# ENVIRONMENT, NATURAL RESOURCES AND REGIONAL DEVELOPMENT COMMITTEE

# Inquiry into the management, governance and use of environmental water

Melbourne — 5 December 2017

Members

Mr Josh Bull — Chair Mr Simon Ramsay — Deputy Chair Ms Bronwyn Halfpenny Mr Luke O'Sullivan Mr Tim Richardson Mr Richard Riordan Mr Daniel Young

#### Witnesses

Mr Phillip Glyde, chief executive,

Mr Carl Binning, executive director, environmental management division, and

Ms Jo Kneebone, general manager, water quality and environmental water, Murray-Darling Basin Authority.

**The DEPUTY CHAIR** — Welcome to the Environment, Natural Resources and Regional Development Committee's public hearing in relation to the inquiry into the management, governance and use of environmental water. Again I extend a warm welcome to the three of you, and I will introduce you individually shortly. The evidence today is being recorded, and the hearing is being filmed and broadcast live, I might add, via the parliamentary website. All evidence taken today is protected by parliamentary privilege, therefore you are protected for what you say here today, but if you go outside and repeat the same things, those comments may not be protected by this privilege.

I understand we have Mr Phillip Glyde, chair of the Murray-Darling Basin Authority, and Mr Carl Binning, executive director, environmental management division. We also have Jo Kneebone. Hello, Jo, and welcome to you too. I am not sure what your official title is. Would you like to tell us?

Ms KNEEBONE — General manager of water quality and environmental water.

**The DEPUTY CHAIR** — Excellent. Thank you. Today's evidence is being recorded. You will be provided with proof versions of the transcript at the earliest opportunity. Transcripts will ultimately be made public and posted on the committee's website. We have allotted half an hour for this session. We do invite you to make a 5-minute short presentation, and then the committee would like to ask you a range of questions. Could I also apologise: we were meant to be in Wodonga to see you face to face in the week before the last sitting week, but the Legislative Council had an extra couple of sitting days to deal with some quite contentious legislation. So our apologies that we could not get up to Albury-Wodonga to see you face to face.

**Mr GLYDE** — Thank you very much, Mr Chairman, and can I on behalf of the MDBA thank you for the opportunity to first of all make a submission but also to appear in front of you, and I thank you for the opportunity to make a short presentation. We are conscious that we need to make sure we have plenty of time for questions, but really we just wanted to provide a little bit of background, I suppose.

The Murray-Darling Basin Authority has two functions: a historical one in terms of the operation of the River Murray primarily on behalf of the Victorian, New South Wales and South Australian governments, but also more recently — since the Water Act 2007 — the establishment and implementation of a plan for the Murray-Darling Basin. A lot of the focus of the plan has been around how much water needs to be returned to the environment. Obviously there is a recognition by all jurisdictions that are involved in the Murray-Darling Basin that there was an over allocation historically — for several decades in fact — as the land has been [inaudible] as the food bowl of Australia and has been opened up for use. It got to the point that that over allocation was really causing a lot of environmental problems but also was possibly undermining the future of agriculture and other industries in the basin.

So the plan is in place. A lot of the focus has been around how much water should be returned. More recently, I suppose, you would no doubt have seen in the media a lot of focus around compliance with individual water entitlement holders as well. But there are a lot of other elements in the plan. Obviously the one that is important from this committee's perspective is the environmental watering planning responsibilities that we have. With the rest of the plan, the whole idea of having a basin-wide plan was to set objectives that were oblivious to state boundaries.

Whether it is the sustainable level of take, whether it is water quality or salinity or indeed environmental watering, our role as the MDBA is to set the big picture, and then obviously the states — in this particular case, the Victorian Environmental Water Holder — would operate consistently with that basin plan. So there are a whole lot of things in the plan which we were not planning to go into other than that we do have this role in terms of developing that overarching policy framework for environmental watering. It is absolutely critical to the success of the plan that we get that right.

The whole idea of the plan is to end up with a healthy working basin. That is an easy phrase to use, but what we are after is a balance between environmental outcomes, industry and community outcomes and outcomes for Aboriginal people as well. We are not trying to change the basin to be something that it was prior to development. We are also not trying to maximise agricultural production. We are looking for a sustainable outcome, a healthy working basin, where the communities that depend on the water and the industries that depend on that water know that they have a future and know that they will be around not just in 10 or 20 years time but for all time to come.

I might leave the opening statement at that. We are happy to focus on the environmental aspects to the extent that it is consistent with our role. I might hand over to questions. Carl and Jo have got more of the direct responsibility than I do. They are probably more across the technical detail, but we will do our best to answer your questions, Chair.

**The DEPUTY CHAIR** — Thank you, Mr Glyde. We did have some far-reaching conversations following presentations and testimony from a number of witnesses this morning that actually dealt with the plan itself. You may well wish to look at some of the transcripts of the commentary this morning that was directed at your management of the basin. We did cover a fairly broad area.

**Mr O'SULLIVAN** — Thank you for joining us. A question that I want to ask follows on from your comment, Mr Glyde, about the balance of the plan. We all know that that is probably one of the underlying factors in relation to the plan working. If we do not get that balance right, there are going to be problems all over the place, which you guys would know about better than me. My first question is: have we got that balance right now, bearing in mind that we have still got some of the SDLs to come online, we have still got that 450 gigalitres of upwater that is floating around and we are not quite sure where that is going to land? The question is: have we got it right now, and are we going to have balance right over the next 10 years, depending on whether that 450 gigalitres of upwater comes in or not?

**Mr GLYDE** — That is a very good question. I think what we would say is we have the balance right as far as our existing level of knowledge and information. Back in 2012, after a lot of research, bringing together the best information that was available in 2012, the Murray-Darling Basin Authority advised governments that essentially the attainable take should be reduced by 2750 gigalitres — from about 13 000 down to about 10 000 being used for agriculture. That is a fairly sizeable reduction, but that is really the balance point that was chosen.

What has made matters more complicated is that with governments having decided that, they then looked at two mechanisms — or it is essentially the same mechanism — to try and minimise the economic and social cost of getting to that balance but also to try and find ways to improve the environment without imposing unnecessary economic hardship as well. So there were two methods — they are colloquially referred to as 'downwater' and 'upwater'. The method we are about to recommend is reduction of about, we have said, 605 gigalitres from that 2750 gigalitre level, because we have seen and the states have brought forward proposals that mean you can achieve the same environmental outcomes but without having to use the water, so there is 605 gigalitres worth of environmental outcome. As we hear, that number is allowed to be up to 650.

The other side of it, which you have mentioned, is the 450 gigalitres of so-called efficiency measures, or upwater, where if you find projects that return water to the environment with no economic or social consequence, then the mechanism is there and will be available until 2024 for that to operate as well. So one is about improving economic outcomes and the other is about improving environmental outcomes, but the bottom line is that we think that the best level is that 2750, that number mooted around about that, without detriment. We review the planning in 2024–25. If there is new information that that number should be changed, then we can contemplate that at the time.

That is a very long answer to the question, but it is really to get the right balance as far as we can determine. The best science went into that basic decision in 2012.

**Mr O'SULLIVAN** — Just one further question. In relation to that 450 gigalitres of upwater, we know that under the current rules it has got to have a neutral or positive community economic impact if that water was to be recovered.

## Mr GLYDE — Correct.

**Mr O'SULLIVAN** — What are the other sort of trigger points that could come into play which would allow that to actually be realised at 450 gigalitres?

Mr GLYDE — I am not quite sure what you mean by trigger points, but it has certainly been a topic of active discussion around the governments. The way the test is reflected — that test of whether or not there are no or positive economic or social outcomes — is essentially the participation of either a state, an irrigation district or an individual farmer in the scheme. If they come along and say, 'Yes. In exchange for investment from the government, we're prepared to participate in that scheme', then it must be economically and socially

positive. They would not do it otherwise, so it is a very simple test against the plan. What has been questioned, particularly over the last 12 to 18 months, is whether or not that simple test is adequate to actually capture all of the economic and social consequences.

A little while ago ministers came to the view that they needed more information in relation to that, so Ernst & Young were engaged by the commonwealth government, using terms of reference that were drawn up by all of the states, to have a look at that question and to see whether or not that test is valid and what has been to date the experience of water being returned to the environment through efficiency measures.

**Mr YOUNG** — I just want to touch on some stuff that is in your submission on social licence. For a long time discussions that I have had with just about anyone in northern Victoria, when you mention the Murray-Darling Basin plan or the Murray-Darling Basin Authority it is followed by a remark along the lines of 'Oh, yeah, those pricks'. It is really not well liked by a lot of people.

## Mr GLYDE — Yes.

Mr YOUNG — You have made a recognition of that in the submission, that there is a social licence around environmental water and that you do not believe it is being well addressed. Could you just touch on your thoughts on the social licence and what you would like to see change as far as addressing that issue?

**Mr GLYDE** — Yes. If I could, I would not mind just addressing the question on the support or otherwise for the basin plan or indeed the authority. I am not too worried about comments on the authority. Our job is on behalf of all of the governments to be the umpire, if you like, to advise governments on that hard call between the economic, environmental, social and cultural uses to benefit all. Because we are in that role, we do expect that there will be people who do not like the decision we take, because it might not necessarily favour their particular interest, whether it is an industry or a conservation interest. We are quite experienced with that. But in relation to the plan, I have actually not met anyone yet who has come out and said, 'That's the perfect plan'. I have been in the role for almost two years, and not a single person has said that to me.

By the same token, in all of the community meetings I attend and industry consultations and the like I go to, no-one has said that we could continue on the way we were back in the early 2000s. A plan is needed. I just think people find it hard to accept the plan because it goes through the middle. It does not satisfy any particular interest group, so we are quite used to that.

In terms of social licence, I think it is in everybody's interests that the Australian community at large is confident that the water resources of the nation, in this particular case the Murray-Darling Basin, are used to best effect. I think that is where the social licence aspect comes into it. People can follow the rules, and indeed the vast majority of the industry follow all the rules that governments, state and federal, set for them, but if they lose the confidence of the community — and that is the broad community, not just the conservation interests and others — then that can be just as damaging to an industry as some inefficient regulation.

I worked for quite a while on live animal exports. All of the live animal exporters followed every single rule that was set down for them by the commonwealth government, and yet one program on *Four Corners* showing some maltreatment of an animal in Indonesia caused people to fundamentally question the existence of that industry and, because of the scale of community reaction, led to the government of the day banning exports of all animals to Indonesia overnight. That is what I mean.

I think it is really important that we use the plan to reassure the community at large that the water is going to its highest stated use, that we are looking after the environment, that we are providing it for small towns along the Murray and the Darling. It is really quite important, I think, to build that confidence, because there is such controversy over the use of water. Just look at the *Four Corners* thing. I think it is amazing how a couple of questions in relation to compliance have caused us to fundamentally question some of the settings within the basin plan.

Mr RICHARDSON — Thank you, Mr Glyde, for that. I was interested in the submission and the note about the role Victoria can take, particularly with reference to environmental water management and effectiveness into the future. Are you able to take us through some of those suggestions in terms of support to those points in the submission — development of water plans and review conditions on environmental

entitlements? What have you identified that the state of Victoria could consider, informing this inquiry what we might be able to consider in that regard?

**Mr GLYDE** — I might start, and then I might hand over to my colleagues, particularly on those suggestions about the role that Victoria could take. I think the number one thing that is worrying the authority is, in essence, the lack of progress on the finalisation of water resource plans, which is our first dot point in our submission.

The plan was put in place and it started in 2012. Collectively all of the states were given seven years to put in place detailed water resource plans or water-sharing plans that were reflective of the overall commitment they have made in setting the basin plan. We are now five years into that seven-year period. We have 36 plans, and only one has been accredited as being consistent with the basin plan, and that is from Queensland. The vast majority of those are in New South Wales, but Victoria has a few as well. We are really getting quite worried that the intent of this overarching plan, which has been signed up to by six governments, might not be delivered if we do not get the plans in place. One of the critical elements of the plan, of course, is making sure that environmental water is used to its greatest effect. I might turn to Carl or Jo just to go a little bit further into the specifics of that.

**Mr BINNING** — Thanks, Phillip. Just a couple of things. The first is the entitlement framework was essentially developed for consumptive users, and as entitlements pass to environmental use it is really important that they are equivalent and tradeable. It is also really important that where environmental water is used, it is in no way detrimental to the reliability of consumptive users. But beyond that, it is really important to recognise that environmental water is used quite differently to consumptive water. A couple of examples are that in the southern system it is much more likely that high volumes of water will be used and volumes of water will be used earlier in the season, so in late winter and early spring.

The amount of coordination that is required between the environmental water users and also with river operators has some very, very different attributes. Often you will want to supplement a natural event, so respond to what an environmental water holder would call a mapped queue. When the tributaries are flowing, that can be a very, very efficient time at which to use environmental water. Rather than ordering water at a particular point in time, an environmental water holder would negotiate with the river operator that when these types of natural events occur, we would like to supplement those events. Ensuring the environmental water holders can (a) continue to coordinate their efforts, so the Victorian Environmental Water Holder, the Commonwealth Environmental Water Holder and the Office of Environment and Heritage in New South Wales, we chair a committee which enables all of those groups to come together to plan a coordinated suite of activities over the course of a year; and then (b) ensure that they are then able to interact effectively with the river operators to ensure that the events can occur at the time in which they are sought. That means the arrangements around, if you like, the way in which entitlements are used and operational [inaudible] each year are quite different to the way that irrigated water is used and operated each year. That is the journey we are on: how to integrate those operations whilst ensuring that we do not impede or impact the reliability of consumptive users in any way.

**Ms HALFPENNY** — I notice that in your submission you talk about having a continuous improvement philosophy and you also say that the allocations of water were based on the best science at the time in 2012. Then you also talk in your submission about the need to consult with the community and I suppose educate the community about what is needed. We have heard various comments from people who have given evidence who have said that it is very difficult, that consultation is not genuine or that perhaps other ideas or views are not fully considered. What is the ability of the authority to change and move? Sometimes organisations get a bit conservative and perhaps you need to be conservative, but if there are ideas about additional tools that might be able to be used for treating blackwater or avoiding it, what sort of process is there and how can people go about this, if it is possible?

Mr GLYDE — Thanks for that question because it covers a huge range of things.

Ms HALFPENNY — Yes, it does.

**Mr GLYDE** — A couple of things I would say is that the whole concept behind the basin plan — there is a lot of rhetoric around it — is that it is meant to be capable of being changed because you are quite right, as time goes on we get more and more information. Environmental watering is something that is only really being done in the last 20 years. If you compare that level of expertise and knowledge to the experience we have had with irrigated agriculture, which goes back 100 years or more, we have still got a long way to go in learning that.

There will be a lot of further knowledge that we gain every year that we need to try and reflect. The plan is capable of changing. In fact there is an amendment on the floor of the commonwealth Parliament to change one of the settings in the north to reduce the amount of water that is going back to the environment by 70 gigalitres.

Because the basin plan is a legislative instrument, it has to go to Parliament to change it. If all the state governments agree, then it is possible to change what has happened as well. So the plan itself is capable of change. It just needs a lot of research and it needs the agreement of governments generally to make the change, so that can be quite hard given water is such a contested resource.

Turning to the MDBA itself, though, and the concerns that have been expressed about our engagement with the community and our consultation methods, we hear that quite a bit — that we are not taking on board local level knowledge, that we are not understanding of the particular situations. We hear a lot from fourth or fifth-generation farmers who have farmed land all that time that we do not understand and nor do our models understand how all that works. That is a really valid concern. What we have been trying to do is ascertain what is the best way to harness that local knowledge. I think when the plan was created there was a sense that the Murray-Darling Basin Authority would sit, primarily in Canberra I suppose, and set the big picture and allow states and catchment level regulators and authorities to do their business and we would set a bigger picture. But it is very clear that most people do not experience the basin plan at that level; they experience it at their local level. So we are quite keen to try to improve the way in which we engage genuinely with the community.

During the course of last year and this year we have engaged regional engagement officers, people from the community that we engage on a part-time basis to help us better understand what the community needs are. We have moved to have offices outside of Canberra, so we have an office in Wodonga. We are doing those sorts of things to try to the extent we can in a million-square-kilometre catchment, with the few people that we have got, to get that deeper understanding, particularly as we move to implementing some of the plan. We have been building the plan to date. Now, as of the end of this year, there will be a lot more work on implementing projects in the plan. I think we would accept that as a criticism, that we do need to do better, and we are certainly working hard on that.

I guess the message I would like to leave is that yes, the plan is capable of being changed, and yes, it is possible to speak to the Murray-Darling Basin Authority to put your views forward, and that we are certainly doing our best to be better at that.

**Mr BINNING** — Can I just make a quick comment about environmental watering. Engagement with local groups, catchment structures and even right down to local Landcare groups and recreational fishing clubs, is absolutely integral to the work that we do. The planning process actually runs in a fairly strong way by month, so we get very localised plans and they first of all get aggregated until the committee that the Murray-Darling Basin chairs seeks then to coordinate all of those activities. The reason for that is one set of environmental water may be used at six or seven different sites on its way down the river. It is a very important job to both understand the local demands and then also at the same time ensure that we effectively coordinate the operation of the river.

We have progressively got better at that, so the data that we get is that the number of individual environmental watering events is actually starting to decrease and the size of those events is starting to increase through time. What that means is that we are getting more water to the right places and using it for multiple purposes across the length of the river.

The other thing is that with environmental watering not enough is known about it. I would really like to commend the work of the Victorian Environmental Water Holder that has just been doing some fantastic work on how to communicate the story of environmental watering to the broader community. It is as simple as small things. What the research is showing is if we say 'environmental water', people think that that is something you buy in a plastic bottle at the supermarket, whereas if we say 'water for the environment', people have a greater chance of understanding that.

The final thing I just wanted to comment on in this space is that those relationships with the community are also really, really important for the management of events. Your committee has been very interested in the blackwater events. There was a lot of criticism of all environmental water holders following those events last year during the flooding, particularly from the recreational fishing community. That actually in the end turned out to be a pretty good experience because there has been a lot of engagement with the rec fishing industry. A

lot of understanding of blackwater has been built and there is really improved understanding of what some of the environmental events are doing to particularly encourage the spawning of Murray cod, golden perch, silver perch and other species that are important. The anecdotal feedback we are getting from the fishing community is that they are starting to see some early signs of improvement amongst those key species that are of interest to them. That is a longwinded way again of saying that with those local partnerships and the ability to communicate the positive outcomes that have been achieved by environmental water I think we have learned some lessons, but we are also very active in understanding the critical role of that.

The DEPUTY CHAIR — Thank you. Mr O'Sullivan, I think, had a very quick question.

**Mr O'SULLIVAN** — I will, but I have changed my question. When can we expect to see the carp virus released? That would be handy for the —

**Mr GLYDE** — Good question. If it can be released, that would be a very significant environmental improvement. I think they are completing the feasibility work. This is not an MDBA thing; it is something that the commonwealth government is funding through the Fisheries Research and Development Corporation to look at how do you release it, what are the risks, how do you make sure you do not have any problems with it. I think that preparation is 2018 —

Ms KNEEBONE — June 2018.

**Mr GLYDE** — June 2018. On the assumption that it passes all the tests and all of it can be managed, it would be sometime after that. Again, it is not one for us, but it is a really significant example of how the basin plan is about setting strategies for environmental watering, water quality, the right amount of water, but you need these complementary measures like the carp herpes virus, fish ladders — all sorts of different things like that — if you actually going to get the long-run outcomes the plan is looking for, which is this healthy working basin.

**The DEPUTY CHAIR** — Thank you. It was great that you were able to make a contribution, Jo. I was hoping you might have got a question. We have come to the end of the session. Can I thank the three of you very much for your time this afternoon, the work you did in providing a submission and also obviously the verbal submission you made just then.

Mr GLYDE — Thank you very much for the opportunity, Chair.

Witnesses withdrew.