness.

If you could turn to the next one, please, Jane. The third area is in relation to new infrastructure development. There are some principles in the existing National Water Initiative on new infrastructure and that are the principles that new infrastructure should be only pursued where it is economically viable, where it is ecologically sustainable and there should be full costs recovery from users. So we believe we need to a recommitment to those principles but also we have provided advice on how those principles can be applied again against the diversity situations across the country.

We have also suggested adding a new principle that planning processes for developments be culturally responsive and we are really seeking feedback from stakeholders such as yourselves on the appropriateness of that principle, whether application of that principle would be an effective way to ensure there is deep engagement with traditional owners and that it does serve to protect cultural assets. As Jane has mentioned, we have also suggested that where there is a new development and there will be new entitlements created through that development, the governments give consideration of allocating entitlements to traditional owners. That may be to compensate for the impacts of the development or it may be to progress governments objectives providing for cultural and economic use of water.

In addition to criteria for good investment, we have considered the situations where government funding is provided to support that investment. We have recommended that the government's role is not to subsidise private industry. The government's role is to promote broader public good benefits and there needs to be a strong public interest test to that effect. In our report, we have identified that for many infrastructure projects in the pipeline, there hasn't been transparent project assessment as business cases are not in the public arena or some of the details of those assessments are not in the public arena and in many situations, it appears all options have not been on the table, so there are a

number of projects where it appears a narrow range of options have been looked at and some of those options may well provide far cheaper solutions to the objectives of the investment, so again, that's just good criteria across all areas of government and certainly we need that in the water sector.

We have also seen an increase in interest by governments to invest in water infrastructure to promote regional development objectives. Where that is the primary or significant criteria for that investment, governments need to ensure that that investment is consistent with good regional development planning, that water infrastructure is indeed the best way to promote development and provide jobs for that community. A blind build-it-and-they-will-come approach will not serve the community well and it will certainly not serve tax payers well. Thanks, Jane. Just in wrapping up, I will just indicate some of the next steps in our inquiry.

Submissions are due on 24 March and shortly after that, we will be undertaking public hearings from 29 to 31 March. We will be looking to take the information provided in submissions and public hearings, rework our draft report and provide a final report to government hopefully by the end of June. If people are unsure as how to make a submission or the details to the public hearings, please have a look on our website, the address is shown on the slide and that will give you all of the information you need. So with that, I think I will hand back to Lou for the broader question and answer section.

MS WILL: Thanks Drew, and thanks Jane. Okay, we have quite a few questions. Thank you, everybody, and please feel free to continue to add questions and to upvote those that are already on the page. Jane, starting with a question from Michael Stewardson, he asks, "Looking back over the last two decades, how" – it has just disappeared. Hang on, I asked Cordelia to move the questions to answered after I had put them to you but it just disappeared a bit too quickly. So, "Looking back over the last two decades, how are the impacts of extended dry periods being shared between environment and consumptive users? Is there evidence that progress towards sustainable diversion in over-allocated catchments is being set back by climate change?"

MS DOOLAN: That's a good and deep question. Basically I think what we have seen is over the last few years that the early water plans were really aimed at trying to get the balance right on average. We now know that you need to do that but you also need to start really looking at what happens in dry periods, and I think we can point to a few areas where that probably wasn't that clear and then we went into drought and we had arrangements where governments had to suspend plans or deal with unanticipated consequences, so I think what we are suggesting is that really, you need, as you do your water plan, to specifically look at the lowest flows on record that are getting lower and to

make sure that it is understood and agreed how you will share the water and what that means, what is the implication of that water sharing? Have you really thought it through? Now, the question about – which I think is how you put it, Mike, is climate change effectively eroding the benefits of water recovery that we have seen to date? I don't think we can answer that question. It's certainly going to be a question when you get down into the Murray–Darling Basin and when you look at all the water plans that are going to be renewed over the next 10, 20 years, but it certainly is a risk that when we look at the projections for climate change, they are significant.

MS WILL: Thanks, Jane. Carole Hammond makes the observation that, "It's interesting how the language of water planning doesn't seem to integrate with land use planning and the scope for partnerships and integrated planning in this space, and it would be good if that could be explored". Would either of you or both of you like to comment on that observation?

MS DOOLAN: I'm happy to give that a go, Drew, unless you want to? Because it pertains to the research project that we did as well. So this is a good point and a good point across all water planning but it's particularly relevant in urban areas, so I think what we found is if people are really interested in liveability, green space, water in the landscape, you start to integrate storm water management. If you integrate storm water management, that takes you directly into land planning and as Drew mentioned, it's land planning at different time scales and it's land planning at different spatial scales, so it's the big city-shaping scale, then you get to growth corridor scale, and then you get to precinct planning and then you can get further down.

It has got to be at the timeframe where water managers and land planning managers are making the key decisions together, so yes, it's really important that they do integrate and it has been a significant barrier that they haven't and if you look at why they haven't, it's because it's not easy to do and it's two completely different sectors. Different ministers, different legislation, you name it. So these, particularly in the urban areas, it's a massive thing that we actually have to break that barrier down and work out how to make that happen. It's going to be through collaboration but it's going to have to be through quite structured collaboration that deals with the multi time scales and the multi spatial scales. And we have tried to actually look at that in the report and in particular, the research report that we released last year, early last year.

MS WILL: Thanks, Jane. Michael Wheelahan has asked a question and he says, "If the waterway management function needs to be strengthened, what advice do we offer on funding that function?"

MS DOOLAN: So currently, Michael, we are not offering advice on that – what we are saying though, that it is in the public benefit space and that

governments want and need to have environmental outcomes, achieving those environmental outcomes is the integration of catchment landscape management and environmental water management, and you need to know if you are doing that appropriately and we do have varying arrangements across the country, we have quite integrated arrangements in Victoria but that is not common across the nation and it's important – it doesn't all have to be done the same way but it does – it really is important that there is a nominated authority, it doesn't matter which one, which actually has that function to monitor, to input to water planning decisions and to actually be that, if you like, caretaker of water, wetland health and we just feel that looking forward and seeing where we have had failures in droughts, there wasn't one. So we think you need one.

MS WILL: Tony Slatyer has posed a question. He observes that the two kinds of water planning reset that we describe in the report, 1) due to changing societal values and the other to climate change and other exogenous factors overlap, or they will overlap, because the latter influences the former. How do you think that the two can be differentiated and follow different processes?

MS DOOLAN: It is a really good point. I think – if we weren't at the high level of allocation, with the degree of controversy that we have in some of our systems, you could have a mature discussion about that but because in some systems we are there, we do have to think about how we do differentiate, and we have put forward that you could have a trigger, so without that trigger being met, you would actually do the review and do the review set to how do we do this better within the current balance that we have? The triggers that we have put forward for discussion and feedback and if other people have better ideas, we are really open to them because we think that this is a critical issue going forward and one of most interest to the community, but we have put forward it could have hydrologic trigger. At the moment, Victoria has a 15-year review and I gave you the results of that and that says if you've got a substantive reduction in the pool and if that falls disproportionately on the environment, then you need to have a planning system. It doesn't say what you need to get out of that but you need to trigger a plan. That's one. So it's a hydrologic trigger.

You could have an ecological trigger where basically you look to say, "Are we meeting or getting the ecological outcomes that we thought we would have?" in the long term, so it would be to a long-term one. That would be sensible but it's also then – ecological monitoring isn't an easy thing to do and it has got to be long-term and it has got to be funded; there's a whole range of things around that too. So we have put forward at least something that differentiates between the two, a trigger, a trigger that actually says, "There has been a substantive change in either the water resource pool that we have or that we are not achieving the objectives we thought we would", but we are really open to feedback on this and we think it's really important that we do get the ideas out in the community on this because it will be a really significant issue for NWI

mark 2.

MS WILL: Jenny Rogers raises a concern that the ring fencing of costs of water will not take into account the wider social or environmental benefits such as the use of recycled water to maintain green spaces and she asks how the benefits of facilitating urban cooling with the associated mental and physical benefits and water way health be taken into account when weighing up the additional costs that recycled water schemes involve.

MR COLLINS: Can I make a comment there to start with, Jane?

MS DOOLAN: Of course.

MR COLLINS: In part, that plays to the issue that service delivery needs to be tightly tied to community preferences and their willingness to pay, so ensuring that those services are indeed valued and the community is willing to pay for them. We do have issues with some high-cost centres where there are affordability issues and government and those councils by and large might look for help from state governments and other funding sources. The issue is historically that has been done on an ad hoc grant basis. In the future, we are recommending that that be done through clearer community service obligation payments, so the service standards and the benefits that are trying to be sought with that investment are clear, understood and that's what the community needs.

MS DOOLAN: I would just add to that as well, and this also comes out of the research report we did in 2019, we do believe that these new benefits, green spaces, liveability, urban cooling, those sorts of governments do need to provide a bit more guidance on the objectives they are setting and that can be drafted and brought into the community preference debate as well but currently, we have got very clear water supply objectives in urban cities, we have got very clear waste water disposal objectives and arrangements and standards. Governments have got some high level motherhood statements on green space but there is really very little then underneath it and we do think that a bit more in terms of policy objectives from governments crafted on the back of community preferences would then enable the existing processes of economic regulation – it provides much clearer guidance to utilities and local councils about it's an acceptable and sought after and endorsed objective to seek, so we also believe there's a role a bit more for clearer policy.

MS WILL: Okay. Alex Polson has asked about our recommendations for drinking water quality. So research has found that drinking unsafe water, particularly in Aboriginal and Torres Strait Islander communities, he'd like you to talk about your recommendations that we have made to address those sorts of issues. Drew? Mute.

MR COLLINS: Sorry, apologies about that. We are quite mindful that cost of supply can be very high in some of these communities and in part for that reason, we need solutions to be tailored for the situations of those communities. We have observed situations where they have tried to fit a solution for other communities to those situations which have led to high costing servicing et cetera, so certainly identifying the specific needs of those communities and tailoring local solutions, local help is very important. That said, it comes back to clearly identifying the service standard that is being sought. We have recommended that governments need to identify a basic level of service that is safe and reliable and that gives them a threshold in which to assess project proposals. If there are cheaper alternatives then new infrastructures, such as self supplied, then that might be the answer but if there is a distributed supply at a reasonable cost within that affordability, then that's an option for government.

MS WILL: Okay. Next question is from Michael Stewardson who – I've just lost it, sorry. Here we go. He asks about whether we have considered the adequacy of current environmental objectives and he notes that there seems to be an increasing need to be more specific about environment targets and mentions a range of reasons why that might be the case.

MS DOOLAN: I think from our perspective, we would see that it's important that as you do water plans, it's acknowledged that there are trade offs, so more water taken out for consumption is more or less water for the environment – greater environmental risk and more potential environmental damage. What is really important is that they are informed trade offs so that you actually bring the best information on environmental impacts, on economic benefits to the table in that trade off and that having made the trade off, that the outcomes that are anticipated are fully specified. So in terms of the adequacy, well, it's more about if you made an informed trade off, are you getting what you expected to get and being very clear about that. That's what we are acknowledging and I think it's really important that we do acknowledge. There's no magical number here. It is a trade off every time you make it and therefore it's really important that you do have a proper process for that and you do have really good information feeding into that process.

MS WILL: The next question is from Kim Crozier who asks whether we have considered linking the NWI to the sustainable development goals?

MS DOOLAN: That was raised for us in particular in 2017 and we made a specific decision in our inquiry there that we basically have maintained in this one not to do that but we do believe that a new NWI needs to be cross-checked against our commitment to sustainable development goals and made sure that it is the way that as a nation we deliver on our commitments to those. The real

reason for that is that governments really have to own the policies that they bring to the table and implement under the NWI and the sustainable government development goals, they have all signed to but they are a level above, so for us, it's about making sure that NWI meets all of our needs, cross-checking it against the SDGs and is the way that we meet those commitments. Frankly, that's why this time around, we have got a greater emphasis and analysis of drinking water quality in remote communities, because that is a commitment under the SDG and we were not confident that we knew whether we were meeting that or not.

MS WILL: Anne Jensen asks about lessons learnt from water trading to ensure that delivery to a new site can occur without impacts on ecosystems or being beyond the capacity of a system to deliver.

MS DOOLAN: I think this is an area where this is – the experience is in the MDB and it's not elsewhere and it's really more of the lessons learnt from that experience and the lessons learnt from that experience are very much to set the trading rules to manage third party impacts which is the environmental impacts and impacts on other entitlement holders and downstream users and to set those comprehensively. So I think some of the experience that we have seen in the Murray Darling would suggest that, you know, take the Goulburn inter-valley transfer, you know, for those of you who know it. The rules there were set. At the time, understanding what those risks were but not with an eye on the future and what the risks could have evolved to, so I think the lesson for the rest of national policy is that when you set the trading rules, you set them comprehensively and when you look at potential impacts for either the environment or third parties as I've said, you look at the full range and what trading could deliver and what would be risks under, you know, an increased trading regime. I think that would be the lesson learnt. Drew?

MR COLLINS: Yes, that's right. There is scope in some situations to integrate that decision making within the water markets, so we have previously had salinity implications factored into water trading and we have got issues currently with water delivery capacity and we have some irrigation areas actually have delivery shares so you can integrate some of that into your water trading market but much of it on a cost position, that wouldn't be viable so much of it has to be set up in the planning and the broader water market operating as Jane said that needs to be created.

MS WILL: Okay. Jadynne Harvey picks up on the commentary we make in chapter 2 about the important role played by water in promoting liveability and asks whether there is a view that water for liveability is of consumptive use or could it be considered instead an environmental use?

MS DOOLAN: Look, I think it sort of depends, really. In some cases, it

could be an environmental use where it's directly – where the liveability is associated with a natural feature of a wetland or a river, for example, but if we are creating wetlands or if we are, you know, irrigating green open space, then it doesn't meet the legislative requirement for what environmental water is meant to do and it is a consumptive use. The legislative requirements are specified in all the state legislation and they are really about biodiversity and ecological function and so the answer is no. Not unless liveability is associated with that.

MS WILL: John Connell has a question about what we were thinking with our commentary on investment in infrastructure. It's not clear to him whether we would be posing that the NWIDF could be used for infrastructure to improve efficiency, and that could include investment in more efficient irrigations systems. If you could clarify, Drew.

MR COLLINS: Yes, I would be happy to comment on that. I mean, what we are looking for is firstly the funding by government is not subsidised by industries to promote the public goods, so there is a public interest test to start with. Secondly, all options should be on the table and all investment opportunities should be on the table, so certainly, we believe there is scope for government funding to be broadened to include, for example, meeting the critical water security needs of regional towns. You have suggested an extension beyond that to promoting irrigation infrastructure. I mean, at face value that sounds like it's to support private industry and I would think not but if there's a broader rationale, I mean, we're happy to hear that and I think governments would consider that, but firstly, the key points are public interest test and secondly, viability and the other NWI criteria on ecological sustainability full costs recovery.

MS WILL: Thanks, Drew. Marian Neal asks whether we are recommending a national water science strategy?

MS DOOLAN: The answer is no but we are recommending a real commitment to investment in particularly the public good research that backs all of the areas we have talked about today and we have also – knowing that a science strategy is really difficult and often a research strategy has been attempted and not been terribly successful, what we are recommending is that the National Resources Committee that is the senior bureaucrats of all states and Commonwealth are regularly, generally three-yearly, would set a statement of research priorities and those research priorities would then be available to the sector and also to, for example, funding organisations like ARC, so it's not a full-blown science strategy frankly because I suppose, and this probably relates to my personal experience over a number of decades, never really, really been successful but setting priorities on a regular basis has actually been more successful at engendering people collaborative and working together.

The other thing that we have discussed at length is really the importance of collaboration with research and industry.

MS WILL: Doug Hall asks a question about engagement and he observes that what is being seen in his experience at a state level is government co-designing policy including water policy with indigenous groups first and then going to all other parties including industry and he questions whether that's what we are proposing as being consistent with best practice.

MS DOOLAN: I think what we have seen is real variation amongst jurisdictions and also it depends what policy is being codesigned as well. So we certainly are acknowledging and recognising that all governments when they signed Closing the Gap, they committed to co-designing policies that influence and impact on traditional owners and Aboriginal and Torres Strait Islanders and so we are just saying that engagement needs to meet that commitment.

MS WILL: Thanks, Jane. Drew, one for you perhaps. Could you comment more on the distinction between large and small utilities when it comes to economic regulation?

MR COLLINS: Yes. We have certainly suggested formal economic regulation for larger utilities that by and large are big metropolitan utilities. The issue is not the size per se, it's really a benefit–cost question. There are costs involved in economic regulation and where those costs are going to outweigh the benefits of that regulation, then that's not serving the public well, so the issue is for smaller utilities often council operator utilities, the cost of setting up formal regulation would just overwhelm the benefits. It's those situations where we are looking for a lighter touch regulation. We still want the benefits of oversight but a lower cost model which would see the reporting and benchmarking and ring fencing et cetera things I mentioned, so it's really just a benefit–cost question. The onus really though is on the owner of that utility to demonstrate that formal economic regulation would be a high cost solution. We really see that as the default because of demonstrably significant gains, so benefit cost question but the onus to demonstrate situations where it's not needed.

MS WILL: Thanks, Drew. Another one for you, I think, from Gordon who asks about our recommendations to help ensure that statutory authorities are regulated, really. So he asks, "What are the recommendations to keep costs in check and a level playing field on implementation?" and he has a particular interest in that activity between states.

MR COLLINS: Yes. You might have to go back there, Gordon. I'm not quite sure what he is getting at there.

MS WILL: Okay.

MS DOOLAN: I'll have a go, if that's all right. Look, I think the key thing here is once again the importance of regular independent assessment of progress which goes to the previous role of the NWC and our current role. It's the role of the PC to call that out and it was the role of the NWC to call it out. I think it's important, though, that we say we are not expecting all states to do things exactly the same way. What we are is setting up a framework where a state who hasn't fully allocated their resources as they move to full allocation, they will do it in a way that avoids all the mistakes of the past. So what we are advocating is the NWI has principles and a consistent framework that jurisdictions implement differently depending on where they are in their level of development and we fully believe in the independent and regular assessment of progress as a key keeping them honest tool.

MS WILL: Thanks. I think we have time for just one more question and I think it's a good one to end on. "Commissioners, what makes you optimistic?"

MR COLLINS: That's an interesting question. I think that question has come from the use of the word "optimistic" in our reports so I am assuming that's the premise of the question. One instance I can particularly recall in relation to an assessment of an infrastructure proposal, we have indicated that we believe the proponents have used optimistic assumptions. The point there really is that for a lot of infrastructure proposals, we have witnessed what we call an optimism bias and they believe you build a dam, they will come, there will be users and they will be willing to pay the full cost. We have really called that out and we would like to see work done ahead of that to identify the demand for some of these things, so be that as we have seen in jurisdictions such as Tasmania with the presale of entitlements to ensure there is demand or just to undertake survey-based research on the willingness of those communities to pay for it. Yes, it's not so much our optimism that I think was the point, it's that we have used that point to reflect what we see is a driver of some investment proposals which really need a bit more homework done.

MS DOOLAN: Yes, it's a term, really, that – optimism bias is an economist term but if you're asking a bit more generally, then I would say that we are neither optimistic nor pessimistic. We just think this is an issue that needs to be dealt with and here is our advice on how to deal with it, and it needs to be dealt with in a way that provides really clear, good, consistent guidance to communities because there are really difficult challenges ahead, but governments have done it before, you know. COAG, really, really ambitious agenda. NWI. So is that optimism or is that factual?

MS WILL: Thank you very much to both of you and thank you to everybody

for joining us today. As Drew mentioned, submissions are due on 24 March and we then have hearings at the end of the month and we very much appreciate continued input from you if you would like to engage further with us. Thanks a lot.

MS DOOLAN: Thank you. Thank you for attending.

MR COLLINS: Thank you. Cheers.

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