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Official Committee Hansard

**HOUSE OF
REPRESENTATIVES**

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND
FORESTRY

Reference: Future water supplies for Australia's rural industries and communities

WEDNESDAY, 13 AUGUST 2003

CANBERRA

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HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

Wednesday, 13 August 2003

Members: Mrs Elson (*Chair*), Mr Adams (*Deputy Chair*), Mr Forrest, Mrs Gash, Mrs Ley, Mr Schultz, Mr Secker, Mr Sidebottom, Mr Windsor and Mr Zahra

Members in attendance: Mr Adams, Mrs Elson, Mrs Ley, Mr Schultz, Mr Secker, Mr Windsor

Terms of reference for the inquiry:

To inquire into and report on:

The provision of future water supplies for Australia's rural industries and communities, particularly:

- The role of the Commonwealth in ensuring adequate and sustainable supply of water in rural and regional Australia.
- Commonwealth policies and programs in rural and regional Australia that could underpin stability of storage and supply of water for domestic consumption and other purposes.
- The effect of Commonwealth policies and programs on current and future water use in rural Australia.
- Commonwealth policies and programs that could address and balance the competing demands on water resources.
- The adequacy of scientific research on the approaches required for adaptation to climate variability and better weather prediction, including the reliability of forecasting systems and capacity to provide specialist forecasts.

WITNESSES

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Committee met at 5.32 p.m.

DALTON, Mr Ross, General Manager, Natural Resource Management, Water and Murray-Darling Basin, Department of Agriculture, Fisheries and Forestry

THOMPSON, Mr Ian, Executive Manager, Natural Resource Management, Department of Agriculture, Fisheries and Forestry

CHAIR—I declare open this public hearing of the House of Representatives Standing Committee on Agriculture, Fisheries and Forestry's inquiry into future water supplies for Australian rural industries and communities. Today's hearing is the 18th one for the inquiry. We have previously held hearings in Queensland, Victoria and South Australia as well as in Canberra. I welcome witnesses from the Department of the Agriculture, Fisheries and Forestry.

I apologise because we will have to run out of this room shortly due to a division in the House. Please excuse us, and I have to excuse myself because I will be unable to attend the rest of the committee meeting.

Proceedings suspended from 5.33 p.m. to 5.46 p.m.

ACTING CHAIR (Mr Adams)—I again welcome the representatives from the Department of Agriculture, Fisheries and Forestry. Although the committee does not require you to give evidence under oath, I should advise that these hearings are formal proceedings of the parliament. Consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Thank you for your submission, which was a very deep and solid one. I am sure you wish to make a short statement on your submission. Please proceed.

Mr Thompson—We do have a short introductory statement. The states and territories have constitutional responsibilities for water and resource management. Nevertheless, the Commonwealth plays an important role through policy leadership, national coordination and provision of financial assistance. Most significantly in recent years, the role of the Australian government has been to work with the states and territories in implementing the COAG—Council of Australian Governments—water reform framework, which was first introduced in 1994. Its focus has been on addressing institutional issues to support a sustainable water industry and to manage environment and resource base underpinnings of rural industries.

The reforms have led to substantial changes in the way water is managed and used in Australia. States and territories have implemented new and substantially amended water management legislation, and on-ground implementation is continuing, particularly with property rights and trading. These reforms have had a significant impact in rural Australia. COAG met in April 2002 and has been considering the need to further address water reforms. It is now particularly interested in how to better define and implement water property rights to address the uncertainties about future availability of water.

In this context it is also addressing the need to improve water trading markets and environmental management. It is now on the public record that COAG is to consider further

development of water reform in its 29 August meeting, when it will consider a national water initiative. The initiative would identify further opportunities to progress the key elements of water reforms. There are considerable synergies with developments going on through the Murray-Darling Basin Ministerial Council and the Living Murray initiative. The major focus of the Living Murray initiative is ways to address achieving a healthy working river that provides economic and social benefits to communities and a better environmental outcome.

The Murray-Darling Basin Ministerial Council is looking to make a first-step decision at its November meeting this year that will deliver measurable and integrated ecological, social and economic outcomes. The Living Murray is one element of the Australian government's participation in the Murray-Darling Basin initiative. The initiative—of which I am sure you are aware—involves six Murray-Darling Basin governments and the community giving effect to the Murray-Darling Basin agreement, which has been in place now for many years.

Ms LEY—The ACT is in it.

Mr Thompson—The ACT is there as well.

Mr SECKER—And Australia and the four states.

Mr Thompson—The agreement is a regional initiative, coordinating planning and management of water, land and other environmental resources of the Murray-Darling Basin. It is a response to and recognises the difficulties of managing a single catchment across state and territory boundaries, and it has received international recognition for that difficult task.

Other regional initiatives complement the government's institutional reforms by addressing natural resource management issues on a regional scale. These are being pursued through initiatives such as the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality. These initiatives focus at the regional level. It is at the regional level that problems, opportunities and innovation in addressing those issues can be worked at with communities, land-holders and regional communities.

The major initiatives that we identify in the submission for implementing action at the Commonwealth level are the National Action Plan for Salinity and Water Quality, and the Natural Heritage Trust. They are both being implemented in partnership with the state and territory governments and regional communities. The submission outlines the initiatives in more detail and also identifies other major issues related to future water supplies, such as managing for Australia's highly variable climate, maximising the use of available water and managing for water quality outcomes. Attachment A to the submission details many of the issues and opportunities in water resource management that might be issues for the future. We welcome the opportunity to appear before the committee. We will address any questions relating to our submission or other matters relating to water that you may wish to raise.

Ms LEY—Where would you say the Living Murray process is up to at the moment? Do you think it is proceeding as per your description?

Mr Thompson—As an initiative to try and bring together economic, social and environmental outcomes, I think it is. It is a very large and ambitious proposal looking at those three levels of

possible water acquisition and their implications. The public consultation process which has been going on to date has been quite difficult because, as we have moved into the process, the issues about identifying the costs and benefits of environmental flows and the impacts on industry and regional communities are becoming more difficult. There is a major program in place to get much better science about the benefits that can be derived from applying water in various places. There is a major program of work to assess the social and economic consequences of obtaining that water from various reaches. Part of the complexity is that there is a bit of a chicken-and-egg situation: until you work out where you are going to get the benefits, it is hard to work out where the water is going to come from; until you can work out where the water might come from, it is hard to do the analysis of the economic and social consequences. That is being worked through.

The commission and council have put a process in place with community reference panels and a series of meetings. Like a lot of community engagement processes, it has had its difficult points, and I imagine you have received lots of comments about that. But no decisions have been made. The ministers are going to look at what decision can be made in November on the basis of the information that is available at that time. It is integrated economic, social and environmental outcomes that are being sought, and it is a tall order to do that properly.

Ms LEY—What about the enormous loss of public confidence in the communities along the Murray and the fact that, if you call a public meeting on this process, you get approximately 500 people in a small community hall who are all very antagonistic towards it and who feel they have not been consulted and that their views are not being taken into account and it is marching relentlessly on with or without them. I know that the MDBC is very much a part of this process, but how can the confidence of those communities be gained at this point in the process?

Mr Thompson—One of the other issues that ministers will be looking at is how they re-engage with the community. I think you are right that there is certainly a lot of antagonism towards the process that has been going on. But I would not say it is relentlessly marching on. In a sense, the Ministerial Council at their last meeting took stock of where they were at and said: ‘What have we got here in terms of science to underpin where we’re going? What does the economic analysis say? Where do the community get involved? What can we actually do?’ I think our minister is on the record as saying that any decision that will be made in November will have to take into account what is known about the costs and the benefits. It will not be made without adequate information or without genuine consultation and engagement with the community.

So I think the first thing that they will be looking at is trying to build that confidence again. But one of the messages that our minister has been saying—and I think he made it in a speech to irrigators last week in Griffith—was that decisions are only going to be made on the basis of proper sound and sensible information to try to dispel the myth that gets around in the community. You can see why it happens because of all the information that appears to sit at the centre—

Ms LEY—I would not call it a myth.

Mr Thompson—No, but the myth is that the process is relentlessly rolling on. It is not relentlessly rolling; it is very much being controlled by ministers, and they are not about to overrun anybody. That would be my perception of it.

Ms LEY—Does your group or subgroup of Natural Resource Management have a view about the Wentworth Group's proposals?

Mr Thompson—We have received copies of the Wentworth Group's proposals and have read through them. Many of the proposals are similar to the sorts of issues that have been raised or addressed elsewhere in the process. In a broad sense we welcome the contribution that expert scientists like that can make to issues like how you might recover water, like cost sharing, like the issues related to obtaining water from irrigators and trying to balance the outcomes, and the scientists' views on the state of the river, and those sorts of things. We see it as a very useful contribution to the public debate.

Ms LEY—You do not see that group as being anti-agriculture? Do you see a conflict between any of their recommendations, including their latest national water plan, and positive outcomes for agriculture generally?

Mr Thompson—I certainly do not think the Wentworth Group is anti-agriculture. I think that most of their recommendations are broadly consistent with a lot of the direction the community has taken. I suppose a fair analysis would be that there is certainly a stronger argument made in the Wentworth Group material towards protecting environmental flows than has been made by our department, but it is not an extreme view. They are arguing it from the point of view of their understanding of the science. The only area that perhaps the Wentworth Group—particularly in the water one—has a weakness is the extent to which they have been able to engage in any sort of consultation or discussion with irrigators, and I think that perhaps—

Mr SECKER—They have not really.

Mr Thompson—Some of the language and some of the recommendations might appear to have suddenly been dumped on top of irrigators, so it is more of a relationship exercise. But I do not think the broad thrust of it is anti-agriculture at all.

Mr SCHULTZ—I would just like to pose a couple of questions related to the current situation that we find ourselves in, particularly in New South Wales and Victoria, where we have had a very debilitating drought. It has been described as the worst drought in 100 years. That has been further compounded by the worst fires we have seen over a significant area. All of these problems are situated in catchment areas. We have had what promises to be good rain, and it has not eventuated. We have had rainfalls that have not even soaked the subsoil. We have had no run-off. How is that going to impact on the work that has been undertaken by both the Murray-Darling Basin Commission and COAG's reform process?

Mr Thompson—Ross might have a little more detail on this, but I think we need to separate out a long-term approach to water reform, which COAG is being involved in, and the Living Murray initiative, which is about working towards restoring the health of the Murray River in a working fashion again over a period of time. You are right about the severity of the current drought. The severity of the impact upon the storages is perhaps even more extreme this year

than the drought was last year because storages take a while to fill up. But I think that is a shorter-term initiative. Ministers have not taken a decision about the short-term availability of water and its links to the longer-term agenda but they are certainly very much aware of those issues and will be taking them into account no doubt in their decision.

Mr SCHULTZ—Have they had a look at them to the point where they have taken it as a very serious contingency that they are going to have to confront? It is not just a question of those two disastrous occurrences creating a problem in themselves. When the rain comes, if it comes—and God help us, I hope it does—in any volume at all, you are going to have an enormous amount of debris and contamination in your rivers and streams. You are going to have that in an environment today where, for example, Burrinjuck Dam, which is not far from this place, is at about 10 per cent capacity—and we are right in the middle of winter—and Blowering Dam is at about 10 per cent capacity, with the likelihood at the moment of it not improving drastically. The point that I am making to you is that we are going to have a more serious problem with our water next year than we had in this last year.

Mr Thompson—That was the point I was referring to—that the water supply situation for the forthcoming irrigation season—

Mr SCHULTZ—Is desperate.

Mr Thompson—is very poor, yes. Ministers have been briefed on that for the Murray-Darling Basin, in a ministerial context, and the commission has been looking at availability and how they are going to manage that situation. It is not that they are not taking it into account. Ross is a bit more aware of some of those details.

Mr Dalton—There are a couple of points I can make. I am sure you have these details—if you do not know the number, it is certainly intuitive. In January 2002 the storage capacity in the Murray-Darling Basin storages was about 70 per cent. In the same period this year it was 20 per cent. So there is 50 per cent gap. There are concerns about how catchments might be affected. I know that in the upper Murray area, essentially for the catchment within the Hume Reservoir, the commission—through River Murray Water—has been talking with New South Wales and Victoria about the monitoring and about what activities can be taken to try to protect the catchment under the scenario that you have painted. But, as we have seen locally, without major interventions there will inevitably be some deterioration of the quality of water entering the reservoirs. That then places constraints on how that water can be used. I would imagine that each of the individual jurisdictions would be looking at the arrangements within their various catchments. I do not have details of what New South Wales or Victoria might be doing in the catchments that you referred to.

Mr Thompson—They certainly are. As you said, the states are directly responsible for that sort of management. We understand that they are taking what actions they can. The one thing they cannot do, though, is make more water to fill those dams. We are facing a very dramatic situation.

Mr SCHULTZ—I am well aware of the fact that the states are responsible for the control of water, but I am extremely concerned as an individual—after making the comments that I have just made and seeing what I am seeing when I am driving in my electorate—that existing

catchment dams on farms are being extensively modified and enlarged in the environment that we have at the moment. I am extremely concerned to see new dams going into these areas, where even some of the catchment dams that are supplying rural towns with water are not able to get any run-off because of that sort of thing. I am saying that the states need to have a look at their own backyards in terms of what is going on, before we even get to the point where it is starting to affect the major rivers themselves.

Mr Thompson—Ross will have a comment on that, but I am sure you are aware that that comes under state responsibility. That capacity for things like extensive use of farm dams is—

Mr SCHULTZ—It is not happening everywhere, I might add, but it is happening.

Mr Thompson—It is one of the issues we identified in our submission. There is the whole issue of the effect of land use change—farm dams, which have been controversial in Victoria and New South Wales—on overall catchment management. It is one of the issues that have been fed into the broader COAG water agenda and the Murray-Darling agenda in terms of how they manage something like the cap. When you look at water availability across the basin, you do not just take into account the main dams or the main ground water aquifers. You start to take into account run-off, yield, changed land use and those sorts of things as well so that you can get the overall picture. Because water is valuable, people are starting to use it more efficiently, and that last 10 or 15 per cent starts to matter.

Mr SCHULTZ—I will just close by saying that most of what I have observed in that respect is happening on hobby farms, not broadacre farms. Every hobby farmer is getting an enormous dam. They are sitting on, say, 100 acres that used to have one dam on it, and now you have 10 properties with 10 dams, and some of them are huge.

ACTING CHAIR—There are a lot more in the catchment.

Mr SCHULTZ—Yes.

Mr Dalton—It is interrupting the surface flow and the overall accession of surface and ground water. It is another intervention in the water cycle which may impact on the storage flows into the major reservoirs or on water going into streams which are not necessarily captured by dams. We are moving more and more into trying to look at catchment management on a much more integrated basis of the whole water cycle. That is why New South Wales has views about the size of dams and run-off; it is why Victoria has a policy about the licensing or registering of farm dams; it is why Queensland has made some judgments about the harvesting of overland flows. There is an understanding that the system is in fact quite connected.

We will see increasing emphasis on the science, the monitoring and the reporting of the overall water balances within catchments and they will become part of catchment planning or larger programs. I cannot speculate about how it might express itself in either a market or a regulatory environment but we will see that as an increasingly pre-eminent part of the planning of future rural water supplies.

Mr SCHULTZ—In relation to the urban interface, I was amazed this morning when I was riding to work with a Comcar driver and he told me that in Canberra there are very few

households that have half-flush toilets and water-saving showerheads. Surely local government is going to have to play a significant role in this too. I was amazed that that was the case. For most of my life I have lived in an environment where we were basically told by our local government people that that was compulsory.

ACTING CHAIR—We got some good evidence on that in Melbourne some time ago. We will certainly be looking at that.

Mr Dalton—There is some work being undertaken within Natural Resource Management in the Environment and Heritage Councils which is looking at the development of water efficiency labelling for domestic appliances. I guess every bit helps, but the major consumer of water in the domestic environment is actually outside the house—it is the garden. On average that is 50 to 60 per cent. That is not to say that you should not be making the effort. There will obviously be further efforts to do that.

Mr Thompson—The capacity to make change outside the house has been demonstrated around Canberra just with voluntary restrictions. There was about a 14 to 20 per cent reduction across the board. It can make a big difference outside.

Mr SECKER—Does AFFA have anything to do with the research into the decision on so-called environmental flows, on whether we have 300, 500, 750 or 1,500?

Mr Thompson—Through our role in the Murray-Darling Basin Commission, yes, we are involved in that whole process through the Living Murray.

Mr SECKER—Do we have any information about the likely recommendations and why?

Mr Thompson—No. The information for that is being researched as we speak.

Mr SECKER—When are we likely to get it? I am interested in that whole argument.

Mr Thompson—We would hope that some of it will be available for November. It has turned out to be more complicated than was originally envisaged.

Mr SECKER—I am not surprised.

Mr Thompson—Some of it may take longer, so I think it is pretty clear that we are not talking about a sudden-death decision on water. Also, you can talk about 350, 750 or 1,500 gigalitres in the broad, but what benefit it might provide, what it might cost or when it is going to be available gets very hard to analyse. The work that is now being done—and this is what has caused part of the delay—is to say, ‘Let’s look at some reaches of the river, some iconic sites and some overall indicators of river health, like silver perch or murray cod.’ One of the iconic sites is clearly the Murray mouth, and there is the Coorong, Chowilla, Gunbower, Perricoota Forest and Barmah Forest. We need to look at them and say, ‘If you put 300 gigalitres of water into the Murray mouth, what benefits would you get from that, where would it have to come from and what costs would there be?’

It is important to be able to say, yes, we are going to be able to get a mouth with a 50 per cent better chance of staying open and a few more square kilometres of bird habitat but that the cost of getting that is going to have to come from these reaches, so the economic cost could be worked through. It is that exercise that is going on and that information would have to be available to the community.

Mr SECKER—The trouble is that, when you want the big environmental flows, the water might not be there. That is the problem we have at the moment—there is not enough water in the system to get water down to the mouth.

Mr Thompson—There are some difficult challenges in there, because to some extent environmental flows can work very well with the irrigation sector. If you are looking at water for wetlands or the like, the wetlands want water in a flood. All you want to do for environmental flows is add 10 per cent to the top of the flood so that you can hold water in a wetland for longer. That means the environment wants water when there is probably plenty of it about and irrigators do not want it, and then in dry years you want to dry out some wetlands so that you can get rid of invasive species. The difficulty that comes with the Murray mouth is that you need a regular low-level flow, which provides some management challenges. Those balances have to be worked through. What can keep the Murray mouth working and put water on wetlands?

Mr SECKER—Will you also be looking at alternatives? I mean, 1,500 gigalitres is a lot in terms of money and the value of what it can produce. Are you looking at saying, ‘Perhaps we can spend our money more wisely to fix up a particular problem in a particular area,’ rather than saying, ‘We have to chuck all this water at it’? That may be the answer, but you may be able to do it better.

Mr Thompson—The value of a volume of water in the river reduces salinity, increases the flood height and probably provides some benefits for the mouth. If you want to wet wetlands, restore bird habitat or ensure that gum trees continue to grow, what is important is how you use the water, the timing of it and careful management of it. Options being looked at are construction works, like putting regulators onto wetlands so that you can use the minimum amount of water at the right time and actually manage the flows you have, and managing reliabilities of water so that the timings can be adjusted such that you can maximise the use of the water. There is that whole range of options; it is not just a volume of water flushed down the river. A volume of water used is a bit of a guide, but we are trying to focus on where we could use the water to get the maximum environmental benefits while integrating it with getting good economic outcomes.

Mr SECKER—Thank you.

Mr WINDSOR—I would like to bring us back to what the inquiry is about, in a sense. It is about what impact the Commonwealth can have in relation to the Murray-Darling and water generally. This process of water reform has been going on for nine years now. Two of the basic tenets that were established back in 1994—that is, some sort of trading arrangement and the property rights definition—still have not been put into place. Probably the major reason for that is the relationship between the Commonwealth and the states and the constitutional complications.

I would like you to comment on those two things. How can you establish a market without a property right—I think that is where Sussan might be coming from to a certain extent—when the thing is rolling on? And what impact can the Commonwealth have in relation to the resolution of some of these problems? We were told for many years that the stick was the national competition policy payments. They have never been, essentially, put into effect to do anything and, to my knowledge, they are starting to run out. So the stick is going to go missing fairly soon for the states. We were told that all the valley blueprints, when they came into focus, would contain a definition of property rights. All of these things have rolled past us, and we still do not have any definitive answer. The simple question is: what impact can the Commonwealth have anyway, given the constitutional arrangements?

Mr Thompson—First of all, I believe there have been significant changes since 1992. It is not as if nothing has happened. There has been a clearer definition of a property right. In more clearly defining it, we actually, as you are aware, uncovered some additional problems by separating water from land. The inadequacy of some of the property rights became very transparent, so progress has happened in that area.

Mr WINDSOR—Could you give us AFFA's recognised definition of a property right then, because nobody else has.

Mr Dalton—The normal kind of, if you like, economic framework around property rights is one that is clearly identifiable and divisible and has a certainty to it.

Mr WINDSOR—A certainty?

Mr Dalton—Yes, a certainty, so you know exactly what it is that you have access to. In the same way, it is very analogous to land in that sense. Having exclusivity over the ownership of it, if there is a market, you are able to exercise judgment about how you deal with that ownership—retain it or sell it. They are the kinds of high-level principles that we have, together with other Commonwealth members. The chief executive officers water group put together some principles around property rights. Clearly, there is debate about the length of time that someone might have exclusivity, and that debate is still going on. It has been for 10 or 15 years in the case of Victoria, where property rights are a much more perpetual thing. There are similar models which we look to from within our portfolio to do with fishery licences, where you have a perpetual licence, but the amount of fishery that might be available in any one year is usually based upon a judgment of stock that is available.

ACTING CHAIR—Based on the science of the time.

Mr Dalton—Yes. So you could transfer that kind of methodology across to water, so that you could have a longer term entitlement. For example, for the amount of water that might be available this year, where you have nothing in the bank, so to speak, you would get a share of the available resource that happens to be available. The amount varies from year to year, but you would have an exclusive entitlement which would be ongoing. A debate is going on around that because, obviously, some states are not necessarily doing that.

Mr WINDSOR—How can the Commonwealth influence that process? In Sussan's area and other people's areas, there is constant talk of 1,500 gigalitres being moved through the system, probably for very good reason—

Ms LEY—Or possibly not.

Mr WINDSOR—possibly not—but people are still wrestling with this issue of 'What did I have? What right do I have if someone—a government or the Murray-Darling people—decides to make a move?' It just seems to me that we have not rectified the two problems that we started with back in 1994.

Mr Thompson—I will say a couple of things on that. The Commonwealth can have a bit of a stick if there is enough money involved. It can apply persuasion by making smaller amounts of money available to do smaller things, but the one that probably has been the most effective in recent times is the Commonwealth exercising a sort of authority of position or leadership in saying, 'This is a national issue. It is on the COAG agenda. All come and display your wares, and let's see what this situation is like.' Then, as Ross said, you see that there are different degrees of certainty, different degrees of property right and different degrees of tradeability between the states. I think that has been fairly effective.

In the case of the Murray-Darling, the analysis that has been done to date is that it becomes a very expensive and a very difficult exercise if you are trying to provide environmental flows without reasonable security and property rights for productive uses. The ability for the market to adjust is very constrained unless you have a decent amount of trade operating around that so that there are opportunities for people to make their own decisions about what they are going to do.

Mr SCHULTZ—What about outside influences, like the people who have been referred to as the water barons? How do you control that sort of influence on property rights and water rights? How do you curb the obvious economic benefit to those people, who then, with the ability to trade and build up a stockpile, have some influence on the price of the water as well? How do you control that?

Mr Thompson—There are a lot of irrigators holding licences at the moment and a lot of people trading, so there is a fair amount of competition.

Mr SCHULTZ—But that is the water system. I am talking about people in the urban areas that are just making bucks as stockbrokers.

Mr Thompson—What I will say is that in establishing a market for water—an operating market like any other market—it has got to have some regulatory underpinnings to make sure it operates effectively. There are roles in there for bodies like the NCC or the ACCC on how people are behaving in a market so that there is not undue market influence or concentration. They are some of the issues that have got to be worked through in developing an effective market.

Mr WINDSOR—If I can just finish off on that, your minister and the Deputy Prime Minister are on record as saying that, if a proper definition of property right is not recognised in the regional catchment blueprints—which are done through the states—the Commonwealth

government will withhold funding. Do you know of any regional catchment blueprint that has got a definition of property right in it? What does your minister intend to do?

Mr Thompson—I have not personally examined the blueprints from that point of view. What I would say is that there is a process going on in New South Wales, which we are party to in part through the COAG agenda, for reviewing the property right arrangement in New South Wales and water allocations. There has been some money paid to all states under the action plan and the NHT, but there is still a way to go with that. I do not know what the minister would do if the plans did not provide for some of those outcomes but, as I say, at the moment there is a process going on for working through water allocation and trading arrangements, a process which is still underway. I think the forthcoming COAG meeting is going to be fairly important in that regard.

Ms LEY—I want to come back to the blueprint for a national water plan by the Wentworth Group. The World Wildlife Fund on their behalf took out a full-page advertisement in yesterday's *Financial Review*, and presumably other media. You have said AFFA's view is that the Wentworth Group's view is not particularly anti-agriculture and that their views are welcome. Nowhere in their water plan do they mention farming or agriculture or, heaven forbid, irrigated agriculture. This blueprint is totally premised on the philosophy that the environment is paramount. I am not arguing with that philosophy per se, but I am saying that I am surprised. I want to know whether AFFA is planning to do any serious analysis of the Wentworth Group's blueprint to see what the effect would be on the agricultural output of the Murray-Darling Basin if it or any of the 13 points within it were adopted.

ACTING CHAIR—I think we need to qualify where the Wentworth Group came from. It came about because of the political wind-up of the idea to turn rivers inland. I think the people who put their names to it thought that was a pretty dumb idea and they thought this would certainly get a few legs. I think the way they put it together came from a certain time span. That is what they told me when I spoke to them through other areas. I just say that before the department answers.

Mr Thompson—That is all true. I would acknowledge that there is not a lot of reference to irrigation—

Ms LEY—There is none.

Mr Thompson—and agriculture in there. I did say that I thought the weak point of the report was that it did not appear to have a good consultation with agriculture. In its language it does place a primacy on meeting the needs of the environment. From AFFA's point of view, we do not have any action going on at the moment to analyse the costs of implementing the Wentworth Group's proposals. We are putting our resources into working on a national water initiative generally, but some of the sorts of things they are talking about are the sorts of things that are being considered more generally. They talk about property rights, trade, a trust to acquire water, paying for it on the market, and those sorts of things. But we are putting a lot of effort into analysing the cost of any proposals that are being seriously considered by the Commonwealth and states, particularly in the Murray-Darling initiatives. So, rather than analyse a proposal put forward in the debate, the general concepts coming from it are being considered but, in terms of the effort of analysing costs and benefits, we are focusing on the initiatives that you have heard about in the Living Murray initiative.

ACTING CHAIR—There is a press release which the Australian Conservation Foundation and the National Farmers Federation put out in July. The figures they talk about were \$200 million or \$250 million per year for a 10-year period. Some consideration needs to be taken of the social issues that Sussan is concerned about for her constituents, who are probably people who may have to change what they are doing. Have you given any consideration to that in money terms with regard to what you said earlier about those people doing work on the social side of reducing water flows in some areas? Maybe you can give us a rundown on that.

Mr Thompson—There are three elements of the cost associated with any of these initiatives, and I would not want to get into the details of how the NFF or ACF calculate those. Again, that is grist for the mill. There are costs associated with the sorts of works and measures you might put in place. Things like regulators or improved drains or channels are a cost. The position that our minister and the department have is that, if water is to be obtained for public purposes, those who own the water now should not be worse off after the public has obtained it. So there is the cost of obtaining water.

But even if you pay someone for water, there are going to be community-level changes. Water might have been here, and then it is there. There could be tourism benefits, but irrigation benefits may have been higher or lower, so there is an adjustment cost that would sit on top of that. Those are the sorts of costs that are being looked at, in those three areas—cost of measures, cost of acquiring water, and cost of adjustment.

ACTING CHAIR—We touched earlier on the view that there is only so much water in a catchment, and Alby was talking about new dams and smaller players. Are people beginning to accept that there is only so much water in a catchment? Are the decision makers coming to accept that? I have the opinion that we have not reached that state of mind yet.

Mr Dalton—(Informal comment - Mr Dalton would prefer it be deleted.) There are catchment planning processes—that is the generic phrase, I think—which are trying to assess issues like the hydrograph. It is on that basis that water-sharing plans or water resource plans are made. I think there might still be some uncertainties—and I think the players probably recognise this, because they have conventional kinds of review built into them—in that interplay between the surface water and the ground water aquifers, the way in which one recharges the other—I am thinking of a particular example—and the way that activity in the surface water might impact upon the availability of the ground water. That is an area of developing resource assessment that will become clearer. That is not universally the case, because in some areas it is not so much of an issue. I do not know if the committee has touched on the issue of the water balance—the availability of water in the catchment as you get changes in land use—

ACTING CHAIR—At the top and the bottom?

Mr Dalton—Yes, and over a period. I guess the science of that is developing as well, although I think a lot of the catchment models—IQQM et cetera—are fairly well validated models. It is now a question of the overall sampling and statistical efficacy. As natural resource management becomes more of a regional and catchment process, you will see the science and evaluation of that start to apply. If you come to a judgment that there is less water available in the catchment, what happens then? Then you have to ask: who bears the cost of any changes? I think that is a

matter for debate. That is a debate that I think will take place: sovereign risk as opposed to climatic risk—or science.

Mr Thompson—I think it is probably fair to say that there would not be a water agency, a catchment management agency or a basin authority which is now not looking at the overall volume of water available in a catchment, from whatever its source, and taking that into account in its water planning. Probably the biggest change that has taken place in COAG over the last 10 years is the increasing recognition of the scarcity of water. So everybody's use of water starts to become important. There are lots of little sub-catchments where somebody has noticed that the farm dams have changed yield, and those sorts of things. I think everyone is now working on the basis that the volume of water in a catchment depends on the rain that falls on it and to get the best outcome you have to take into account run-off, usage, evaporation and ground water use right across the catchment. Water is valuable, whether you are talking about water for environmental flows, additional water for irrigation, or additional water for a town. That last little bit is really starting to count—there is competition for it.

ACTING CHAIR—So the departmental policy, coming from government, is that, when we restructure some of the rural industries around the availability of water, a restructuring process will need to take place?

Mr Thompson—If there are changes in the allocation of water for environmental purposes and it is significant, restructuring will take place. I would not like to say it is something where the government is going to come in and say, 'We don't have this industry; we do have that one. Water will move from here to there from on top.' That is why we are trying to put a market in place: so that individuals can make the decisions about what is best for their individual farm operation—how much water they can use, how much they can access and what benefit they can get from it. What we are trying to do is model, on average, what the changes might be so that we can put in place appropriate preparation or have programs available for when you do get significant adverse impacts that need to be addressed. If there are to be major changes in water allocation, there is a potential for adjustment of water usage in industries. Some could be positive and some could be negative; there is no grand plan.

ACTING CHAIR—Basically we are changing land management, aren't we? That is what we are looking at doing and therefore—

Mr Dalton—That may be an outcome. As Mr Thompson said, I do not think we would necessarily be saying that this industry should be here and that industry should be there. The framework we would like involves knowledge of the resource, judgment of how much is available, a good property rights system that gives people some certainty about what share they have available over what time, and the capacity to make judgments as to whether they wish to use that water themselves or whether someone else can find a use for it through the market process.

ACTING CHAIR—And there might be a process of government buying the water and putting it into a system.

Mr Thompson—There could well be a process of governments, or others, buying the water to use for environmental purposes. Then you would have some sort of trust owning water on pretty

much the same basis as others and buying and selling it for environmental purposes. Perhaps the water has got to come back: in the Murray-Darling Basin context, we are looking at a number of ways of recovering water. It includes things like buying water, it includes providing improvements to public infrastructure which provide water for efficiency, it includes looking at how water use efficiency could be improved on farms in conjunction with farmers and it includes allowing for changes in water reliability—the higher the reliability, in a sense, in reality the lower the volume you can have. If you want a lot of water some of the time, that is a decision you can make but that depends on what crops you grow. If you want to grow trees, you want perhaps less water but guaranteed availability. Some individuals may wish to make decisions about that, and that can change the availability of water for other purposes. A range of recovery mechanisms will be looked at.

Mr WINDSOR—Ross mentioned modelling a moment ago. We interviewed CSIRO in Melbourne. They spoke of some of the climatic modelling and the catchment modelling that they have got now and how those models can identify that if we do not do this then certain things will happen. I asked them: if they have such a good model, can they model backwards? This has been raised a few times by this committee. I want to know if people in AFFA can actually make some direction that CSIRO use their model to go back to the situation before any of the dams were put in place and any of the farming took place and to assess the flows through the systems that are there now. I do not know what the result of that would be, but people are being asked to accept various environmental flow rates that are not really based on anything. Is it possible for AFFA to give a direction that CSIRO actually do model backwards rather than just forwards?

Mr Thompson—It is an interesting exercise. I am no expert on modelling—

Mr WINDSOR—But they are.

Mr Thompson—and cannot say whether they could do it or not. I would presume that, if you can do a model that predicts the future, you should be able to do a model that can look at—within the assumptions you make and the knowledge you have got—what past conditions, under various climate regimes, should have been. I am surprised they said they have not done it, though, because there have been various attempts to try and work out what the natural flow regime for the River Murray was. I know some of them have said, ‘The River Murray would’ve been dry this year.’

Mr WINDSOR—They have not responded to this committee. They said in Melbourne that they had not done that but they thought it would be an interesting exercise. We asked if they would do it, and to my knowledge they have not responded.

ACTING CHAIR—That was sort of the Forestry response that we had regarding the regional forest agreements coming from the national forestry plan—

Mr Dalton—Presettlement.

ACTING CHAIR—Pre-1750, yes. There have been changes. The Murray would be empty now in parts; it would not be running.

Mr Thompson—Yes, there is that classic photo from the 1930s with someone standing on a sandbar.

ACTING CHAIR—Do you want to add any more to that?

Mr WINDSOR—Could you make a request through the department for a model of what the Murray-Darling system looked like before we interfered with it?

Mr Thompson—I could certainly make a request of the CSIRO or the Murray-Darling Basin Commission of what is possible. I would not like to commit them to it, because I know we are asking an awful lot of their modelling to try to work out what some of the scenarios being looked at now would mean, but I would certainly be happy to ask them. It would be an interesting exercise.

ACTING CHAIR—Thank you very much for your time, Mr Thompson and Mr Dalton. There may be some questions which we did not get to today and which we may like to send to you. Would that be okay?

Mr Thompson—That would be fine.

Resolved (on motion by **Ms Ley**):

That this committee authorises publication of the proof transcript of the evidence given before it at public hearing this day.

Committee adjourned at 6.41 p.m.