

# **ENVIRONMENT, NATURAL RESOURCES AND REGIONAL DEVELOPMENT COMMITTEE**

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

Shepparton — 24 October 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 John Pettigrew, water spokesman, Environmental Farmers Network, and  
chair, Goulburn Valley Environment Group;

Mr Terry Court, vice-president, and

Ms Melissa Stagg, committee member, Goulburn Valley Environment Group.

**The ACTING CHAIR (Ms Halfpenny)** — Welcome. Thank you for coming to present to this inquiry today. Welcome to Mr Court, Mr Pettigrew and Ms Stagg. Before I get you to introduce yourselves and provide a bit of background, I will go through the formalities, which you probably heard while you were sitting there, but we need to do it each time. First of all, the evidence that you give today is being recorded. A copy of the proof transcript will be provided to you to check for accuracy prior to it becoming public. Any evidence you give today is covered by parliamentary privilege. However, outside this hearing whatever you say is not covered by parliamentary privilege. On that basis, I will hand it over to you to give a short presentation and then answer questions.

**Mr PETTIGREW** — Thank you, and thanks for the invitation today to be part of this session. We represent two different groups: the Environmental Farmers Network and Goulburn Valley Environment Group.

**The ACTING CHAIR** — Sorry about that.

**Mr PETTIGREW** — That is fine, but there are obvious links, and we will explain some of those links. We also have working alliances with many other environmental groups across the basin. I am John Pettigrew. I am the water spokesperson for the Environmental Farmers Network. I also chair the Goulburn Valley Environment Group. What we intend to do is a brief introduction, and then we will each select one of your terms of reference with some key points in that.

**Mr COURT** — I am Terry Court, vice-president of the Goulburn Valley Environment Group.

**Ms STAGG** — I am Melissa Stagg, a committee member of the Goulburn Valley Environment Group. I am going to start with a brief outline about blackwater. Obviously we have spoken about it a bit previously with the other groups, but I will outline some of our information. In any consideration of water management and environmental flows, blackwater is an important and complex issue, the duration since last inundation perhaps being the main driver of large blackwater events.

It is important to understand that flood plains and wetlands produce most of the carbon in the river system, carbon which comprises of litter such as wood, twigs, grass and leaves. Floods wash this material into the river where it provides physical habitat and an energy source for bacteria, fungi and invertebrates for many months and years. Invertebrates such as snails eat the fungi as well as the bacteria that grow on the plant material or eat the decaying plant material itself. This is very important to the riverine food web and river health. It would appear that the millennium drought resulted in an extraordinary build-up of this litter and caused both an increase in occurrence and severity of blackwater events over recent years, with the drought preventing inundation events and therefore preventing the regular dispersion of litter throughout river system.

**Mr COURT** — Just to recap, Goulburn Valley Environment Group has been around for 25 years, so we have been involved with these sorts of issues over that time. Environmental water management in Victoria is difficult given the restrictions and conditions imposed on waterway managers. Without doubt environmental outcomes can be maximised when environmental water is used to achieve frequent and timely out-of-bank flows. It is extremely unfortunate that the current government would appear not to sanction the use of environmental water to achieve or contribute to overbank flooding. This position, reached because of the threat of legal action by a small number of vocal landowners, is severely restricting the Victorian Environmental Water Holder and waterway managers to achieve their mission. This means we are never going to be able to get the best possible gains from the use of environmental water. That in itself is an extremely important point.

Waterway managers are therefore forced to rely on naturally available waterway flows to get water into some areas of the flood plain. This infrequent and partial inundation of the flood plain is prone to creating blackwater events, as the CMA have pointed out earlier today. You would by now be aware that blackwater is a complex issue how long since the last inundation being perhaps the main driver of large blackwater events. By not allowing or preventing overbank flooding, the government is actually contributing to the ongoing problem of blackwater.

Generally speaking, the initial cause of mobilisation of oxygen-poor water will be a natural event that pushes water over bank. On occasions environmental water may contribute to higher flows that mobilise blackwater, but given the inability to push large quantities of environmental water down our waterways, this is never going to be a major concern with blackwater events. Indeed, periodic lower bench inundation with environmental water would help mitigate blackwater events during high waterway flows.

An important component of ecologically healthy waterways is carbon, as Melissa has pointed out. Whilst blackwater is an undesirable outcome on the flood plain, the mobilisation and movement of carbon is vital for the ongoing ecological health of our waterways and wetlands. Environmental water is essential in supporting this process, and its use needs to be optimised wherever and whenever possible. The main thing that needs to be pointed out is that environmental water is all about maintaining and, where possible, improving the condition and quality of Victoria's waterways and wetlands.

Healthy waterways generate good-quality water for irrigation, urban consumption and natural amenity and condition, all things that underpin productive farming and living in areas where irrigation operates. A fully implemented basin plan with its planned environmental flows is the best chance of reducing the severest of blackwater events for Victoria's northern rivers. Environmental flows, by replacing minor flow events lost since river regulation, will regularly reduce the accumulation of organic matter, ensuring the impacts of blackwater are reduced at times of medium and major flooding.

We caution that the Murray-Darling Basin's SD adjustment mechanism, which allows environmental water at times to be offset with alternative measures that achieve equivalent ecological outcomes, such as re-engineering wetlands so that they are artificially flooded with less water, has the potential to cause localised blackwater events. This re-engineering, we suggest, does not in all cases ensure the connectivity of the flows out of or back into the river, which are essential not only for river health but also to avoid the risk of localised blackwater events.

It is very clear that we all benefit immensely from a healthy natural environment, and conversely our businesses and communities would be unviable if our waterways were to become degraded to a point where water quality and amenity were compromised.

Finally, the *State of the Environment* reports highlight that we are still fighting to address the decline in our natural assets, and considerable investment is needed and constraints on how environmental water can be used need to be relaxed considerably.

**Mr PETTIGREW** — Thanks, Terry. My comments centre around the use of storages, carryover facilities and possible impacts on third parties. The environmental water is held and supplied under exactly the same rules and regulations as with all other water entitlement holders, which is critical. As with most water entitlement holders, the carryover facility is an important management tool for the environmental package of water, just as it is for us farmers. The environmental water holder generally uses this facility differently to most other users in that environmental carryover water is often required very early in the season, a time when opening allocations are low. This early use of stored entitlements has the ability to free up storage space for the traditional high inflow spring period for the benefit of all entitlement holders, not just the environmental water holder but farmers as well, so it is important when the water is used, the carryover facility is critical for both irrigation and the environment.

**The ACTING CHAIR** — Can you explain a little bit more in terms of the farmer and environment?

**Mr PETTIGREW** — From the farmer's point of view there has been some criticism that there is too much environmental water in our storages held over — carried over. My argument would be that there is probably no higher percentage of environmental water carried over than there is for irrigation water carried over as well. But the ability for the carryover for the environmental water holder is more important because come 1 June each year there is an initial opening allocation. These allocations have been traditionally pretty low. If there is a low allocation, the environmental water holder would not have any of the water available that it may gain during the allocation season later in the year to actually use when it is best suited — that is, in the late winter, early spring period. When that happens — when the environmental water holder uses that water early — it empties the weir and allows for inflows during our peak. Up to October is generally our wettest time of year to gain inflows into the likes of Eildon and our major reservoirs.

**Mr COURT** — Also, on that point, I think there is a big misconception about the environmental water held. It is all about the water allocations. You may have talked with Mark Bailey this morning about limiting risk of spill and so forth. Whether it is environmental water, or whether it is landowner water, the same risk assessment is applied. John's point is if the environment uses it early, the risk of spill goes down. That alters the whole calculation of allocation, which is quite complex in Victoria and has to fit in with the southern basin as well.

**The ACTING CHAIR** — Thank you.

**Mr COURT** — It is complex.

**The ACTING CHAIR** — Sorry, I interrupted. I just wanted —

**Mr PETTIGREW** — That is fine.

**Mr O'SULLIVAN** — Thanks for coming in today; I appreciate that. The question I want to ask is about the balance, because we have spoken and I have certainly spoken about that today. Through the Murray-Darling Basin plan in its infancy up to where it is now it is about trying to get the balance right. We just heard from the Goulburn Broken Catchment Management Authority saying that from their point of view they are still on a learning trajectory in terms of understanding environmental water and how to best use it. Some comments from you guys in terms of whether you think we have got the balance right through the Murray-Darling Basin plan?

**Mr PETTIGREW** — It is always difficult to know; it really is. The basin plan was an agreed outcome by all parties at the time. Some people from the environmental area would say it was set far too low; from the irrigation point of view, they would argue it was set too high. I do not think we will ever know, or anyone could possibly say, what the correct balance should be. You can only go back to the way the whole plan was developed. I am not relaxed but I am confident that a reasonable job in achieving balance was achieved in the plan. Now, I know there were a couple of late decisions made: one, to have the sustainable diversion limits affected in two ways — down-water 650 gigalitres; up-water 450 gigalitres. In our view they were strongly linked. Terry mentioned connectivity. Connectivity is critical for environmental outcomes with the basin plan. What we do by reducing the mix by 650 gigalitres in some of these other projects, many of them good projects, is reducing the volume and that connectivity of the wetlands back to the river. The 450 in our view, the up-water, was a compensation in recognition that, 'Yes, we are going to reduce the flows, significantly impacting on that connectivity'. The 450 is a way of gaining some balance. No-one agrees on everything, but that is what I reckon is fair.

**Mr COURT** — I think from our point of view, from the Goulburn Valley Environment Group's point of view, the agreed figure was the agreed figure and we want to go forward with that. Again it was pointed out earlier today there are substantial productivity gains to be made with the use of irrigation water. You can argue whether that whole process has been done correctly; I could argue it has not been done correctly, because there is no vision for the new dryland, if you like, and where we are going to move to. So there are whole things that we could have done better and we still can do better if we get our act together about what we do with those areas that water could be removed from. So there are certainly ways to improve on the irrigation side of it, where we are headed, regional development — all those sorts of things that come into it — and the use of energy, which we know is another issue, as to how we do that, but certainly the environment movement has got to improve its performance as well. That is what Chris and the people from the Murray-Darling Basin talked about. There is work to be done. There is monitoring to do. We have got to learn along the way. We have only just smidged the top of it.

The last point I will point out is that we have completely and utterly underestimated the value of ecosystem services to us, our agricultural industry and our wellbeing in this whole argument. What is the value of the ibis in the irrigation system? Do you know what I mean? We have really undervalued that. If there is ever work to be done around getting that appreciation right, we should work on that sort of thing as well. There are huge benefits other than just — yellowbelly do breed in the Goulburn, but there is a whole suite of things. There is pollination. You know, it comes from all that.

**The ACTING CHAIR** — Whose job do you think it is to do that? How do you think that could be sort of gotten out there?

**Mr COURT** — It has been attempted, you know what I mean? What value did he put on these sorts of things. We have not done it well. The environmental movement struggled with it at the basin plan initiations. Irrigators struggled with it. The Murray-Darling Basin — people roll their eyes over that. But we can certainly do a lot more work. It is one thing for Kingsford to say there are 15 per cent less birds in a wetland, but what is the benefit of those birds? Where do they actually fit into our ecosystem? This is complex stuff. We need to do a lot more work, and we need to do a lot more scientific work around that.

**Mr PETTIGREW** — Part of the problem is that the decision gets back to dollars. Everyone wants to put it in dollar form and get it back to dollars, and that is very difficult. It is very difficult to put dollar figures on the value of a tree or the value of clean, good quality water. It really is.

**The ACTING CHAIR** — Can I just ask another quick question? Going back to the overbank flooding that you talked about and the government not agreeing, I suppose, to water private land, if that was to happen, how would you see that being sort of managed in terms of the impact on the farm?

**Mr COURT** — John, do you want to have a chip at this one?

**Mr PETTIGREW** — I have been involved in the constraints management consultation through the Murray-Darling Basin Authority.

**The ACTING CHAIR** — And that is what you were talking about with the channel —

**Mr PETTIGREW** — Yes, part of the community consultation. That consultation centred around flows that would get out into the forests — the out-of-bank flows. They were only up to minor flood level, which is exactly what it is termed. It is not a major flood. Yes, it does get onto some private land but not much at all. The disappointing part is that since the Victorian government has taken over that role, the constraints management goals have been set lower and lower. In Shepparton we are looking at 20 000 megalitres a day going through here. That is a minor flood. Even with the Victorian plan at the moment there will be at least a 10 per cent reduction on that from a risk point of view. Even as a starting point, they are talking 15. This is just retaining water in the channel. This is not what the basin plan was all about. We are disappointed.

**Mr COURT** — It is containing water in the channel, but it is also not allowing it to get into every little billabong. I was down the river the other day, and with the last environmental flow we pushed through, if it had gone another metre, it would have gone back into a backwater and come out again. There is a whole lot of stuff we can do. If you put 20 000 megalitres down that river, you would not even see it. I am exaggerating slightly, but it is not getting anywhere near the topping of the levee bank. What about when you open Loch Garry, John?

**Mr PETTIGREW** — It is about 30.

**Mr COURT** — Thirty.

**The ACTING CHAIR** — What do you think the burden would be on the private landholder?

**Mr PETTIGREW** — There is a threat of legal action by some landholders who object to any water being put on their land at all.

**The ACTING CHAIR** — So you do not think it would have much effect on them in practical terms?

**Mr COURT** — No.

**Mr PETTIGREW** — No, but obviously you have to take out easements. Easements have to be purchased off these people. We did it on the Murray River from Hume down to Yarrawonga when the Yarrawonga Weir started walking downstream a few years ago. That was a very expensive exercise, but those easements are still in place today and they are achieving outcomes for irrigators and environmental flows. That has to be done on the Goulburn and other rivers in the basin, but we need the will to actually follow that through.

**Mr COURT** — Unfortunately, with the Hume thing, they released 90 000 megalitres when the Hume potentially had a crack in it, right? It flooded and knocked everything out. That was a dam safety issue, but unfortunately those sorts of things linger. That is what people think about, but we are not thinking about this. If you are looking at the Upper Goulburn, we are talking about flooding the picnic tables at a bridge. We are talking about lifting the bridge a foot. It goes into there, it is up there for three days and it comes back. We are not talking about inundating total properties. The land that would go would certainly be within easement.

**Mr O'SULLIVAN** — But where does that water come from that you are talking about — that extra water that you would like to see?

**Mr PETTIGREW** — It is out of the environmental holdings.

**Mr COURT** — It is out of the environmental holding of water, and it gives them more flexibility to be able to do that. Rather than keeping it in channel and being restricted in what we do, we are actually limiting our environmental gain because of that and because it is not doing the sorts of things I talked about — moving around, moving that carbon out of the plain. It all has an impact on blackwater events. The more we can simulate that stuff to get that carbon mobilised and drip-fed into the river — that is what we need for a healthier river. It all makes up that tapestry of what we can do.

**Mr RIORDAN** — Thanks, guys. I come from an area in the south where we do not quite have the water politics. It generally just involves the neighbour next door putting a dam in that takes the water from you, and it becomes a very localised problem. Up here of course it is a different field, so I am not as familiar with the politics. John, you call yourselves the Environmental Farmers Network. That says to me there are people on the land that can see the balance that is required between the environment and agriculture. Tell me — you have been touching on it I guess in the last answer — what is the reason people do not want the inundations or the flooding? We probably can all accept that the Murray River and the various rivers up here historically have flooded on and off at periods. We clearly all know that we now manage it. These are not rocket science things for us to get our heads around. There is evidence that we can do some flooding, and Terry has just highlighted why we need to do that. What are the fears of farmers and other landholders? What are the barriers to people wanting to treat environmental water like that, in your opinion? If I filled a hall full of you on that side and your detractors on the other, what are you going to do about it?

**Mr PETTIGREW** — From our point of view, we are just trying to get the absolute maximum benefits from the environmental water that is held.

**Mr RIORDAN** — That we are already holding?

**Mr PETTIGREW** — Already holding or what might be held in the future. It is a matter of getting the maximum benefit for that \$13 billion of federal funding being spent on this water. We cannot understand why we would not be optimising that by using every tool we can. The opposition is interesting. I think it ranges from a landholder genuinely concerned about flooding on some high-value crops, but unfortunately I think politics are riddled through it as well. I think it is seen by some as a way of undermining or constraining the volume of environmental water. The thinking is that if the constraints remain, the environmental water will not be able to be delivered. Therefore we do not need any more environmental water.

**Mr RIORDAN** — It could be used for other things.

**Mr PETTIGREW** — They are the two extremes, but there is a mixture out there at the moment.

**Mr RIORDAN** — So are there models in place? I think you referred to easements. That is obviously an expensive model.

**Mr PETTIGREW** — There is a lot of work being done on it.

**Mr RIORDAN** — There are obviously some mechanisms whereby you can take a lease and buy back whatever land is going to be subject to flooding.

**Mr PETTIGREW** — A lease is preferable, because it is valuable land. It is riverside country. I think from everyone's point of view, an easement with conditions on it is the best way to go.

**Mr COURT** — Already there is a reserve on the Goulburn all the way through, do you know what I mean? So we have got a 22-metre — or 22-yard — reserve on it. It is already in place. It has been there since 1870 or whatever, so it is not far. We are now talking about the margins of that. Unlike New South Wales, where they own it right to the middle of the river, that is not the case in Victoria on the Goulburn. So we have already got a mechanism there that we can manipulate slightly and compensate to optimise our environmental flows.

**The ACTING CHAIR** — Thank you very much for coming in. Ms Stagg, we did not ask you any questions.

**Ms STAGG** — That is okay.

**The ACTING CHAIR** — Is there anything you would like to add to what has been discussed, maybe something we have missed?

**Ms STAGG** — John and Terry have covered it pretty well, but I think one point is that we live on very flat landscapes in this area, and in the areas that do need that inundation you really do not need that much of an event to inundate them. So it is not as difficult as can be perceived. I work in this area designing a lot of constructed wetlands and I work closely with civil engineers that are dealing with movement of water through this region and I can see how quickly people kind of misunderstand how this landscape works. If we were able to tap in to that available water, we could see huge benefits without a whole lot of trouble I think.

**The ACTING CHAIR** — Do you know how much water, or is that political too or probably something that needs to be properly considered?

**Ms STAGG** — No, I would not be able to figure it out off the top of my head, sorry.

**Mr RIORDAN** — Can I just ask one follow-up on that, Bronwyn? The point was made earlier that there is a residual fear amongst many people, perhaps older timers who have seen some bad times or catastrophes with flooding. Do you find that with creating wetlands and obviously engaging with communities that you will have a cohort of people who are in favour of it but there will be others also who say, 'I remember when' or 'This will happen if you do that'?

**Ms STAGG** — No. I have not really had much issue with those sorts of views. I think the biggest thing people are often worried about is just things like snakes, and they are all part of the natural balance of the ecosystem.

**The ACTING CHAIR** — Even in Fawkner in the middle of Melbourne that is the case when they create wetlands.

**Ms STAGG** — So, no, I cannot say I have come across many people having negative thoughts towards putting in new wetland areas.

**The ACTING CHAIR** — Okay, thank you very much. That was really good. That concludes our hearings for today.

**Committee adjourned.**