## **REPORT OF PROCEEDINGS BEFORE**

# STANDING COMMITTEE ON NATURAL RESOURCE MANAGEMENT

## INQUIRY INTO NATURAL RESOURCE MANAGEMENT ISSUES

At Sydney on Thursday 4 September 2003

The Committee met at 10.05 a.m.

## PRESENT

The Hon. Pam Allan (Chair)

Mr Gregory Aplin Mr Gerard Martin Mr Anthony McGrane

Transcript provided by Spark and Cannon

**CHRISTOPHER ROBERT GUEST**, Acting Deputy Director-General, Department of Infrastructure Planning and Natural Resources, 22-33 Bridge Street, Sydney, and

**DESMOND MICHAEL CLEARY**, General Manager, Water Management Act Implementation, Department of Infrastructure Planning and Natural Resources, 22-33 Bridge Street, Sydney, affirmed and examined:

CHAIR: Chris, obviously you are going to present, and then we will be asking you questions.

**Dr GUEST:** Yes. We have prepared a short summary outline of what we are about to say, and we are, obviously, happy to take questions as we proceed. It is probably best if people ask questions as they occur to them. You have supplied us with a set of questions to which we have prepared answers in this presentation. Before we turn to answer the questions you have put to us, it is useful, I think, to put the trading issue in context by talking very briefly about the changes that have recently been made in the legislative framework governing water management in New South Wales.

As you are probably aware, in 2000 a new Act was introduced—the Water Management Act which replaced the old Water Act of 1912. For our purposes today, it is relevant to note two changes that were introduced by the Water Management Act. The first of those changes was to place a clear, explicit priority on the importance of managing water for achieving environmental outcomes. That previously had not been part of the formal legislative arrangements that governed water management.

The second element of the Water Management Act that is particularly relevant to our discussion today about water trading is that there are a variety of measures within the Act which are designed to, and will have the effect of, facilitating water trading. Of those, the first, and perhaps most important, is the separation of land from water. A critical element of the reforms in the Water Management Act has been to separate the ownership of land from water so that a person who owns water need not own any land associated with that, whereas under the old arrangements, in order to own a water access right, you had to own the land to which that water access right was attached. The consequence of that separation is that it will be much easier to trade water, because you can focus on the commodity of water for the purposes of the trade rather than linking the water to land.

One of the other changes associated with the Act which we believe will facilitate trading is the introduction of longer term licences. Under the Water Act, the access licence was for five years. Under the new Act, the access licence is for 15 years, so that gives greater security of access to the licence holder.

The third change is that water management will be governed through 10-year water sharing plans, and those water sharing plans specify the fundamental rules whereby decisions will be taken about the allocation of water between the environment and consumptive users. Previously, under the Water Act, decisions about water allocations were made on a year-by-year basis and could be varied at any time by the Minister, without there being any compensation entitlement by irrigation licence holders. Under the Water Management Act approach, the rules are fixed for a 10-year period. If there is a variation from those rules, then, if that variation is not contemplated by the water sharing plan, the impact of that variation is compensable for licence holders.

The next change introduced through the Water Management Act is the introduction of a set of State rules for water trading which specify the arrangements by which the decisions will be made about whether a trade can be approved.

The final new thing that the Water Management Act introduces which we believe will facilitate trades is the establishment of an access licence register, whereby there will be a public record, just as there is for land titles, which will show who owns the water licence and what its terms and conditions are. Having this public register will mean that there is a transparency about water access ownership and its transfers, which will make it easier for people to undertake transaction.

They are just some very brief remarks about the change in the operating environment that the new Act has introduced, and we will look specifically at what the impacts of those are as we go through the various questions for which we have prepared responses.

The first issue you have asked us to talk about is what was agreed at the Council of Australian Governments meeting last Friday, 29 August, in relation to water trading. As I am sure you are aware, the Council of Australian Governments [COAG] agreement from last Friday has been very positively received by all stakeholders and governments and it was endorsed by all jurisdictions. For our purposes, there are two critical issues in the COAG agreement that are relevant to water trading.

The first is that the COAG agreement delivers a commitment to taking steps to expand water markets, in particular to make it easier for there to be trade across borders. The way in which that is to be done is to ensure that there is as much compatibility as possible between the water management regimes of each of the jurisdictions. The objective is not to achieve a uniform water management framework. It would be, as we know from a history of Federation, a major task to get every State to have exactly the same rules and, we believe, unnecessary. What is required to facilitate trade is that we have regimes between jurisdictions that are as consistent and as compatible as possible so as to make trade easy, while at the same time allowing for differences between jurisdictions that reflect particular circumstances in those jurisdictions. So COAG is committed to taking steps to ensure the maximum compatibility of rules and access entitlements between jurisdictions so as to facilitate trade across borders. We should recognise, of course, that a large portion of trade is likely to be within a jurisdiction rather than between jurisdictions and, for that purpose, the responsibility, of course, lies with the individual jurisdiction to ensure that its own rules facilitate trade as much as possible.

The other element to the COAG agreement, which is a quite new thing and a very important step forward, is the agreement to provide \$500 million to fund a range of works for The Living Murray, which are to improve environmental conditions in the River Murray by increasing environmental flows, and New South Wales agreed to contribute \$115 million to that program. The purposes to which the money will be put have yet to be determined, but at this stage the position of the New South Wales Government is that our contribution should be directed to infrastructure works and that the Commonwealth contribution of \$200 million should be directed to industry restructuring assistance.

CHAIR: Where is that \$115 million coming from? Is that new money or reconstituted money?

**Dr GUEST:** It is a commitment to new money over five years, so we are looking at \$100 million in total from the program over five years. At this stage the commitment is to new money. There has been no argument about trying to get credit for existing expenditures or whatever. It is a very substantial commitment of money, for the first time, to address The Living Murray in particular.

Mr MARTIN: Is that \$500 million being matched by the Commonwealth?

**Dr GUEST:** No. The original proposition from the Prime Minister was that each jurisdiction—the Commonwealth and each of the states—would put in \$125 million. That was felt to be not enough of a contribution by the Commonwealth and, in negotiations at the Friday meeting, the original offer was modified such that the Commonwealth is putting in \$115 million and, from memory, Victoria is putting in a slightly smaller quantity again, South Australia a smaller quantity again, and the ACT \$5 million. It was a negotiated outcome which better reflected the relative capacities of the jurisdictions. The Commonwealth is putting in \$200 million, so almost half.

**Mr APLIN:** You mentioned that the New South Wales contribution would be directed to the area of infrastructure. What particular infrastructure is foreseen?

**Dr GUEST:** The intention is that the money will be spent on water savings infrastructure. That might involve capital works programs that aim to improve flows by removing choke problems, for instance. It might be works that involve improving on-farm water efficiency use. It might be works that involve covering channels so that you reduce losses to evaporation. In other words, it will be a variety of capital works that aim to either improve the flows within the river itself or that improve the efficiency of water use by irrigators, such that less water is required by them in order to undertake production. The next step will be to identify the precise capital works program that will spend that money, but those broadly are the kinds of things we are looking at.

Mr APLIN: Who is going to be the arbitrator as to how the money is going to be spent in

regard to the various things put up?

**Dr GUEST:** That is a good question. The expectation is that the Murray-Darling Basin Council, which meets in November, will need to agree on that mechanism. One option would be that the decisions are taken by the council. Another would be that a new body is set up with the specific job of receiving and assessing these capital works proposals. The Commonwealth has proposed that an environmental water manager be established to do that job. At this stage, though, it has supplied very few details about how that would work. The obvious issue, in thinking about setting up a new body of this kind, is what that would mean for the future of the Office of the Murray-Darling Basin Commission which, as you know, already sits there to do this kind of work. So at this stage there are no firm proposals about the way in which it would be administered but, clearly, decisions of this kind will need to be made quite soon because there is a quite considerable appetite and expectation among people that, having announced the program, the money should flow. Shall we turn to the next topic?

#### CHAIR: Yes.

**Dr GUEST:** From here on the questions relate to trade in particular. What are the trends in the number and volume of trades involving New South Wales since the introduction of water trading? What we have supplied to you on page 6 of the handout is a graph that shows the volume of trades—water transfers—in the year 1999-2000. Before we look at the graph specifically, there is one clear trend in water trading, and that is that since the early 1990s there has been a considerable increase in the volume of water trade. Essentially, the reason for that is that since that time there has been an increasing recognition of the value and the scarcity of water and the fact that it is an economic asset used for production, just like any other—just like land; just like seed, tractors, diesel fuel.

Before that, there had been a culture, when thinking about water, that it was somehow just part of a birthright, that it was part of the land that you owned and it was not a tradeable asset in the way that the other inputs to production are. There has been, though, since the 1980s, an increased recognition that water in fact is a production input that has a very high value in a dry continent and, therefore, as an economic asset it has a value in production that ought to be transferable. That has been associated with the first COAG agreement in 1994, which sought to provide a formal framework within which the recognition of water as an economic asset, having a value available through transfer, was underpinned.

In parallel with that, irrigators have begun to recognise that it is something they can and should trade. The trend since the 1990s has been for an increase in the volume of trade. Within that, there is no consistently clear trend because the actual volume of trade varies hugely with the prevailing climatic conditions. In an average to dry year there will be a fairly substantial body of trade, as irrigators try to gain access to extra water. In a very dry year, as we have at the moment, there are simply extremely low allocations, so there is no water to trade in the first place.

High-security licence holders will have some water and there is some trade by high-security licence holders but, in general, the volume of trade is relatively low because the allocation is low; there is no water to trade. If you look at the records over the years, it does vary considerably over the past 10 years, reflecting the allocations that are provided in each year. It is useful, though, to look at this graph we have supplied on page 6 of the handout, which presents a snapshot of trades in the year 1999-2000, which was an average to dry year. We were moving into the drought at that time. What it shows are two things: the first is the relativities between permanent trades and temporary trades. You see from the graph that in each of the jurisdictions the volume of temporary trade is considerably greater than the volume of permanent trade—in other words, people are trading for that season to fill particular requirements that they have. They want to plant a larger area or they do not have quite enough allocation to water the area they have planted, so they buy an amount of water for that year, for that season. That is the first thing we notice from the graph: temporary trades dominate over permanent trades.

The second thing we notice from the graph is that the volume of trade in New South Wales is considerably greater than it is in Victoria and the other jurisdictions, and that the size diminishes quite markedly as you move from New South Wales down to Queensland, which has very few trades compared to the New South Wales position. **Mr MARTIN:** Is there a particular reason for that?

**Dr GUEST:** My suspicion is that this partly relates to the particular rules that apply in Queensland, for instance, to make it much lower, and also the kind of irrigation that they undertake; it is a much smaller sector.

**Mr CLEARY:** It is also to do with the relative security of supply. Victorian water is relatively more secure than generally New South Wales water because of our historical development, as well as some climate regime. In South Australia there just is not much water; they depend a great deal on inflows from other states. Queensland is also in a development mode in some parts. They are still developing and building dams in most of northern Queensland, so there is no need to trade. It is only in a few of the systems where they are fully allocated that trade is very important.

**Dr GUEST:** Another trend to notice, which is very marked, is that the price of water has increased very substantially over the past 10 years. Price does fluctuate with conditions at the time but, very broadly, over the past 10 years the temporary trade prices moved from \$20 to \$200 a megalitre. Permanent trade prices moved from, roughly, \$180 a megalitre to \$2,000 a megalitre. If you had an access licence 10 years ago, it would have been much better than a superannuation policy of almost any kind that I know of—certainly better than mine. It has become an extremely valuable asset.

Mr McGRANE: Put there by the Government.

**Dr GUEST:** Like any licence, it creates a scarcity value attached to that licence. That had been little appreciated in the earlier times when, as Des described in the Queensland situation, the New South Wales situation was one where we had excess supply: you had plenty of water, the access right was not there and it did not mean a great deal. That was what we call the "mining period" when people were encouraged to increase their use of the water resource to underpin economic development. Through the eighties it began to be recognised that we had reached the limits of the allocation; that demand for use of the water had caught up with supply. As soon as you have the situation where you do not have excess supply any more, the right to access the water starts to have a scarcity value. That has increased substantially in the past 10 years and, I expect, will continue to increase as it is recognised that we have reached the limit of our available use. In fact, in a number of cases we will have to reduce our use in order to ensure the long-term sustainability of the water source. If we are reducing our use, those people who retain access rights have a licence that is of increasing value.

**Mr APLIN:** You have pointed out the difference between New South Wales and South Australia. To take the worst-case scenario, if a situation developed in South Australia where the water barons set up, would there be the possibility of an enormous amount of transfer of water from New South Wales to South Australia?

**Dr GUEST:** That essentially turns on the question of the kind of trading rules that we adopt in New South Wales, which review any applications for water transfers. One of the things we would be mindful of is that excessive amounts of water do not move to another jurisdiction.

Mr APLIN: That would be firmly regulated.

**Dr GUEST:** There is a capacity under a provision in the Water Management Act for the Minister to refuse a transfer. In coming to a decision about whether or not he or she approves that transfer, the Minister is to take account of the environmental impact of the transfer and the social and economic consequences of that transfer.

**Mr APLIN:** Given that water is essential to life, what controls will be exerted on the pricing structure for domestic consumption?

Dr GUEST: In urban areas?

Mr APLIN: Yes, particularly urban areas.

Dr GUEST: The present arrangement is that those prices for Sydney water, metropolitan

water, are regulated through the Independent Pricing and Regulatory Tribunal [IPART], which is required, when determining the price, to take account of two sets of issues, broadly. One is to ensure a sufficient commercial return to the provider, Sydney Water. The second is that there be no undue regressive impact on the price of water.

**Mr McGRANE:** I have another question on tradeability. Originally the supply of water from the rivers and dams was overallocated through irrigation licences to farmers. How do these "sleeping licences" affect the volume of trading now?

**Mr CLEARY:** You are alluding to the fact that the licence entitlement in many of these rivers is substantially greater than the amount of water that is typically taken out. That means that in some years, under our water sharing plans, we are looking at an average long-term rate of extraction which is below the licence entitlement. In the good years, when there is plenty of water, that allows people to take their licence entitlement; in the bad years, when there is not much around, they get a lot less. That means the farmers are recognising the implications of that for their long-term security. They might have a licence entitlement of 1,000 megalitres but regularly only ever get 800 megalitres. Then they enter the market to get the additional 200 megalitres that they need for their business. Recognition of that security and of the limits of water available means that will make the marketplace work more efficiently and effectively.

Mr McGRANE: Has there been any research done on the number of sleeping licences?

**Mr CLEARY:** Yes. We know that on the regulated rivers, from where there is 75 per cent of water extraction in New South Wales, there are very few sleeper licences left. Almost every licence is activated to a degree. On some of the unregulated rivers there is a large sleeper—dozer—component and the same in some groundwater systems. In the regulated rivers almost all of the water is being used.

**Dr GUEST:** Turning to the next issue, what are the trends in the source and destination of water in trades involving New South Wales since the introduction of water trading? This picture of New South Wales by the colour tries to show the movement of water between areas. The areas in red are those for which there is an export of water, a loss of water, and the areas of blue are the ones that gain the water that has been traded. There are two observations to make about the pattern of trades across land. The first of those is that, as a generalisation, trade tends to be from upstream areas to downstream areas—in other words, it tends to be from the people who are more likely to receive the rain in the upstream part of the catchment to those in the downstream who are less likely to get the benefits of that rainwater and so are more likely to want to buy water from the upstream users.

The second observation is that, in general, water trades tend to occur within a given local government area—in other words, they tend not to move out of a local government area. We say that on the basis of a study that we have done because this is a question that comes up a lot. We did a study of two river valleys—the Namoi and the Murrumbidgee—to see where the water did flow from and to, in terms of how far it travelled. Typically, the trades tended to be within a local government area—that is, the trade occurred within a relatively confined geographical space. It does not tend to occur over very long distances, and there are some reasons for that. That was the strong finding of the fairly detailed work we have done on that issue.

So there were two broad findings: one is that it tends to be from upstream to downstream users; the second is that those transfers tend to occur within a given local government area.

CHAIR: Are those reports able to be studied by this committee?

**Dr GUEST:** Yes, we are happy to provide our findings and the study reports on both of those, if you would like them.

**Mr McGRANE:** In the Macquarie we have a problem where the smaller irrigators—like the horticulturalists and those types of operations—around Narromine have changed and sold on to cotton growers. While I know a lot of it went to Trangie, which is in the same shire, the rest of them went to Warren. That is a bit of a difference. It has a detrimental effect on the Town of Narromine because the purchasing power in that council area has diminished. I know with free enterprise you can do this, but

that is one of the effects of selling on. The big operators—the cotton growers—tend to shop in a bigger place and not shop locally like a small irrigator or farmer.

**Dr GUEST:** To some extent that is probably like so many of these things and reinforces what is a strong trend within regions anyway: people vote with their feet. There are so many benefits by going to "the big centre"—for example, Dubbo. It is much easier to get there, access is good, and there are all the benefits of a conglomeration. The more people go to Dubbo, the more services are provided there and the more people go. To some extent, this is an overlay with that.

#### (Short adjournment)

**Dr GUEST:** We should turn now to question 4: what are the changes brought under the Water Management Act that support water trading and what is the current stage of implementation? I outlined some of those changes that the Water Management Act introduced earlier on, but we set out on page 8 of the handout what we think are the four key elements of the new Act which will facilitate water trading. The first of those is the separation of the access licence from land and also from approvals about use.

Under the old Act, there was a single licence issued; water access and use combined in the one licence. Under the new arrangements we have separated the licence into three different parts. One is a right of access, the second is a works approval and the third is a use approval. One of the benefits of that separation, apart from the fact that you can explicitly then make decisions about each of the dimensions of water, is that it is then easier to trade the access right per se because it is isolated as a single separated licence. The economic interest lies in the access right. Therefore, by separating that part off as a separate licence, the trade can focus on that access right alone.

The second element of the changes introduced under the Act has been to establish some statewide water transfer principles which establish the broad rules of the game. If I can characterise them very generally, the rules of the game are a presumption that water trade ought to occur unless it can be demonstrated that there are adverse environmental or social economic consequences.

The third element which we think will facilitate trade is the establishment of the water sharing plans, and the reason we think the 10-year water sharing plans will facilitate trade is that they provide a certainty about what will happen to water over the coming 10 years, which was not previously available. Markets work best the more certain people are about the future access rights and the future entitlement uses that the asset will provide. The more you know about what the asset will mean for you over the longer period, the more likely it is that you are going to feel comfortable and confident about buying and selling that asset. The more risky, the more uncertain, the ownership rights are, then the less likely you are to trade, and the higher the premiums people will want in order to reflect the risk.

The final element introduced through the Water Management Act is the establishment of the access licence register which, for the first time, will provide a public source of information about who holds which access licences so that you can quickly find out who the ownership of the licence resides in, so that if you are interested in a trade then it is easier to identify who that person is. It also provides a degree of security for banks in the sense that, by having a public register of the licence and that licence being a tradeable right, it is, for those reasons, more likely to be something against which people can lend money. In other words, it becomes a mortgageable asset.

The following question was: what is the process for approval? As I have already alluded to, all trades require departmental approval and, as we say, there is a provision in the Water Management Act which allows the Minister to refuse a transfer. Essentially, there are three elements to the decision that is made in relation to a transfer. The first is to ensure that the ownership of the right occurs, that the person who says they have the licence actually does have the licence—so that is a simple ownership verification check—and to ensure that that ownership transfer occurs.

The second is to assess any environmental or physical real water impacts of the transfer. In other words, will there be any adverse environmental or physical impacts as a result of the transfer? Generally, transfers that occur from upstream to downstream would be acceptable because that constitutes a transfer of water that would otherwise move downstream anyway. It is more problematic,

though, getting an approval to transfer water from downstream to upstream because that is water that will not be there, therefore we need to look more carefully at what the impacts and suitability of that transfer are.

The third issue is the approval of the use of the water. That goes to whether or not the new use of the water for irrigation will have any adverse impacts in relation to things like salinity, for instance. Is irrigation a suitable land use for this particular purpose in this area? An approval is required for the purpose to which the water is to be put, as a way of guarding against any adverse or undue consequences from the use of that water. They are the three elements to the decision that we take about whether the transfer can be approved.

**Mr APLIN:** This picks up on the question asked by Tony a little earlier, and that is the impact of, let us say, large trades out of some of the more remote regional areas and the impact on that community long term. As you indicated, there could be a detrimental impact in the short term. In the long term, if somebody wishes to establish a new enterprise, they are discriminated against initially because there is no water available without buying it at the prevailing price, and they may have a more efficient system. What role would the department play in encouraging regional development in that sense? Obviously, you do control the ability of businesses or enterprises to set up.

**Dr GUEST:** That is, arguably, a very complex, difficult political matter, but there are a couple of issues on which it turns. The first is that we would expect that, in facilitating tradefull, the trades that occur will move to uses that have a higher value, otherwise it will not occur. Unless someone can offer a price to a seller which exceeds the value of the use of that water to the seller, the transfer will not occur, because neither party has an incentive to do it. So, in a broad sense, if a transfer occurs it must be occurring because the water is transferring to a higher valued use and, as a higher valued use, it will make a greater contribution to economic activity, economic development, than it otherwise would.

Second, given that our experience so far and our expectation is that transfers can only occur between water sources that are hydrologically linked—there has to be a linkage between the systems—and given that transfers over long distances have a discount attached to them because there has to be account taken of transmission losses, our record of experience is that transfers tend not to occur over large distances. Transfers will tend to occur within a given local government area, which means that, although there might be some relocation of economic activity within an area, the economic activity will stay within that area.

The final factor is: what does all this mean in terms of the ability of new businesses to start up? What it means is that if a new business which does not presently hold a licence wants to start up, then it will need to purchase water. That is a sensible thing, because its use of water has a cost that ought to be reflected in the costs that the business bears, just like the purchase of land or the purchase of any other of the inputs or assets that it needs in order to undertake that production.

**Mr APLIN:** As you say, it becomes a political question as to whether the Government wishes to encourage that in the future.

Mr MARTIN: Are the criteria for establishing the higher value use laid down?

**Dr GUEST:** The test for the higher value use is whether the two parties are prepared to exchange. Our role is not to assess whether it is a higher value use; that is taken for granted. If the two people agree to buy and sell, then we assume that the seller has decided he or she is better off selling it for this price because it is more than they can make from it if they use the water themselves, and the buyer has decided it is worth paying that price because they can use it for that higher value use. Our role is to ensure that there are no adverse impacts from that transfer in relation to the environmental impacts of the transfer of the water from one place to another or in relation to the use of the water for the intended purpose.

**Mr McGRANE:** That sounds all right in theory, but in actual fact it is generally the case that the person who is buying has more money than some other person, he is willing to pay more because he has more money, more assets, and he has a bigger allocation existing that he can add that onto. Whilst what you are saying sounds great in theory, in actual fact it does not happen like that most

times, especially for smaller places. I am quoting the cotton industry again.

**Dr GUEST:** That is true. The flip side to the coin is always that the seller, in order to decide that he or she will sell, has to make the decision that there is more value to them, there is more dollar in their hand, if they sell than if they continue to use it, otherwise they will not sell. In that sense, they are better off than they would be without the capacity to trade; they can get more money for the water by going outside than by continuing to use it on their land, because, for whatever reason, their use on their land is lower value. If they do not believe that is the case, people can quite freely decide, even though there is an attractive offer, to reject it. It is like someone comes along and offers you a price for your house and it is more than you think it is really worth, but you are just not ready to sell, for whatever reason, and you do not sell.

In the same way, a licence holder who might not be getting, at this stage, particularly high value from their use of the water might decide not to sell for now, either because they would rather stay where they are, doing what they are doing, recognising that they are giving up some extra income, or because they might think in the long run they can do even better. In that sense, both parties are still better off. Both parties—the buyer and the seller—are still better off, because the seller will only sell if they think they are going to gain something from the sale. Sure, there will be the big buyers in the sense that there will be more buyers with deeper pockets than there are sellers, but that is a central feature of the market economy, where assets move to people who can get higher value for them.

Question 6: what steps is the department taking to remove barriers to water trading in New South Wales? We have answered this in a way that might look a bit odd, in the sense that we have provided here the arrangements in relation to the irrigation corporations. The premise for that is that our view is that, in adopting the water trading rules that we have statewide, in adopting the water trading rules that we have essentially removed all the previous impediments to water trade, while retaining a system of decision-making that allows us to assess the impacts of those water trades.

The primary remaining impediment to trade in New South Wales with the Water Management Act being introduced is the rules that apply within the irrigation corporations which restrict permanent trades. The reason for answering the question in the way we have on page 10 is that our view is that, in all areas other than the irrigation corporations, the previous barriers to trade have been removed. The remaining barriers to trade now are the restrictions that irrigation corporations place on permanent trades out of their systems, and what this table shows is those irrigation corporations that have restrictions on permanent trades out. Three of the six do not allow any trade at all and the other three allow only very limited trade out.

This arrangement raises some quite difficult issues. The current understanding is that the New South Wales Government has, effectively, no formal power to change those rules adopted by the irrigation corporations. Each of the irrigation corporations is essentially a corporation formed by its member shareholders, who agree on the rules of that corporation, and one of the rules they have all agreed on is that there be either no trade out or only highly restricted trade out. We, as the New South Wales Government, do not have a formal power by which we can make those corporations change those rules. Those rules are ones that are properly made within the corporation and, just like a BHP might have a decision among its shareholders about who it votes to be its directors or what it votes to be its dividend policy and the New South Wales Government does not have a capacity to say to BHP, "No, that decision that you have taken among your shareholders is wrong," so we do not have a formal capacity, a legal right, to intervene in the kinds of rules that these irrigation corporations have established. There is increasing interest from all governments in trying to encourage the irrigation corporations to review these rules to allow more flexibility for permanent trade.

The following question is: do we anticipate an increase in the number and volume of trades in the next few years? The general answer to that, as we say here, is yes, but largely in the unregulated and groundwater systems. There has already been a quite substantial volume of trade in relation to the regulated rivers which, as Des has already said, constitutes the vast bulk of water use in New South Wales—75 per cent. There has been much less trade in unregulated rivers and groundwater. One of the impacts of the water sharing plans will be that, for the first time, there are trading rules which will allow an amount of trading in those sources. But, again, the volume of trade will not just depend upon

the fact that it will now be easier to do that trade. It will be very importantly driven by the impact of the current weather. If it is a wet year, there is no need to buy extra water, because God is providing it. If commodity markets are poor, then you have a reduced economic incentive to purchase water, because the returns are not there. If commodity markets are strong, then you do have an incentive. What we will be doing in relation to the unregulated rivers and the groundwater sources is that we will make it easier for trade to occur, but whether or not trade actually increases will very importantly depend upon the production circumstances of the irrigators themselves, and that is hard to predict.

The following question is: do we anticipate a greater distance between the source and the destination of trade in the next few years? As we say there, in general, no, we do not anticipate that there will be an increase in the distance of trade. There are a couple of reasons for that. One of them I think I mentioned earlier on: that there is a conversion factor applied to trade that reflects the distance over which the water has to travel. That, essentially, is a discount on the volume of water to reflect the losses of water through evaporation and seepage and so on as it travels its course from the point of a seller to the point of a buyer. So there is that disincentive.

The second thing is that in relation, for instance, to groundwater and unregulated trades, part of the trading rules that we will introduce in the water sharing plans does restrict those trades to local areas. There are some quite complicated rules in relation to some of the unregulated and groundwater systems, and the intent of those rules is, in fact, to restrict the trades to local areas so that the water trade remains within the narrowly defined water source. That is particularly the case in groundwater. There are some quite strong physical restraints on people's ability to trade water within an aquifer.

We do expect though, finally, and particularly in the light of COAG, that there may be some increase—in fact, there will be some increase—in cross-border trades once the compatibility of jurisdictions is increased, and once a management system for cross-border systems is finalised then we do expect to see more trade between jurisdictions than there is now. The Murray-Darling Basin Commission at the moment is running a pilot trading scheme to work out the mechanics of what is required for cross-border trade and, once that pilot scheme is finished and a management system is adopted, we are expecting that there will be an increase in the volume of trades across boundaries and across borders.

CHAIR: Is there any interstate ownership now?

Dr GUEST: Yes. Not a great deal, though.

**Mr CLEARY:** It is less than, overall, about 20,000 megalitres, so it is a relatively small part of the overall trade. It was deliberately limited for the pilot scheme, so that, yes, we will allow some trades, but to a manageable level so that we can assess the overall impacts.

**CHAIR:** Have the South Australians stopped their polemic about "taking over our water"? Was that in evidence before COAG?

**Dr GUEST:** I was not at COAG. South Australia, I think we can expect, will continue to be strident, because they see themselves as being at the end of the line and being subject to whatever people up the line are going to do, and they are so critically dependent on that water. It is always a bad position for someone to feel themselves in: to be depending on something whose amount, volume and quality depends on what other people do who don't like you. So there is always going to be an edge to South Australia's position. I think, though, that may change a little with the COAG agreement and the joint agreement about funding some programs, where everyone is kicking in a quite substantial amount of money. Now that the Commonwealth and the other states—other than South Australia—are kicking in quite a lot of money, although there will be fights about where the money should go and all the rest of it, that might be a second-level issue and there might now be a somewhat more co-operative relationship, because there is a basis now of a working relationship to manage things that was not there before.

The following question—questions 6 and 7—is: are the environmental impacts of water trading monitored and what arrangements are in place to prevent water trading causing further salinisation? I think there is some confusion; there are two question 6's on the sheet. The simple answer is, yes, we do review, with each transfer application, the impacts of that transfer in relation to its impact on the

water source and its impact on the use of the water in relation to externalities like salinity. We have, as I have said, an approval made in relation to the transfer of the water and its impact on the water source, both from the exporting and from the importing side—the buyer and the seller—and we do assess the impact of the use of that water in the new use that the buyer intends to put the water to.

The other element to this, in relation to monitoring, is that there is a statutory requirement to undertake a mid-term, a five-year, review of the impact of the water sharing plan. One of the things that we will need to review as part of that five-year review will be the impact of the water trading rules adopted in the water sharing plans and the impact of the kinds of decision we have taken in relation to whether we approve or not approve transfers. There are two sets of monitoring arrangements. One is the decisions being taken specifically in relation to the transfers, and we obviously will build up a record of experience about what has happened as transfers have been effected. The second is the statutory requirement to undertake a comprehensive review of the water sharing plans at the middle of the plan itself, in year five.

The following question is: is the department planning any changes to arrangements, for instance in relation to a liberalisation of interstate trade? Essentially, the answer to that lies in the New South Wales agreement to commit to the National Water Initiative which was signed by COAG on 29 August. That National Water Initiative (a) aims to facilitate as extensive a water market as possible, and (b) will do so by seeking from jurisdictions the development of water management frameworks that are as compatible as possible—in other words, by trying to ensure that the water management arrangements within each jurisdiction are as closely aligned as is possible, to make it easy to compare one water product with another.

In order to have an efficient, competitive market, it is not necessary to have products that are absolutely identical. We are able to make choices between different kinds of products all the time. If I want to invest money in a financial asset, I can choose an asset that is high risk and low priced or I can choose an asset that is low risk and high priced. I can have a bundle of assets reflecting my preferences between risk and return. Likewise, if I am buying water, I can choose between water with different kinds of characteristics. It is not necessary in a competitive market to have products that are identical. Of course, most markets in the world do not have products that are identical, and people actually quite like the idea that you can choose between different forms of the same kind of product.

The commitment in COAG is not to aim for uniformity; that every water product in every jurisdiction has to be exactly the same. It is simply to aim for the maximum compatibility between water management frameworks so as to minimise the number of water products, but recognise that you might still wind up with some diversity of their characteristics, and accept that as being a reasonable outcome. In our commitment to COAG, we are committing to that trade liberalisation which will facilitate cross-border transactions, without sacrificing the need for each jurisdiction to have somewhat different arrangements within their jurisdictions to reflect whatever differences there are in those jurisdictions.

The following question is: what do you think are the advantages and disadvantages of the institutional model proposed by the Australian Bureau of Agricultural and Resource Economics [ABARE]? I must say, it was not clear to me, from looking at the ABARE material, that there was a single institutional model proposed by ABARE. ABARE has done a great deal of work looking at the impacts of different water management arrangements, looking at the way in which a water market would work, and that kind of research is obviously going to be relevant to the work that is to occur between now and the next COAG meeting in April which will develop an implementation plan for the COAG agreement. I expect that the ABARE work will be an input to that, and it may be useful if I say something about the way the COAG agreement from 29 August will be translated to real action.

The proposal is that, all jurisdictions having signed up to the National Water Initiative, there is then to be established, in the great tradition of these things, a senior officers group below COAG which comprises a representative of each of the jurisdictions. The role of that group will be to develop an implementation plan whereby each jurisdiction will have to set out what it proposes to do in order to meet the objectives that their leaders, their premiers, signed up to at COAG. That work is to occur between now and next April, when COAG will meet again.

CHAIR: It is not the central agency representative; it is the department representative?

**Dr GUEST:** It is the department, yes. It varies a bit between jurisdictions. In New South Wales the representation is me, representing the Department of Infrastructure Planning and Natural Resources [DIPNR], and a person from Cabinet Office. Some jurisdictions follow the New South Wales model; others have representatives from the natural resource agencies. But the lead role is taken by the natural resource agencies in each jurisdiction.

**CHAIR:** Which is entirely appropriate. The previous strategy for the Salinity Summit was supposedly co-ordinated by Cabinet Office, was it not?

Dr GUEST: Yes.

CHAIR: That has now been subsumed by your department?

**Dr GUEST:** That is right, yes. There was a specific job to be done in setting up the Salinity Summit which was carried out by Cabinet Office, but the baton has been transferred to this department over the last couple of years.

The final question is a group set of questions which follow out of an article by Mike Young and Jim McColl about the impacts of a variety of measures that might be used in the River Murray on the level of flows in the River Murray. I read very quickly the Young and McColl article this morning, and it is clear from the language that they use—in its guarded academic way—that the numbers they cite are pretty woolly guesstimates. They are pretty up-front about that, which is good, because that is honest. They are clearly themselves not confident about the numbers. That is the first point to note.

Our view is that their estimates of the losses to river flow are considerably overstated but, more importantly, what they fail to take account of is the management actions that the river managers might take in response to whatever changes occur. By that I mean the following. For instance, the first question asked here is: Young and McColl have estimated that if "water use efficiency savings are used to increase irrigation rather than river flow" there will be a reduction in flow of 723 gigalitres over 20 years in the Murray River system; what are we doing to address this?

Our central response to that is to say that it does not follow, if there are savings in water use for irrigation, that that amount of water will be lost to the River Murray, and it does not follow because the water management decision is: "What do we do with the extra water that's been saved by the adoption by irrigators of water savings measure? Do we allow that extra water to remain in use for irrigation or do we put some or all of that water back into the river?" The water management decision will be to decide how much water is required for environmental flows and therefore what portion of the saved water should go to those environmental flows.

It is quite conceivable, for instance, that water savings measurers are introduced on-farm which lead to a reduction in the amount of water required to maintain a given volume of output by 20 per cent. What happens to that 20 per cent? The premise in the Young and McColl article is that 20 per cent stays on-farm so, therefore, there is no gain to the environment. That is the management decision that is required, which is what do we as the river managers want to do with that 20 per cent? Do we want to put it into the river for the required environmental flows, or should some of it remain on-farm? It is quite conceivable that in these sorts of situations there is a win-win—there is a win for irrigators and there is a win for the environment—because the adoption of water efficiency measures can lead to there being more water available to irrigators and more water available to the environment or to the river. In very general terms, the error in the Young and McColl premise is to not take account of the management decision that will be taken about the way in which the water is to be used.

**Mr McGRANE:** From the irrigators' side, even though they get incentives to be more efficient in how they use the water and they save this 20 per cent, it is human nature to want to increase the productivity on the whole property. They are not wanting to give that away. Would it not be an idea to look at fifty-fifty?

**Dr GUEST:** Yes. I think that is exactly the sort of thing that will need to be negotiated. One of the critical issues—and it goes to human nature again—will be who pays for these on-farm water efficiency measures? If the public purse pays for all of them, for instance, then I think the public has a

fair right to say, "We've paid for them. We ought to reap the benefits." If the farmers share some portion of the cost, which might be appropriate—recognising that the farmers are going to gain some benefits out of this—then the farmers could quite rightly say, "Well, we've paid for some portion of this. We ought to be able to retain some portion of the savings." That will be a political process that will be needed to settle what the distribution of costs is and, therefore, what the distribution of benefits will be.

The central point is that we need to recognise that whether or not the introduction, the implementation, of water efficiency measures yields a benefit to the environment is entirely a matter of the management arrangements we adopt about how we use that water. That is a comment that applies to each of these issues. Indeed, it would have been useful if they said this, but you cannot predict what the outcome will be. For instance, I was in Wagga last week talking to community representatives about this kind of issue. This was exactly the discussion we were having: to recognise that there will need to be an arrangement, a process, whereby the distribution of costs and benefits is resolved, but that it is conceivable that if we do this program sensibly, there is a win for both sides.

There is a win for the community because we will ensure the sustainability of production by ensuring the long-term survival, the long-term availability, of the water source, and there is a win for the environment because the way we do that will be such that there is the collateral benefit of freeing up additional water which can be left in the river. It is very rare that there are win-wins in life. There usually is a trade-off; someone wins and therefore someone loses. I do not think it is naive in this case, though, to think that there is a win-win, but it will depend on how sensibly we can introduce measures that lead to more efficient water use on-farm and how we then negotiate the distribution of those benefits between the farmers, between the irrigators, and the river. It is conceivable that there is a win-win for both sides.

Certainly in the long term, we believe, just as we have argued locally in relation to things like the groundwater system, that unless we do these kinds of things, unless we begin to rein in the aggregate amount of water that is extracted, then that water source will not be there in the long term and the industry will not be there. Industry itself recognises that. In groundwater, for instance, that is well recognised. The argument is all about, "Okay, how do we best distribute the costs and benefits of getting to that position of having a sustainable level of extraction?" In this case, now that we have the \$500 million on the table, we have a very substantial pot of money available to get out there and spend money to find water savings which we then can distribute between the users and the environment.

CHAIR: Did you fix the urban salinity problems while you were there, Chris?

Dr GUEST: No, that's tomorrow.

CHAIR: Presumably that money would not be able to be used for things like that.

**Dr GUEST:** No, it will not. It is to be allocated for The Living Murray, for environmental flows and industry sustainability.

**CHAIR:** They will not be very happy about that, will they? They have major issues. We addressed them in our previous committee. I am well aware of them, and I am sure you have had lots of representations about them as well. What happens to issues like that, now that we are moving on to another section of the debate? Dubbo has some real problems.

**Dr GUEST:** Yes. There are two things here: one is that we are undoubtedly seeing something of the ebb and flow of headline interest in issues. The headline at the moment is all the River Murray and is less salinity. However, sitting below that headline ebb and flow is a continuing commitment through the National Action Plan on Salinity and Water Quality to the \$1.4 billion for water quality and salinity, which includes as part of the local action an urban salinity focus. That is unchanged. In fact, following the announcement that the Government made at Country Labor in Tamworth in early July, whereby the New South Wales Government has proposed a change in funding arrangements under the National Action Plan [NAP] and Natural Heritage Trust 2 [NHT2], the expectation is that the purpose of that change in funding arrangements is to allow local communities a far greater discretion about the way in which they spend those two sources of funds, which will give them the

discretion to devote money to things like urban salinity in Dubbo or Wagga where it is a big issue; Werriwa. There are lots of towns where it is a big issue; western Sydney. People allow those communities to make those decisions.

In a way there are two things that come together. There has been considerable frustration about the incredible complexity and bureaucracy that has grown up about the decisions being made about how to spend the NAP and NHT2 money. The New South Wales Government's response to that is to say, "Look, we need to cut through this system that's grown up like Topsy and get back to basics. This is money intended to go to local communities to be spent on the things that local communities judge to be important." In those towns and regions where urban salinity is an issue, then the communities will have the capacity to decide on that priority.

CHAIR: It is also part of the responsibility of your department as well, is it not?

**Dr GUEST:** That is right. As the department responsible for the salinity strategy—and an element of that is urban salinity—then it is our responsibility.

CHAIR: Do you still have the Western Sydney Salinity Unit?

Dr GUEST: Yes.

**Mr McGRANE:** Three or four years ago the Government of New South Wales announced there would be a lot more money for salinity. To me, a lot of that money has not been spent.

**Dr GUEST:** That is right. That is a source of frustration. The National Action Plan was announced in October 2000 as a seven-year program with \$1.4 billion—50 per cent from the Commonwealth; 50 per cent from the states and territories. Two years on, almost none of that had been spent. Three years on—in October 2003—still very little of that has been spent. Why? The reason is that in the great history of Federation the arrangements that were settled through Commonwealth negotiations have wound up being incredibly complicated. It has meant that there has been a very wide funnel, if you like, with a very narrow neck and it has taken a long time to get the money through. It is for that reason that the New South Wales Government at the Country Labor Conference said, "We've had enough of playing along with this Commonwealth game."

Communities are very frustrated—as you are saying—that the money, although promised in October 2000, is not coming out. We need to cut through this and have a very simple system, whereby prima facie a substantial chunk of money out of these programs will just be allocated direct to the local community, with none of the filters of Commonwealth-State officials reviewing and assessing these things. You remove the filters, you allocate the money direct to the local community through the Catchment Management Board—or its later equivalent, the Catchment Management Authority—and leave them with the discretion to make the decision about how they want to spend the money. This will mean (a) it all happens much faster because you remove all intervening layers; and (b) it happens in a way that ought to better reflect what local communities want, because the decisions will be made locally.

**CHAIR:** That is interesting. I still think that is a problematic approach as well, in terms of perhaps the ultimate strategic goals of a department like yours or what we are trying to achieve in a national approach, if we are just going to let local communities make all the decisions. Basically, that is the model in WA and South Australia. We have been to both places on previous occasions and we have talked to them. While I think that it certainly does empower communities, they still have a lot of issues that do not get addressed in the process. Where does it leave your extensive bureaucracy? You have the residue of Land and Water Conservation, have you not? You have the people who have been at the forefront in the past in trying to deal with the issue. Where does that approach or commitment leave your staff?

**Dr GUEST:** There are two things about that. The first is that I should have said in my answer that money will be allocated to the local body and they will be free to spend that money, providing it meets certain statewide criteria. There will be a framework, I should say, to balance up that answer; it will not be a matter of a complete discretion to spend.

#### **CHAIR:** It would be pretty scary empowering the Country Labor Conference completely.

**Dr GUEST:** The discretion to spend will be that it occur within published guidelines. Those guidelines essentially will say things like the program must be directed to addressing salinity or water quality; it must be cost effective; it must be thoroughly costed in terms of the way in which the process of selection occurs. There will be two elements to the guidelines. One is what it is they have to spend the money on and they will have to reflect the priorities of the program. The second is that there will be some rules about the process whereby they (a) come to the decision and (b) then project manage the money itself. So, yes, there will be statewide guidelines.

That then leads into a response to your second question which is, what does that mean for the role of DIPNR? The role of the department will be that of providing and developing the statewide policy and regulatory framework for natural resources management in New South Wales. That will mean withdrawing from some of the local level involvement we have had previously through the close work we have done with the old catchment management boards, devolving to them more discretion, and taking the role of establishing the framework within which they operate. There is a devolution to local level decision-making and, accompanying that devolution, there will be a matching shift of responsibility on our part out of working with the Catchment Management Board by being on the board itself, to withdrawing from that and having the job of developing the guidelines and the framework.

I should add that, if and when catchment management authorities are established, we expect that they will have roles and responsibilities to do things which catchment management boards do not have—they are only advisory groups. Catchment management authorities would be empowered to do certain things and to spend moneys and to project manage those moneys. They will need some full-time staff. If this proceeds, some of our staff will be transferred from the department to constitute the secretariat and professional support required by the catchment management authorities. So there is a shifting of the department's role in two ways. One is that some of our staff will transfer to the new catchment management authorities, so those people will move to work directly for the catchment management, which will still be the vast bulk of people, will be to establish the framework within which these catchment management authorities operate. The intended role, broadly, of the department is that it becomes a strategic regulatory policy-making body, defining a set of decisions that are then made at the local level within that framework.

**Mr McGRANE:** What about organisations such as the Dubbo group under Ken Rogers, where 14 councillors all got together and now they have a separate entity to the council's? Will they have a right to be able to come to your department and get money? Do you know the group I am talking about?

**Dr GUEST:** No, I do not. If catchment management authorities are set up—and obviously the Government has yet to take a formal decision on this—then I expect that one of the groups or interests represented on the catchment authorities will be local government, so that local government will have a formal role in the catchment management authorities.

**Mr McGRANE:** This group is made up of local government, but it is outside local government now because they wanted to take the parochialism out of it.

**CHAIR:** I think you are going to have to do some tick-tacking with the Minister, because there is going to be a lot of lobbying about appointments to these things. You are really going to have to have some exchange with him.

Mr McGRANE: Yes, fair enough. I am sorry, I thought you knew more about it.

Dr GUEST: No, I do not know much about the Macquarie just yet.

CHAIR: He's the good soldier.

Mr APLIN: What is the time line on establishment for the catchment management authorities? I understand some are already in existence but not all of them have been fully funded. Is

there a time line?

**Dr GUEST:** No, there are no catchment management authorities yet. Again, I can only speculate, but I would expect that a good time for them to start might be 1 January.

**CHAIR:** But there has to be legislation, does there not? The last bill was pulled, was it not? We have not actually got a current bill.

Dr GUEST: It will need legislation to change from catchment management boards to catchment management authorities.

CHAIR: So there will be debate. It will be in the next session, I assume.

Dr GUEST: That will need to come through in this session, the spring session.

CHAIR: This session. This is it.

**Dr GUEST:** Yes. If it goes through successfully, then a good time for them to start would be 1 January.

**CHAIR:** It sounds as if we should talk to the Minister about when he is bringing it forward. Thank you very much, Chris and Des. We are going to be around for four years, so we appreciate an ongoing relationship with you. We know that you are in a process of evolution yourselves and obviously it is a challenging time. We would very much like to keep that relationship going. Do we liaise with someone in the department? We did write to you about that. Could you give that some consideration?

**Dr GUEST:** I will pursue that and respond formally.

#### (The witnesses withdrew)

(The Committee adjourned at 11.40 a.m.)