



COMMONWEALTH OF AUSTRALIA

Proof Committee Hansard

SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT
REFERENCES COMMITTEE

Reference: Rural water usage in Australia

TUESDAY, 26 AUGUST 2003

MOREE

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SENATE

RURAL AND REGIONAL AFFAIRS AND TRANSPORT REFERENCES COMMITTEE

Tuesday, 26 August 2003

Members: Senator Ridgeway (*Chair*), Senator Heffernan (*Deputy Chair*), Senators Buckland, McGauran, O'Brien and Stephens

Participating members: Senators Abetz, Boswell, Brown, Carr, Chapman, Colbeck, Coonan, Crossin, Eggleston, Chris Evans, Faulkner, Ferguson, Ferris, Harradine, Harris, Hutchins, Knowles, Lees, Lightfoot, Mason, Sandy Macdonald, Murphy, Payne, Santoro, Tchen, Tierney, Watson

Senators in attendance: Senators Buckland, Ferris, Heffernan, McGauran, O'Brien and Ridgeway

Terms of reference for the inquiry:

To inquire into and report on:

1. current rural industry based water resource usage;
2. options for optimising water resource usage for sustainable agriculture;
3. other matters of relevance that the committee may wish to inquire into and comment on that may arise during the course of the inquiry, including the findings and recommendations from other inquiries relevant to any of the issues in these terms of reference.
4. the Committee to make its report to the Senate on this matter by the last sitting day in 2003.

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Committee met at 9.01 a.m.

CHAIR—I declare open this public meeting of the Senate Rural and Regional Affairs and Transport References Committee. This is the committee's first opportunity—but second visit—to publicly canvass issues raised by its inquiry into water resource usage in that part of rural Australia which relies on irrigation water for its agricultural activities. The committee's program for this week has taken it to St George yesterday and Moree today and will take it to Griffith tomorrow. The committee is currently programming further hearings between now and the end of November which are essentially intended to give it a more complete picture of the rapid and difficult changes facing rural water users. The committee's inquiry focuses on current rural industry based water resource usage, options for optimising water resource usage for sustainable agriculture and any other matters of relevance that the committee may wish to inquire into and comment on that may arise during the course of the inquiry, including the findings and recommendations from other inquiries that are relevant to any of the issues in these terms of reference.

I welcome people here today. This is a public hearing, so it is good to see you here. A *Hansard* transcript of the proceedings will be made available. The format of today's hearing is a program of witnesses invited by the committee. At the end of the hearing, at approximately 2.30 p.m., there will be an invitation for anyone else who wants to speak on a matter relevant to the inquiry to make a short statement. That will be for three minutes and will not be subject to committee questioning, but the contributions will form part of today's recording of proceedings and will be considered by the committee in preparing its report. The committee has also received a large number of written submissions—I think it is now in excess of 50—all of which are available from the committee secretariat or from the Parliament House web site for the committee's inquiry. It should be noted that the committee has authorised the recording, broadcasting and rebroadcasting of these proceedings in accordance with the rules contained in the order of the Senate 23 August 1990 concerning the broadcasting of committee proceedings.

Before the committee takes evidence, let me place on the record that all of the witnesses that appear here today are protected by parliamentary privilege with respect to the submissions made to the committee and evidence given before it. Any act by any person which may operate to the disadvantage of a witness on account of evidence given by him or her before the Senate or any committee of the Senate is treated as a breach of the privilege. While the committee prefers to hear all evidence in public, if requested the committee may agree to take evidence in camera and record that evidence. Should the committee take evidence in this manner, I remind the committee and those present that it is within the power of the committee at a later date to publish or present all or part of the evidence to the Senate. The Senate itself also has the power to order production and/or publication of such evidence. Any decision regarding publication of in camera evidence or confidential submissions would not be taken by the committee without prior reference to the person whose evidence the committee may consider publishing.

[9.04 a.m.]

ABER, Mr David John, General Manager, Moree Plains Shire Council

CHAIR—I welcome our first witness today who is a representative of the Moree Plains Shire Council. I invite you to make some opening remarks.

Mr Aber—The basis of my submission and what I want to cover are the local government issues associated with rural water usage, some of the flow-on effects that the industries here are experiencing, how that affects us and some of the policies that we have to cover. Of particular interest to us, of course, is the tying of water licences to the valuation of properties. That has a dramatic effect on our potential rate income. It is the effect not so much on the income but on the distribution of where we raise the income. The distribution across some of the population will affect their ability to pay, depending on the wealth they are generating on their properties.

For this area, water is an extremely valuable resource. I do not think anyone would discount that that is the case right throughout Australia. It is important for us for our domestic supply and for some community uses, such as the preservation of reserves, parks and gardens—the whole thing. Also, this community depends on a sustainable supply of water. We are basically an agricultural economy. There is a lot of broadacre farming and a lot of that is based on irrigation. If we do not get it from the heavens, we have got to get it from somewhere else. It is a very strong economy. We quote a figure of about \$750 million which goes into Australia's GDP every year from this shire. We are significant producers and, on that basis, we claim to be the most productive shire in Australia.

We use water from the Gwydir River system in this area. We also have a subartesian supply, which we use for the town supply. The town water is pumped from the ground water resources beneath the town. That stretches out as far as the villages of Ashley and the wider rural and residential areas around the town. We also use water from the Great Artesian Basin. That is primarily for our hot mineral spas in the tourist facilities here. That is a very important part of the community usage; it is also used for stock supply further out.

I want to touch on the rates issue. Currently, water licences are tied to the valuation of land. The valuation is higher for irrigation based properties, which means that we are getting a higher income based on our rural land rate on the irrigation properties. That is important because it reflects a lot of the transportation demand created by that industry. The higher levels of production mean that there are a lot of inputs going in but also a lot outputs coming out from the produce that is being produced. One of the important reasons this shire was instrumental in the National Rural Roads Congress—the first congress was held here—was the pressure of meeting the transport demand of a vibrant agricultural industry. That is fairly acute here. We are well aware of the problems of maintaining rural road funding and local road funding to try and keep that network operating. With the high level of productivity, especially coming out of irrigation areas, a high demand is placed on our roads. Road trains use our roads basically all the time. With the high productivity, a lot of product has got to get off the farm to the railhead or the transportation depot to wherever it has to go. The issue for us is that, if you remove the licence, we have to average the rates out across—

Senator HEFFERNAN—We have got the issue.

Mr Aber—I think you are pretty well aware of it. We have properties that are primarily grazing, with a bit of wheat. If you start doing that, it is going to create hardship for the people who are producing a high level of income—that is usually the small rural farm family type of operation. It will affect them.

There are a couple of minor areas that may be of interest to you. A number of vegetation plan issues in relation to linkage seem to be floating around. In any legislation coming through, we need to start to honour existing legislation by thinking about what that covers. Among some of the issues that have come through was the state government looking to redefine the riparian limits in relation to vegetation. It is already covered under the rivers legislation. Why not change the definition in the original act rather than introducing new legislation over the top of it, making it more complex for us to manage and to understand which act has precedence? Already local government operates under about 120 different pieces of legislation. If you make it more and more complex, it will increase the expertise needed to even understand what we are supposed to do. It is the same situation with the riparian zone—the area around the edge of the rivers. Let us have consistent zoning between all the levels of legislation associated with that; let us come to some common agreement.

I will move on to planning issues. With respect to recent planning about water, there have been strong concerns in this community about the formation of committees from outside with strong representation from capital city areas. That is usually just balanced with the number of local representatives and, consequently, there is a strong external influence on the outcomes and also a strong sense of non-ownership by the local community—which seems to be counterproductive to some of the ideals that are actually being put into some of the studies we are seeing.

The other thing which is of concern, particularly to us as a council, is the tendency not to take into account the socioeconomic issues or to dismiss them by saying, ‘Someone has looked at that, and it does not seem to be a problem.’ I think for this community socioeconomic issues are a very strong and important issue, considering the high Aboriginal population in the town. We are putting a lot of effort into generating Aboriginal employment, particularly through the AES. They are doing a fine job in pushing that issue and getting people working, particularly in the areas where irrigation farming is going on. That farming is actually generating a lot of the jobs that they are getting. By creating a strong work ethic, we are seeing some impact in the community on some of the issues that we have been facing. So we are very sensitive to any potential changes to those things. Also, the more we can reduce the dependence on welfare in the community, the less welfare payments are going to be made and the more people will have the self-esteem that comes from actually looking after themselves. The greater their self-esteem, the greater the value of the community to itself. That also starts to break down some of the barriers between the socioeconomic strata.

In terms of the notions of regular flows, if you look at the geomorphology of the systems here, you will see that these rivers are not used to constant flows. It is interesting that some of the ecological arguments are actually trying to persist with increasing some of the regular flows into the areas. The Gwydir River system has been boom and bust, particularly with regard to any water going through from here into the Murray-Darling system. It has generally been a closed

system, with low-flow to moderate-flow events. Larger floodwaters move through and go into the Barwon and then on into the Murray-Darling system. I am not sure, from some of the stuff I have read, that that has been much looked at. In fact, in some cases I think there has been a tendency to want to say, 'Here's a source of water we can actually add to reduce the problems elsewhere,' but that has the potential to have a localised impact, particularly in areas like the watercourse area further to the west.

In terms of some of the environmental flows and the way that some of the systems have been developed here, particularly Copeton Dam, depending on who you look to up to about 74 per cent has been dedicated to the environment already. I will not guarantee those figures—some of these things can be a bit rubbery in terms of how people interpret them—but probably in the order of 50 to 70 per cent is already dedicated to the environment. That is important and it needs to be recognised. I think it is pretty well recognised by the community here. What they are concerned about is any attempt to go beyond that. We do get some of our water supply from Copeton—a very minor amount for Weemalah township—so we are interested in that, but it is a fairly complex and long way to get water down to Weemalah before we can pump it up into storage for the town. One of the longer term planning issues for us is to make sure that we do have sufficient water to maintain future growth of the urban centre.

Moree clearly has a vision for maintaining a regional focus and being a regional centre, particularly on the strength of its agricultural economy. We see the formation of a regional triangle between Tamworth, Moree and Dubbo. While we do not have a lot of government facilities, it is the banking and agricultural based supporting industries that keep this going at that level. We need to make sure that we guarantee the water supply to sustain growth and that it is not artificially cut off by some of the measures or considerations being made.

I know that is not part of the initial thing, but just to indicate how government decisions can affect us, there is an oversupply of ground water licences in this valley. The plan was to take all licences into effect rather than start looking at something more practical like removing licences that are not being used. Only 50 per cent of the licences were being used and the amount of water used out of the ground water was equal to the sustainable supply that was worked out anyway. Yet, there was pressure to consider all licences. Suddenly the licences that were not being used had a greater value than what was perceived and the people using them are now forced into a situation where they have to spend a lot of money to get the value up to a point, which was a rather surprising decision.

The artesian supply is important for us. We are working through the GABAC to try and maintain that. A lot of the tourism industry here is based on the artesian supply. There is pressure on us to reduce the amount of water being used, yet it is an industry that has the potential to grow. We are simply looking at maintaining our current level of supply but we are also putting in measures to reduce the amount we are using by using pool blankets, timers on pumps and things like that so that we grow the industry. This will allow other people to move in and take up the water we are saving and use it for other facilities. In particular, it is important to us to maintain the level of tourism, the diversity of restaurants and quality of life that we have, because of the large northern European population that visit and spend up to six months of the year here because of the baths. Those are the areas I wanted to cover.

Senator HEFFERNAN—We have discussed the rating issue before, but I would like to highlight it. If under what was the proposed river management plan or the valley management plan licences were separated from the land so you had two regimes of valuation and then you had a further layer of being able to acquire those as a paper traded commodity and someone in Sydney potentially owned the bulk of your asset base in water here, how do you think you would structure your rates to pick up the outsiders who own the water?

Mr Aber—Rates can only be based on land valuation. So if it is removed from the valuation of the land and the land comes to a common valuation, water rates are going to have to be set. We have discussed with the state government what options are available such as looking at some sort of land use tax. Increasingly, one of the things that is coming home is that in terms of looking after the future of local government areas, rates as a land tax are not going to do the job. That is why we are looking at other—

Senator HEFFERNAN—As a matter of interest, how much of your expenditure is a rating base and how much of it is grants et cetera?

Mr Aber—It is about fifty-fifty. To put it in context, the amount of rates we collect is equal to our wages bill in terms of providing all the services we provide and have to provide to the community. So the rates we collect are equivalent to our wages, and it is about 50 per cent. The rest is mostly made up of grants—a lot of those are federal grants—as well as some private income that we generate.

Senator HEFFERNAN—Some of the grazier blocks, as opposed to the cotton blocks around here, are under a regime where you split the title to take the water away, so they would have an enormous increase in their rates. That would be pretty unfair.

Senator O'BRIEN—I am interested in the distribution of the income-generating power—you talked about the differentiation between the income generated by grazing land and the income generated by irrigated crop land. Is it fair to say that irrigated crop land is fairly closely held and grazing land is much more widely held? Are there a greater number of land-holders in grazing land?

Mr Aber—I do not think so, no. Irrigation land is, quite obviously, distributed down the river systems, but interspersed are vast areas that are grazing or broadacre wheat cropping land, and those activities are dependent on the rainfall.

Senator O'BRIEN—I meant the entities—the number of entities that are operating in the irrigated areas. Is that becoming more concentrated?

Mr Aber—I do not see it as becoming more concentrated, no. I think it has probably maintained a reasonable distribution. I think what is happening with farming land generally is that the smaller land holdings, as they get into financial hardship, are being taken up by larger land-holders—either companies or family companies. In the irrigation area it is basically corporate entities. Let me put it this way: I have not seen anything that would suggest to me that it is actually changing dramatically.

Senator O'BRIEN—There is some aggregating of titles to the larger entities.

Mr Aber—That has always happened.

Senator O'BRIEN—What is the value to the town of the irrigation businesses in terms of business generation? Does most of the input and service for the irrigated areas come through the town, or are businesses sourcing their resources from the larger centres—taking advantage of perhaps larger buying power, bypassing the local district service enterprises and going to Brisbane, Sydney or wherever?

Mr Aber—Certainly, there is a thriving subcontracting industry based on irrigation farming. So I think it is fairly strong as a service centre for contracting, also for equipment supply. Irrigation properties do have strong buying power, and they could go elsewhere if they wanted to. Certainly, the profits to a large extent have gone elsewhere. That is an issue that we have looked at.

Senator O'BRIEN—The council is looking at how much of the income generated by the irrigation businesses comes back through the town, is it?

Mr Aber—We have not looked at it specifically as a topic. We really have not had the resources to follow that closely. One activity we have gone through in the last 12 months was looking at the effects of the drought anecdotally, particularly in the contracting area. There is a reasonably minimal effect depending on where they are working. But the threat of not having a cotton crop this year because there is not enough water has suddenly put the doom and gloom on. That gives a pretty good indication of the level of support for that activity.

Senator O'BRIEN—I take it that the drought has had a similar effect on non-irrigation enterprises?

Mr Aber—Yes, it has.

Senator O'BRIEN—Maybe it was feeding into my question, but I was just wondering why you highlighted the impact of the drought on the irrigators.

Mr Aber—In the non-irrigation areas, they know the tendency is for one bad year in five years. One year is okay but, if you have two years, it really starts to hit home—and that is what we are facing now. We know that in a lot of farm areas, if they know they are not going to get a crop in or something like that, they might take a holiday.

Senator HEFFERNAN—A bit of wheat has gone in.

Mr Aber—Certainly, this year there has been a lot of wheat.

Senator HEFFERNAN—Provided we do not get a frost in the next couple of weeks, they might be all right. They look pretty good to me.

Mr Aber—Looking at what is happening in the south—the chances do not look good. It is hard because it is anecdotal, really. People have been able to manage themselves to get through to this point but, once there is no irrigation based activity, that is the end of it—that is basically where people start considering whether they have to move out and look at jobs elsewhere and

things like that. It has been interesting with this drought compared to some of the previous ones in that people have actually been able to maintain a livelihood or just keep going until now, but the threat of it going on further is starting to take—

Senator HEFFERNAN—Do you mean the asset owners or the employees?

Mr Aber—The employees. A lot of the employees have moved off properties back into town, and they have started to drift away now, whereas with previous droughts this happened during the middle of the drought and they just never came back again. Regarding the point I made about employment, a lot of the Aboriginal employment strategy is tied to the irrigation. They are getting jobs in that area because that is where a lot of the stuff is being generated at the moment.

Senator FERRIS—Is there anything you could supply to the committee on that? Has the council been part of any program that you would be able to supply details of to us?

Mr Aber—I think it would be worth talking to Dick Estens about that. He has a lot of figures and stuff to back that up.

CHAIR—We could possibly arrange to drop in this afternoon, if we have time.

Senator FERRIS—That would be terrific.

Senator HEFFERNAN—How much do you charge for your local domestic water?

Mr Aber—Forty-five cents a kilolitre.

Senator O'BRIEN—Has there been any impact of mechanisation in this area? You hear of the introduction of further mechanisation into some of the agricultural businesses and of the impact on employment. Is there any information you can give us about that?

Mr Aber—In the last five years this community has slowly come back from the greatest losses in the 1995 drought. In terms of productivity, I am not sure of the actual figures, but there certainly has been a dramatic increase in productivity. With the increases in efficiency in farm production, they have needed fewer people on the farm. There have been changes in large-scale equipment. All that sort of thing has basically meant that productivity, I think, has had a dramatic increase. In fact, I did not bring it, but I have a chart which highlights the amount of water per hectare of cotton. It charts quite clearly a decrease in the amount of water used per hectare, but productivity has been going in the opposite direction. So there have been quite significant improvements, particularly looking at cotton itself. That seems to have been spread right across the farming sector.

I think that is at the heart of some of the problems in regional and rural Australia: productivity has increased quite significantly and you are needing fewer people to produce the same or even more product. Consequently there has been a drift back to the cities. One of pressure points in terms of water, for us as the price goes up, is that we start looking at changing the crops or the produce being grown. Then, technically, you may move into areas where you need more people to produce that crop. Consequently there may be quite a significant turnaround the other way,

and there would be pressures on us to provide facilities to support a community that is going to grow very quickly.

Senator O'BRIEN—Perhaps seasonality becomes more of a factor.

Mr Aber—Yes.

Senator HEFFERNAN—Has the productivity overcome the vagaries of the market and those wise decisions on currency trading et cetera that everyone thought were a great idea at the time?

Mr Aber—I do not know—I think farmers are the biggest gamblers I have ever come across on some of these issues! If you look at it over time, there has certainly been a levelling out and a slow growth back. Certainly this area has never gone back to where it was 10 years ago.

Senator O'BRIEN—Do you know whether there has been significant introduction of genetically modified cotton in this area?

Mr Aber—I believe so, yes.

Senator O'BRIEN—Thank you.

Senator FERRIS—I was interested in the comments you made earlier about the tourism industry. Did I understand correctly that you said the amount of water available in the area where the spas are has fallen?

Mr Aber—The issue there is that we have a licensed amount that we can use. We have negotiated an agreement for the spa industry between all the spa users—the artesian water users—in town. We are capped on the level we can take, and we are actually under pressure to reduce the amount. This is part of the water efficiency program. What we have been arguing is whether we can maintain the level we have—still put in the efficiency measures but maintain the difference that we create for future expansion of the industry.

Senator FERRIS—I just wondered whether as a council or as a tourist body in the town you have ever done anything on this in terms of documents that we might be able to have a look at on the number of people who come, the generation of wealth in the town as a result of it and the potential threat to that as a result of the water allocations.

Mr Aber—We have worked out that about \$40 million of the local economy comes from the spa users and the tourism generated by that. That supports a very lively motel industry. I think occupancies are rarely below 80 per cent here. If you have a motel here, you have a smile from ear to ear because, basically, all year around you have a high level of occupancy. Certainly we have some figures if you would like those.

Senator FERRIS—I think it would be useful to have a look at the pattern. I was intrigued to hear you say that some European people come down here for months at a time. That would be a significant wealth generator. I would be interested to look at the figures.

Mr Aber—What we are picking up is the pensioner tourist who comes for the dollar rate train fare and they spend some time here. We have people from Melbourne, Sydney, Newcastle and Wollongong who own property here because of the spa. The family rate takes them through the facilities. It is very popular. If you have a look at some of the supermarket shelves, you can see the different varieties of food that are on sale here—it is quite cosmopolitan—and that is due to the high level of visitors who come here for the spa water.

Senator FERRIS—I would be interested in anything you could supply the committee with on that.

Senator McGAURAN—On that same theme, the spa water is not from the same basin that you are using for the town water, is it? It that right?

Mr Aber—That is right.

Senator McGAURAN—So it is the subartesian basin.

Mr Aber—There is the river supply. We have a subartesian supply which runs from the town and heads towards the west a bit. There are two layers. There is a layer above it and underneath is the water we are actually tapping, which comes out almost pure and clean. So it takes very little treatment from us to provide the town water supply. Chlorination is the only thing we do to it. It is so clean. Anyone who lives in Sydney or anywhere and fills up their pool wonders what is going on because the water is brown. If you fill your pool up here it is clear.

Senator McGAURAN—That is a unique situation. I do not know of any other town that does that. It is going to be a finite resource, though, isn't it?

Mr Aber—No, it is not finite—it is basically replenished, probably more from the river supplies. If you look at the whole pattern of this area, this is basically one vast river delta. So you have all these pockets of river channels and stuff that have been covered up with the siltation process that just builds up. The water river courses just fan across and deposit silt and it gradually keeps building up. That is how this whole area was formed—basically from here right down into the Murray system.

Senator McGAURAN—As a Victorian, I am allowed to ask this question: does any other town use this? Is anyone else tapping into it?

Mr Aber—There are licences to use the subartesian supply for irrigation farming. They have been issued—it is not just us. So it is being used for that. There are also individual users on properties who supply their domestic bore out of that area.

Senator McGAURAN—No doubt the drought would have affected—

Senator FERRIS—That is what Mr Aber was talking about when you were out of the room.

Mr Aber—It has a fair bit because basically it is not replenishing. In some of the outer areas of the aquifer, what we will notice is that domestic supply pumps will start to lose pressure and

the ability to get water. But in the middle, where we are, there is probably not much of a problem.

Senator BUCKLAND—Still on the issue of the town water supply—and irrigators can draw upon that as well—do irrigators who have allocations from river water have allocations of bore water?

Mr Aber—I do not know offhand. There may be. You would have to talk to the state government about that—the Department of Land and Water Conservation.

Senator BUCKLAND—So is the water rating equated by the council?

Mr Aber—The water rating valuation of the property is based on whether there is an irrigation supply.

Senator BUCKLAND—Is there any metering of that?

Mr Aber—There is metering of the supply. We are licensed to take up to a certain amount. There is metering of all the pumps. The amount of water used is metered off the pump and they have to pay fees based on how much water is used.

Senator BUCKLAND—And what about for those who are taking water out of the ground?

Mr Aber—It is the same deal—it is metered; our pumps are metered. We have a licence for so much per year that we are allowed.

Senator BUCKLAND—That is for the council; what about for the irrigators?

Mr Aber—It is the same deal.

Senator BUCKLAND—And does that equate to the rate allocation or the rating of properties for council purposes?

Mr Aber—My understanding is that if they have a licence—no matter where it comes from—that will be included as part of the valuation of the property.

Senator BUCKLAND—You were talking about employment opportunities. I am aware of some of the programs that are going through Moree, particularly with Indigenous people, which are most credible. But are the contractors that you were referring to locally based or itinerant?

Mr Aber—A lot are locally based. We get a significant drift of tradesmen in particular from places like Inverell and Tamworth when there is a lot of work on. We do not seem to have a lot of trades contractors living here, but in terms of farming contractors and people that supply earthmoving equipment, irrigation equipment, satellite technology and things like that there is quite a significant and vibrant industry.

Senator BUCKLAND—Are there any programs to attract tradespeople to the town?

Mr Aber—We are looking at that at the moment. That is something we have noticed that is an important issue for us, particularly if you start looking at being able to build houses or things like that. One of the things that has been discussed is a proposal called Country Week. It is starting to gather momentum. It will be almost an expo of what is available in the country for the city people in Sydney. It is being planned for next year. As part of our program for that we are looking at things like whether we should be attracting or targeting tradesmen as part of that process.

Senator BUCKLAND—You mentioned, two or three times, significant increases in productivity; is that in the cotton industry or in rural industry in general?

Mr Aber—I think it is in rural industry in general. If you look at wheat production, cotton production and a lot of the growing production areas with conservation farming techniques and things in terms of conserving the amount of water in the ground and how they actually do it—no-tool farming et cetera—the evidence is there that the productivity of crops per hectare has increased quite significantly.

Senator BUCKLAND—Is there any centre here or any individual cotton grower in particular who is researching new methods?

Mr Aber—I think the irrigation industry are appearing after me. They will probably have a fair bit of information on that.

Senator BUCKLAND—But there is nothing in town such as government funded or cooperatively funded research programs?

Mr Aber—There is the Australian Cotton Research Institute in Narrabri. It should be looking at a lot of the issues that are important here. We are discussing with a number of groups the establishment of an agricultural research centre in Moree, apart from some of the things that are already established here.

CHAIR—Mr Aber, thank you for coming along today and providing assistance to the committee. We will arrange to meet with the AES later on this afternoon.

[9.41 a.m.]

BOLAND, Mr Leslie Francis, Vice Chairman, Gwydir Valley Irrigators Association Inc.

BROWNE, Mr Richard Stuart, Chair, Gwydir Valley Irrigators Association Inc.

KIRKBY, Mr William Arthur, Delegate, Gwydir Valley Irrigators Association Inc.

MURRAY, Mr Michael Bernard, Executive Officer, Gwydir Valley Irrigators Association Inc.

CHAIR—Welcome.

Senator HEFFERNAN—Chair, could we put on the record the financial interest side of things? As you know, I have an irrigation licence, and I think we should have the interests of witnesses on the record—whether they are a cotton grower, rabbit breeder or whatever.

Mr Browne—I am presently retired, but I represent a corporate farming organisation. I was General Manager, Corporate Operations for Auscot Ltd, which is a large scale cotton grower, irrigator and cotton ginner in this valley.

Mr Murray—I am an employee of the association and a former irrigator from southern New South Wales.

Mr Boland—I am a cotton grower, cattle breeder and grain grower in the area.

Mr Kirkby—I am a cotton farmer. We are also playing around with horticulture olives, some citrus and grapes—we are fooling.

CHAIR—Mr Browne, do you wish to make some opening remarks?

Mr Browne—Yes. I would like to welcome you to Moree. Thank you very much for taking the time to come here. It is a great opportunity for us to showcase the Gwydir Valley, so we appreciate your attendance. To start, I will give you an overview of the Gwydir Valley—a brief history on irrigation development here—and lead into the discussion that way. I do not know how familiar you are with the Gwydir Valley or what goes on here, but if you bear with me I will try and give you a picture of how it operates.

The Gwydir Valley is probably one of the newer irrigation areas in New South Wales. It came about with the completion of Copeton Dam on the Gwydir River in the mid-1970s. Irrigation was promoted and licences were actively issued by the government of the day, so most of the irrigation development took place from about 1980 on. Up until that time, this was traditionally a dryland farming and grazing area. So it is a relatively new irrigation area. Copeton Dam has a capacity of about 1.36 million megalitres, which makes it a sizeable dam. There has been huge growth in irrigation here in the last 20 years or so, mostly based on cotton. As a result of the

completion of Copeton Dam, about 510,000 megalitres of licence entitlements were issued here—equivalent to about 86,000 hectares of irrigation activity per year.

The industry is very much based on cotton. Probably 90 per cent of all irrigation in this valley is based on cotton, and it has been the basis of the growth in irrigation. It is a fact that licences were probably overallocated in this valley in the early years, but I think most of the irrigators here have made adjustments for that. Their level of irrigation varies from year to year depending on the availability of water, and they have probably tended to buy up licence entitlements to compensate for the lack of reliability. The reliability of water supply in this valley is about 50 per cent. In other words, on average an irrigator would be receiving about 50 per cent of his entitlement.

A feature of this valley is that the water supply varies enormously from year to year. Over a 23-year history in the valley we have suffered three serious droughts—one in the early eighties, one in the mid-nineties and one now. During those periods the availability of water for irrigation has been very low, or zero in some cases. Nonetheless, irrigators have been able to operate in this environment, and it has really been very successful. The Gwydir Valley is the biggest cotton production area in Australia. Normally we would grow about 600,000 to 700,000 bales of cotton a year, which would bring around \$350 million into this community. Last year production in the valley was less than 50 per cent of normal. This year it might be only 20 per cent of normal, unless we get some rain and some water in the dam.

Access to water for irrigation comes via Copeton Dam. It is regulated and allocated water—that is, general security water. But the irrigators also have access to unregulated flows, which in the new jargon are called supplementary flows. Your entitlement to supplementary flow is based on licensed entitlement. In other words, we have some fairly rigid rules on how that water is shared. I would say that the current value of investment in irrigation in this valley exceeds \$1 billion, so it is a large part of the local economy of the town.

There are areas in this valley that have access to ground water. It has been developed over the last 25 years too. You could call it a mature development, where the aquifers are fully developed but not overexploited. We are dealing with water-sharing arrangements under the new water-sharing plan and with those cutbacks. With regard to water-sharing, the Gwydir Valley takes about one-third of all flows in this valley. The rest would go to the environment. By its very nature, it is a closed valley. It has a wetland at the end of it with an inland delta. Very rarely does the Gwydir Valley supply water to the Barwon-Darling system; that would occur only during years of high rainfall or flooding. I would argue that the industry is new, modern and efficient. It does not threaten the environment in any way, and irrigation takes only about one-third of all valley flows.

The irrigation industry and the cotton industry in particular are extremely well supported by research and development. The cotton industry is supported by a CRC for Australian cotton production and by the Cotton Research and Development Corporation. If you were to add up all the money that is invested in R&D in this industry in a year, it would amount to more than \$25 million. A budget of about \$15 million goes through the Cotton Research and Development Corporation, and a large part of that goes into developing sustainable production systems and, in particular, improving the efficiency of irrigation.

Most of the irrigation systems are fully enclosed. The water is controlled in those farms. To avoid pollution, we are not allowed to discharge water off our farms into river systems. A condition of licensing here is that all the farms have tail water return systems. As flood irrigation systems go, I would argue that the farmers here would be amongst the most efficient flood irrigators anywhere in the world.

I heard a question earlier on GMOs. Probably 50 per cent of all the plantings in the industry would be GMO now. Two sorts of GMO cotton have been planted: one is the BT cotton, which produces the insecticide for insect resistance; the other is Roundup Ready cotton, which is resistant to the herbicide Roundup. That is an overview of the valley. I hope it gives you a picture of how we are situated and where we fit in.

CHAIR—Do any other witness want to offer any information before we go to questions?

Mr Kirkby—Only on the ground water issue and this valley's use of the recharge. In fact, over the last five years it has used less than the recharge. It is averaging about 25,000 megalitres. The recharge is about 38,000 megs, they think—nobody quite knows and the department certainly does not know. So they have a whole lot of allocation out there, but there is not all that much use.

CHAIR—We were in St George yesterday and, in terms of the users of water on the upper and lower parts of the system, there were some very unique local issues that came to our attention. I came away from that thinking, 'Will there be a replication here in terms of local issues? How might that be dealt with?' Would you say, from the discussions that you have had either with the state government, in looking at water plans or the processes, or with water users in the valley, that it is a completely rosy picture and that there seem to be very few problems? Or are we talking about other things that might also need to be brought to our attention?

Mr Browne—Yes, there are problems. It is probably fair to say that the irrigation industry is under pressure, and the cotton industry is under pressure to perform in certain ways. I guess we have been caught up in the reform process and there are problems. It is true to say that, when licences were issued in this valley and irrigation came along, due regard was not given to the needs of the environment. It is fair to say that the Gwydir Wetlands, for example, were disadvantaged in that process and that the focus was on building a dam for irrigation and developing an irrigation industry. I think those problems were recognised in the early nineties and they have since been addressed. In fact, the irrigators in this valley worked with the community and the government to develop more equitable water-sharing arrangements, which were established in 1998.

On Copeton Dam, for example, in 1998 we introduced an arrangement of continuous accounting or capacity sharing, which set aside an environmental contingency allocation in the dam, so there is a volume of water in Copeton Dam available for environmental uses, as an environmental reserve. We also agreed to a sharing of unregulated flows or environmental flows, which was introduced in 1998. That is based on licensed entitlement. It recognised the need for more water to go to the Gwydir Wetlands. I would say that, yes, there have been problems, but a lot of those problems have been addressed.

I think we entered into some reasonable sharing arrangements in the late 1990s and, unfortunately, I do not think any of that has been recognised in the reform process. In fact, we were trying to pre-empt the reform process and be seen to be good citizens with some responsibility for the environment. The water reform process—the water-sharing plans—came along and rode over the top of that. I think the government want to be seen to be taking water away from the irrigation industry and giving it to the environment.

CHAIR—You say that there were some things during the reform process that were unrecognised. Are you able to tell us a little more about that so that we can get that on the record and so that we can get to know fairly clearly the things that are being done here in order to compare between not just the different systems but also actions by government?

Mr Browne—There is a lack of knowledge of what is going on in the valley—some very poor information. I guess we have been struggling with that for the last four or five years. In fact, this association has had to invest large amounts of money in gathering information to argue our case. We have some concerns about the computer modelling—the IQQM. We have some differences of opinion as to the input data in that and what it all means. We dispute the figures for run-off in the valley. In other words, all the modelling on the water sharing has been taken from a point in the river upstream from Moree and does not take into account all the other water that is flowing in the valley. We do not agree with the sharing arrangements.

I think the information the New South Wales government had on the area of development, on-farm storage and irrigation activities was all very poor. I guess there has been a degree of distrust of the data that has been used to formulate the plans. I think that has been pretty well documented in our representations to the New South Wales government and the water sharing management committees.

Senator HEFFERNAN—I think Craig Knowles has woken up to that too.

Senator O'BRIEN—The written submission that you have given us says:

The GVIA contends that if Government provides irrigators with a secure, and compensable property right, that guarantees a share of define resource, water will naturally move in a control manner towards higher returns.

Can you explain the extent of the right that you have now and where you want that to move?

Mr Boland—Our licences are given to us for five years—they turn over and have to be reissued every five years. What we are looking for are licences in perpetuity so that, if we have an investment, we know that we have got something down the line, not just a five-year investment. That is one of the main things that we are looking for.

Senator O'BRIEN—So that is the common water right in this catchment—the five-year limitation?

Mr Boland—Yes. The new plans, if they are implemented, are going to extend that to 15 years but we still think that, when we do not have water rights, investment is restricted because we are not quite sure how long they are going to last.

Senator O'BRIEN—At yesterday's hearings in St George the terminology 'sleepers and dozers' was used. Do they exist here?

Mr Murray—Yes, particularly in the ground water situation. I guess different people have different ideas of what a sleeper and a dozer is. My definition of a sleeper is a person who has an entitlement and never uses it. A dozer is a person who has an entitlement and only occasionally uses it or regularly only uses a small part of their entitlement. In round figures, we have about 70,000 megalitres of entitlement out there. We have an average history of use of about 33,000 megalitres. There is a sustainable recharge of around 35,000 to 38,000 megalitres. Our recharge is fairly much in balance with our use. But we have this large entitlement out there that in theory could be accessed.

In the Gwydir Valley, in 1993-94 they started to bring in a number of rules which in 1998 led to a moratorium on the building of new bores, with the exception of replacing a failed bore. That in effect capped development but it has not dealt with the entitlement out there now. Part of the whole push of this water reform process—both from COAG and at a state level—is to get rid of that overhang of entitlement one way or another, bring your entitlements in line with your sustainable usage and then go forth from there. We feel that there has not been a good process put forward to deal with that entitlement overhang. People who have not used that water feel that they hold an entitlement and that it is an asset to them. That is probably, from their point of view, a valid thought. That has been reinforced by the process.

Senator O'BRIEN—Does that run out?

Mr Murray—No. At the moment, even though they are five-year licences, you have automatic renewal. It harks back to your earlier point as to why property rights are so important. In the past it was fine to live with a five-year licence because it never changed and it was automatically renewed. This reform process had not come in, people had adequate allocations—they were not an issue—and everyone had trust in it. Now we realise that there is the power to vary the amount of water you have—your share of that water. There is no automatic right to any form of compensation or structural adjustment. So under that circumstance it is absolutely critical that you get a properly defined and compensable water property right.

Senator HEFFERNAN—What is the average allocation from the bore licence—40-odd per cent?

Mr Murray—If you had an announced allocation across the board for everyone, it would work out at about 42 per cent.

Senator HEFFERNAN—As I understand the snapshot of the aquifer licences here, 50 per cent are mature licence users, approximately 25 per cent are sleepers and dozers, and 25 per cent are the people that actually have a licence but no aquifer.

Mr Murray—Those figures probably are not too far out, but if you want me to be really specific I could not comment

Senator HEFFERNAN—What should happen to the people that actually have a bore licence without an aquifer, which is valueless while it cannot be separated from the land? What should happen to those people?

Mr Murray—Given that they have a genuine belief that the licences have some value, I think they should be bought back by the government as an entitlement.

Senator HEFFERNAN—You do not think that would be a fraud of the public purse?

Mr Murray—If the situation had been that those licences were issued with a use it or lose it clause that said, ‘If you don’t develop it within five years you lose it,’ I think it would be fine to lose the licence. When they were issued, none of those rules were put in. It would probably be fine if you were dealing with people who had literally just paid their \$140, or whatever it was at the time, for a licence and done nothing—if those are the same people. Since then properties have been transferred and people have paid some value for the fact that a property had a licence attached to it, especially once embargoes came in and no more licences were being issued.

Senator O’BRIEN—Surely that is buyer beware?

Mr Murray—I guess it is buyer beware but the precedent was that there were no actual rules saying that things were going to change.

Senator O’BRIEN—But there was no guarantee that they would not change. You would approach this from two ways. I am interested to know—I have been sidetracked from my line of questioning so I would like to go back to it—this: when you had the five-year rotation of your licence, what was the guarantee of reissuing? Whilst that was normal, was there a built-in guarantee that the licence would be reissued, or was that just custom and practice?

Mr Murray—As far as I know, it was custom and practice. Read the back of the licence: it says the department can basically do what they like with your licence at any time. Certainly precedent was that it was just automatically renewed.

Mr Kirkby—Unless you did something wrong.

Senator O’BRIEN—Unless you breached it?

Mr Kirkby—Yes.

Senator O’BRIEN—That is to be altered to a 15-year rotation but on the same terms?

Mr Kirkby—Yes.

Mr Murray—I must admit I am not sure of the fine detail of it but basically it is on the same terms. The interesting thing is that they have gone to a 15-year licence but a 10-year water-sharing plan period, so you can actually have your share varied in 10 years and still hold a licence that lasts for 15 years, so this process only really gives us 10 years of security.

Senator O'BRIEN—The curious thing about it is that we are talking about licences that notionally have rights that exceed the viable water availability. It seems that, whatever happened in the past, a prudent government would have to put in place measures which did not threaten the sustainability of the water supply. Why wouldn't a prudent government simply modify, at the end of a period, the entitlements or not reissue them to those that had not used their entitlement?

Mr Browne—In the case of ground water, that should have happened. Licences that were issued and not developed, or issued on land which did not have any water under it, should have been cancelled, and the government failed to do that.

Mr Kirkby—That is actually on the licence; the licence said that you had to develop it within three years.

Senator HEFFERNAN—So would you call it a bureaucratic stuff-up?

Mr Kirkby—They did not care. You have to remember that there were a whole lot of conjunctive use licences here, which were river licences with bore water attached to them. As they have been traded over the years they have gone from areas that had bore water to areas that have not got any bore water. They were then converted to stand-alone bore licences of a certain volume—they were converted at 2.76 megs per hectare. So there are these licences sitting out there now on country that has virtually no water under it, but these guys think those licences have a value.

Mr Murray—Just to go back for a moment, you had three years to develop the bore, but there was a fairly loose definition of what a developed bore was. It did not have to produce a great deal of water; it could be a hole in the ground with a pump on it that could produce some water. To take it to a ridiculous extreme, you might have had a 1,000-megalitre licence but you may have only put down a small, four-inch bore hole that produced three megalitres of water. At that stage, legally you had the same rights as any other licence holder.

Senator HEFFERNAN—In other catchments—for instance, where you have come from—there would not have been the opportunity for a bore licence to exist that did not actually have an aquifer. That would be just a fantasy down in the south, wouldn't it?

Mr Murray—There is certainly some argument that, particularly to the west of Hay, there is either not enough water down there or the water you get would be too saline to actually to use. So they do have some issues there. But in the main part of the area, you are right: basically you sunk a hole and you found water.

Senator HEFFERNAN—If someone has a licence for something that is a valueless because there is nothing under the ground for which the licence exists, why would that be compensatable?

Mr Kirkby—Because under this water-sharing plan they were going to get—

Senator HEFFERNAN—I realise what will happen under the water-sharing plan. I rang the New South Wales Farmers Association and said: 'Why aren't you blokes doing something about this? This is a potential fraud, I reckon.' They said, 'You've got to understand that we've got a

few members that have got those licences.’ They are sitting on their dig and waiting for the day, which I reckon is a disgrace. As I understand it, the disadvantage of that is also that they are taken into account for the calculation of the 40-odd per cent. So the mature licence users are getting a double hit because you have got blokes who have bore licences for water that does not exist being taken into account to drop their allocation and then the mature water licence users would have to buy the licences back to get their allocation up—which is pretty unfair, I reckon. That is just my view.

Mr Kirkby—Absolutely.

Senator O’BRIEN—I guess that leads back to the questions I was asking about what a prudent government would do in those circumstances.

Mr Kirkby—Why shouldn’t they just cancel them.

Senator O’BRIEN—Why shouldn’t they just cancel the licences of the sleepers—

Mr Kirkby—We would not have any objection to that.

Senator O’BRIEN—and require the dozers—to use your definition of ‘sleepers’ and ‘dozers’, Mr Murray—to show cause as to why they should keep their licences? Would that be a fair way for a government to approach it?

Mr Browne—It should have happened that way, but unfortunately these people have now been given an expectation that they have something that has value.

Senator O’BRIEN—An expectation or a right?

Mr Kirkby—An expectation.

Mr Browne—I do not think it has been tested as a right.

Senator HEFFERNAN—I have to say that there was no-one more surprised than Craig Knowles to discover that these existed. This is a serious oversight by a previous outfit that probably did not know where the sun came up, by the sound of it.

Mr Kirkby—They just had no real—

Senator HEFFERNAN—I think it would be fair to say that it is a custard pie in the face of the department.

Mr Murray—There is no argument that, with hindsight, things should have been done differently. I guess these people, the sleepers and dozers, under COAG and everything else have had this expectation that they have a licence that they can now trade. The difficult thing is when you say that there is no water under there. They can construct an argument: it may not be practical; it may be practical. It depends on what they are going to do with it—grow hydroponic tomatoes or whatever. But they might argue: ‘I’ve got a 100 megalitre licence. I can only pull out

10 megs with one bore in a year. Why shouldn't I be allowed to put down 10 bores and extract that amount of water?' So those issues—

Senator HEFFERNAN—There is nothing to stop them from doing it tomorrow morning, is there?

Mr Murray—There is.

Senator HEFFERNAN—Put your money where your mouth is.

Mr Murray—Since 1998, a moratorium has been in place on new bores in the valley. So they have not been able to do that, and they can point to that. I would have no argument with what you are saying if they were the rules five years ago—use it or lose it; that would have been fine—but they have got this expectation now, which has been fostered by government, that that licence is worth something to them.

Mr Boland—That is because they can sell the water. They can sell it to their neighbours, even though—

Mr Kirkby—

Senator HEFFERNAN—It is a river of gold if you untie the thing from the land. But it is a double jeopardy for all the mature licence users, and it is a unit on the Gold Coast for the people who have got these corny licences.

Senator O'BRIEN—The alternative is that you reallocate the actual water, not the pretend water, and then you require the genuine users to buy the rights off the people who are not the genuine users—which seems even more unfair to me.

Mr Boland—We agree with that.

Senator HEFFERNAN—I want to go to the question of flood water. Yesterday, we had what seemed to me a pretty vague proposition for A and B licences, with all sorts of odd logic—driven by self-interest, I would have thought. Could you give us a snapshot on how much water makes it through to the wetlands and how all that regime works?

Mr Browne—I want to backtrack here. We have got two sorts of water. Regulated flow comes out of the dam, and that is essentially controlled for irrigation use, general security supply, with the environmental contingency allocation in that. Copeton Dam is about a quarter of the way down this catchment. About a quarter of this valley is upstream from the dam and three quarters of it is below. Large volumes of water run into the system below Copeton Dam—by far the largest percentage of volume.

Strictly speaking, until recent times irrigators have not had an entitlement to those unregulated flows. It was not part of our licence condition that we have access to unregulated flows, but in practice we have. There have been sharing arrangements with that water. Under the new water-sharing plans, we will now have an entitlement to supplementary flows—which are, in effect, off allocation.

In 1998 we entered into an arrangement for sharing that water under the north-west environmental flow plan. That was based on a fifty-fifty sharing, on an event-by-event basis, and the amount of water that each irrigator could take was based on his licensed entitlement. In other words, it was pro rata, based on the volume of licence entitlement you had. In reality, irrigators have only been able to get 20 per cent of that water. So right now, 80 per cent of all the water that flows in an unregulated fashion below Copeton Dam goes to the environment in this valley.

Mr Kirkby—The reason for that is that we can only pump about 15,000 megs a day in any event, and there might be 50,000 megs running under Yarraman Bridge.

Mr Browne—We are reasonably happy with that arrangement. It is important that irrigators have access to those flows to supplement the lack of reliability out of Copeton Dam.

Senator HEFFERNAN—What if we were to go to a regime where there was some sort of coordination between the states? The arrangement we looked at yesterday stops at the border, which makes it a bit hard for the blokes over the border. The flood waters are being harvested upstream in the flood country, and for the people further down it is just a bit of bad luck that they are further down. Could anyone in this district make out a case such as the one they made out up there for banking water off natural flood country and then claiming the entitlement for the water that would have been used to flood and absorb in that country? That is what the A licence is all about up there.

Mr Browne—I do not think so. The irrigators would not want access to that water. All the irrigators want is—

Senator HEFFERNAN—No, but is any of this country suitable? There is plenty of it up there. There is faster water here and there are deeper channels. Is there anyone in the flood country down here that, if there were some sort of uniformity of laws and regulations on water and some of the flood plain country could be banked off, could turn it into a water entitlement?

Mr Browne—Not under the new water-sharing plans, no, because access to water will all operate under the cap.

Senator HEFFERNAN—It is just that I think it is a strange logic that they have used up there.

Senator BUCKLAND—What is the R&D that is being undertaken at the moment focusing on? Is it plant species, or is it water use?

Mr Browne—There is a whole range of programs involved in the R&D. Some of it is looking at different irrigation systems, improving water use efficiency, making irrigators better manage the water that is available to them, improving the efficiency of existing systems. There is some research going on into drip irrigation, which I think has limited application in this industry, but we are also looking at overhead systems, centre pivots and linear moves. There will be some modifying of plants to become more water use efficient, and use of technology to monitor soil moisture and manage irrigation timing better. It is really a whole range of things; it is a multifaceted approach.

Senator BUCKLAND—I can understand the cotton industry may be difficult with trickle, or drip, irrigation. Mr Kirkby, you said you had a range of goods on your property.

Mr Kirkby—We are playing around with citrus, with grapes and with olives, looking for alternatives to broadacre irrigation, purely and simply to spread the risk.

Senator BUCKLAND—You mentioned olive trees and grapes—is that all on drip irrigation?

Mr Kirkby—Yes.

Senator BUCKLAND—What about broadacre? Do you use any irrigation for that at all?

Mr Kirkby—All the cotton is flood irrigated.

Senator BUCKLAND—What about the other? Do you grow grain?

Mr Kirkby—Yes, but we do not irrigate it much.

Senator BUCKLAND—It is not irrigated?

Mr Kirkby—No. We grow cotton as our cash crop, because it is the one that makes the most money; it gives us the best return on the megalitres of water invested. We tend not to use much water on winter crops and so on, because we are saving it for summer crops. It is pretty unreliable anyway. We have continuous accounting so any you save you keep, just like your bank account. It just keeps building up until you use it. There are other people in the valley who irrigate winter crops and so on, but in our case—and I am only speaking about our case—we do not.

Senator HEFFERNAN—Under that continuous accounting, if I am downstream here somewhere and I have had a trip overseas for a couple of years, or whatever, and I have some water credit in my account—and I think I have; I have been out to the stock route this morning for a bit of a poke around—and I had an entitlement down there now which is a legal entitlement but would take a lot of water and waste a lot of water getting it to me, surely I would not get it.

Mr Kirkby—No, you probably would not. State water would have to look at that, because it would cost far too much water to get your lot down there. But if they have got an environmental flow coming down or a stock and domestic flow coming down, they can piggyback it. It can be organised. You can sell it. You might want to sell it to somebody further upstream.

Senator BUCKLAND—My method of irrigation is out of a hose at home. With irrigation, I see the transport of water from the river to the crops is all in open channels and stored in—from what we flew over yesterday, and they were not all full—massive dams or bunds. What is being done to eliminate evaporation of water? Is there any money being put into that by the industry to pipe the water, rather than having open channels, to store in covered bunds? These things can be done.

Mr Murray—The short answer to that is no, because of the volumes of water required. However, most people modify their management practices to minimise evaporation. Most people

would take water into their on-farm storages here during wintertime, when evaporation losses are minimal, and use that water first in the summer to avoid the evaporation losses. Let me say that all of the irrigation development in this part of the basin is private development; most irrigators are along rivers and streams. There is a certain amount of water lost in the rivers getting to them, but there are not huge losses by off-river schemes. Most of the irrigation is along the main streams.

It is true to say that, with the volumes and the scale of irrigation here, it would be very difficult to pipe those volumes, and it would be very difficult to avoid evaporation losses in storages. People who are building storages now are building them deeper. There are some experiments going on at the moment to look at various coverings to put on water storages, but they have a long way to go. I just do not see that it is practical to put all the water into underground pipes and avoid the use of open storage.

Senator BUCKLAND—I was not suggesting underground pipes. You can pipe water—we do in South Australia. We pipe it many hundreds of kilometres for domestic and industrial use. It just seems to me that there is some irresponsibility. I do not know whether that irresponsibility lies with the growers or whether it is a government thing, but it seems to me that there is no effort being made to conserve these waters.

Mr Boland—If you were to ask the environmentalists, they would say that the rivers have to have a certain amount running into them to keep all of the biodiversity along the rivers. That is one of the things that happen in this valley: there is a certain amount of water that goes back to the environment. Even though they have run since irrigation has started, some of our rivers probably only run once a year. Now they have a supply of water and it has helped the environment a fair bit by having water in them all the time.

Senator BUCKLAND—I was not looking at it from an environmentalist point of view. I think you do me credit to suggest that—that is not what I was looking at. It is just that, to me, with the massive amount of water that is transported over our landscape, it is exposing it to evaporation. You say you are doing it in the wintertime and using it early in the summer. Even on a day like today you will have a degree of evaporation, which seems to be counterproductive. Is it cost alone that prevents us doing things like this?

Mr Murray—You would, no doubt, be aware of the Pratt water study that has been undertaken.

Senator BUCKLAND—Yes.

Mr Murray—That is looking at many of those issues. Obviously, it is in its very early days, but I think, even now, the grand vision of piping stuff everywhere is beginning to have more of a practical, hard looking at. They see pipes as being used in some very specific areas, but the actual economics of piping large volumes of water over large areas, unfortunately, does not stack up. But farmers here are taking a number of practical steps to reduce their on-farm losses. Committee members flew over the storages. It is becoming quite a trend here, as Dick mentioned, that where they used to be shallower they are now deeper. Their surface area is smaller. There are growers who have large storages and are putting banks through the middle of them to, in fact, make two smaller storages so that when their supplies are relatively low they

can put all the water in one storage and the greater depth and smaller surface area reduces evaporation. All those actions are taking place, but they have to be balanced against the bottom line as well.

Mr Kirkby—It could be said of Menindee Lakes, too, because Menindee Lakes' evaporation is about the amount that the irrigation industry in the north of the state uses.

Senator BUCKLAND—I understand all of that.

Mr Kirkby—Evaporation is a huge problem, but it is a very expensive one if you need to pipe it, because then you have to pump it.

Senator FERRIS—If you were starting over, you would do that, but it is a bit hard when you have the infrastructure in place.

Senator HEFFERNAN—You would have to grow marijuana!

Mr Kirkby—You would have to grow other crops. I do not think cotton could afford it. Maybe grapes and citrus and those sorts of things could afford it, but it is a very expensive exercise. If you are talking about pumping 100 megs a day, that is 100 million litres a day—and that is only a small set-up. There would be set-ups here that pump 500 megs a day.

Senator HEFFERNAN—A bit of practical knowledge would soon put that proposition to bed. But there is good scientific evidence to back the fact that part of the difficulty in managing the health of the rivers is that, if we turn all irrigation into trickle irrigation, or effective high-efficiency irrigation, it will do further damage to the river, because the pasture based irrigators return 40 or 50 per cent of their water to the river. They are very sound scientific arguments.

Mr Kirkby—That does not happen up here, of course, because they are all closed systems.

Senator FERRIS—I would like to go back to your submission. Mr Browne—or anyone else who would like to make a comment—at the bottom of your first dot point you talk about:

Active groundwater irrigators face cuts in access of up to 58%, in an aquifer that all agree is not stressed ...

Are you able to show us some documentation to substantiate that comment that all agree that the aquifer is not stressed? Who are 'all', and where is the evidence that they agree?

Mr Kirkby—The department have all the meter reading figures. We argue the toss as to how accurate they are, but they do have them. In this whole scheme they have been telling us that that is what the water use figures are.

Senator FERRIS—And on that basis you say that they agree that the aquifer is not stressed?

Mr Kirkby—There is no argument about the water use; the argument is about the amount of allocation that is there, which government wants to reduce to the sustainable yield, or at least to the recharge level.

Senator FERRIS—In the first point on the second page—and it is related to my first question—you talk about the valley being:

... capped at an unjustifiably low level, and this is impacting negatively on the economic health of the family.

The previous witness told us about the effect on the town. Could one of you give us a snapshot of a property—if not your property, then a property nearby—including how many people it was employing and what the situation with the contractors was? Could you tell us a little about, for example, what your yield was, say, three years ago, now and what you expect it to be. I do not expect you to disclose private aspects in answering my question. We are just trying to getting a snapshot of what it means on a farm in relation to the figures previously given to us by the council witness. Is someone able to do that for us?

Mr Murray—I will quote the figures of one of our grower members. He is not here today, but I am sure he will not mind. He has access to both ground water and surface water. He basically uses his entire ground water allocation every year, so he has quite a dependency on ground water. If the cuts in the gazetted plan come through as is and if it works on a pure percentage basis, he is going to lose 1.7 employees. I think he has seven employees, so he is basically going to lose two of them through that process. That then has a flow-on effect throughout the town. There is probably at least another employee somewhere in the town that the flow-on will affect. We had figures quoted the other day that said for every employee in Moree there is at least one employee in Sydney as well. We could effectively be looking at six employees from that cut on that one property.

Senator FERRIS—What about production yield, percentage wise?

Mr Murray—From memory, he is losing around 1,600 megalitres—eight megalitres a hectare. He is down 200 hectares of cotton. A fair figure for the gross margin is \$1,000 a hectare, so his business is basically down \$200,000 in profit.

Senator FERRIS—Which obviously flows back into the town. I notice in that same dot point you say that this has come about because the Murray-Darling Basin Commission and the department, who are going to be here later today:

... seem unable to agree on how the Valley is performing against Cap.

Can you elaborate on that?

Mr Browne—Yes. We have had a range of so-called cap figures over the years. At the moment we are operating with one figure which comes from DIPNR—the New South Wales government—and another which comes from the Murray-Darling Basin Commission, and they are different. The Murray-Darling Basin Commission is working on a cap of 343,000 megalitres for this valley, while the New South Wales government is working on 415,000. We think the difference has to do with an estimate of the amount of water that is taken in overland flows. The independent audit group of the Murray-Darling Basin Commission tells us from time to time that we are over cap, and we fail to understand why. At the moment, we are making representations to the independent audit group and the department of natural resources in New South Wales to try to address those issues.

Senator FERRIS—That is almost 100,000 megalitres difference. It is 75,000.

Mr Browne—That is right.

Mr Murray—In fact, the quoted figure is that we are 225,000 over cap on a cumulative total. Most of that—175,000 of it—relates to the 2000-01 water year. We just sent a letter off yesterday questioning that, because it is very strange that we were set a cap in this valley, from memory, of about 244,000 megalitres for that year, which is the lowest cap that we have ever had. Every other valley in New South Wales had either their highest cap or their second highest cap. It was a higher than average rainfall year, but it was not in any way extreme. Cotton planting areas were on average for the last three or four years. There is some argument that there has been growth in on-farm storages, but even if all that growth were taken into account it would not account for the 175,000. Our supplementary flow, or off-allocation flow, that year was about 150,000 megalitres. Even if we had taken no off-allocation flow that year, the cap figure would still have said that we were over cap by 25,000.

It just makes no sense to us how we could have got such a low cap. I am waiting for a detailed explanation. The snippet of an explanation is that we had a fairly large flood in the lower part of the valley that year and the models put in that there was some extraordinary amount of flood plain harvesting. As far as our irrigators can recall, there was not a great deal of flood plain harvesting in that event. It is not needed, and so it is very hard to work out how much it is. Basically, without that one year we would not even have triggered a special audit requirement, so we would not be in the situation where we are over cap. We really need an explanation as to how the department came up with that level.

Senator HEFFERNAN—When was that big flood?

Mr Boland—It was 2½ years ago.

Senator FERRIS—The third dot point I would like you to elaborate on concerns your comments on the Wentworth Group. You say in your submission:

The GVIA does not object to, in broad terms, the concept of environment trusts as recently championed by the Wentworth Group. However, it warns that the environment must only be allowed to participate in the market on an equal footing with other stakeholders. The Association is concerned that unless the concept is developed carefully, it may well distort the market.

Can you elaborate on those comments?

Mr Browne—We are concerned about what the market is going to deliver. COAG set out to try to cap irrigation development. The way it has been managed in New South Wales so far has had the opposite effect. All it has really done is activate licences and put more pressure on consumptive use. I think letting the market solve all these problems is high risk. Some trading of water within values, within limits, is good for the local community and the local irrigators, but there is a risk that the market is in fact going to increase use, or put pressure on use, rather than cap it.

Senator HEFFERNAN—Are you worried about the river of gold, free trade, ‘Let the market flow and let all the speculators in’ approach?

Mr Browne—Personally, yes, I am.

Senator FERRIS—Let me continue. How do you see the system of trusts—which you say you only broadly support—operating here, if it were introduced? How do you see it disadvantaging this valley?

Mr Browne—Could I address that question from a slightly different angle? One of the greatest concerns I have had in this process is that agriculture and irrigation have been pretty closely scrutinised—it is very easy to get a handle on that, and we have come under an enormous amount of pressure—but addressing the environmental issue has not been approached with the same degree of rigour. I am concerned that we do not necessarily understand what we are going to do to fix the environment—we do not understand the problem and we do not understand what the solutions are—and that irrigation is expected to take all the losses for the benefit of the environment.

I am scared that in five years time these water-sharing plans will be reviewed and people will look at the environment and say, ‘We’ve made no progress, so let’s take more water off the irrigation industry.’ I want the same sort of rigour applied to addressing and dealing with environmental problems. There needs to be good science. There needs to be very clear objectives. It just needs to be managed in the same sort of way. It seems to me that the environment should have a share of the water but that should operate under strict rules. They have an obligation to utilise that water to the best advantage. If having a trust adds some rigour, some discipline and some good science to that process, then that is essentially what we want. But right now the environmental use of water is essentially unaccountable.

Senator FERRIS—Are you concerned that the irrigators have become the ugly sisters in this battle?

Mr Browne—Absolutely. The cotton industry has been victimised. The irrigation industry has been victimised. We have had across-the-basin and across-the-state policies applied to us. There has been no proper consideration given to the unique nature of individual valleys in dealing with the environmental problems in those valleys. For example, I do not believe there is any direct environmental threat from irrigation in this valley. There are no problems with salinity in this valley. It is a new industry, it is well managed, it is efficient, but none of that seems to have been taken into account.

Senator FERRIS—You are saying, ‘Let’s have the science,’ but isn’t that what the Wentworth Group—and I am not a particular advocate for them—are trying to do? As my final point, I want you to again try to expand on how you accept the broad terms of the Wentworth Group but are, obviously, concerned with the more narrow, more detailed focus of it. I will explain why I ask the question. Everybody seems to think that the answer lies with implementing the Wentworth Group’s plans. I am interested that you made those comments and I just want to test them a little bit for the purposes of an inquiry.

Mr Browne—I just want to make a general comment. I think a lot of what the Wentworth Group has done is good. I think a lot of the ideas and the concepts it is talking about are reasonable, and I think that has helped people to focus on the issues. It suggests that property rights are essential, that there are certain other things that we have to do. I saw that it put up a framework that people could identify with and that there was some good in that. What I think is wrong with the Wentworth Group is that it is a bunch of scientists who have a very narrow view of the world, and I do not think there is enough representation from practical agriculture. I think the Wentworth Group has helped the politicians, the farmers and the scientists to at least focus on a framework that we can maybe move forward with. I think that needs to be refined and it needs to be more representative.

Senator FERRIS—Does anyone else want to make a comment on that?

Mr Murray—Just to add to that, basically they have presented us with a broad brush picture. We can broadly support that, but we do not have the detail to know how it is really going to work. I guess the concerns are how much local valley input will be put into the trusts—how much local science has been done and will go into them; where is that control—where is the funding going to come from, who is actually going to control it, and will the economic rigour in purchasing water for the environment be the same as the economic rigour when the farmers make a decision to go out into the market and purchase? So we need to know in some detail how it is going to run. Bear in mind that if the environment is suddenly given an open chequebook, without too much scientific rigour behind the purchasing decisions, the price of water is likely to be inflated way out of the reach of the irrigators. So we want to make sure that the science is right, the management is right and the economic rigour is there.

Senator FERRIS—It seems to me that the Wentworth Group have got out there with their plan and organisations such as yours are behind now, trying to catch up to balance the debate. It does put groups like yours at a significant disadvantage and one that is potentially quite costly, as we heard in St George yesterday. An irrigators' group who gave evidence said that they had spent thousands and thousands of dollars—in fact, hundreds of thousands—of their own money on trying to have some sort of scientific input into the debate but from a position of being behind. I am interested in your comments on that.

Mr Murray—I will respond to the comment about being behind. I guess that might be true, specifically when you look at the Wentworth proposal, but, as Dick mentioned earlier, the irrigators here have been very proactive on the environmental front. To a large extent they initiated the environmental flow rules that exist in this valley. They have always been supportive of the ECA. Even before the ECA was formally in place, whenever there was a requirement for extra water in the wetlands, say, during a bird breeding event, the irrigators were always very supportive of supplying the water—to their own economic detriment. They are all members of this community as well and they certainly support the environment, so it was always done with a high degree of irrigator support. I do not think we have been behind the Wentworth Group in the environmental debate. We just want more details and the ability to be part of that debate.

Mr Boland—I will just comment on that. I do not think anybody has any trouble with the environment buying water, but I can see a lot of problems when they start trading it and selling it back to the industry. That is one thing that I am totally opposed to.

Senator FERRIS—If you have a word with Senator Heffernan over a cup of tea you will find agreement on that.

CHAIR—We will have to finish on that note. I am mindful of the time constraints. I thank Mr Browne, Mr Murray, Mr Boland and Mr Kirkby for appearing here today and providing assistance to the committee. A copy of the *Hansard* will be available at some time in the future. If the secretariat need to contact you, they will. On behalf of the committee, thank you for appearing.

Proceedings suspended from 10.42 a.m. to 10.57 a.m.

GRESTE, Mr Andrew, Chairman of Executive Committee, Lower Namoi Cotton Growers Association

KAHL, Mr James David, Executive Committee Member, Lower Namoi Cotton Growers Association

ROBINSON, Mr John Joseph, Acting Chairman, Gwydir Valley Cotton Growers Association

SMITH, Mr Troy Anthony, Member, Gwydir Valley Cotton Growers Association

CHAIR—I reconvene the committee and welcome our next group of witnesses. Mr Robinson, I invite you to make some opening remarks on behalf of the group.

Mr Robinson—I will give a quick run down on what the cotton grower association is involved in. We have many issues. Water is obviously one. The irrigators association is generally made up of members of our association. Obviously, it is a big issue so we have a separate entity to deal with that. The cotton growers association deals with a number of other cotton related issues. We encourage the implementation of best management practices on the farms, we support the Aboriginal employment strategy, we run a medical undergraduate scheme in which we sponsor medical undergraduates or other medical professionals through the university, we sponsor the Croc Eisteddfod and deal with any pesticide problems—we are obviously at the forefront trying to solve those. With the use of these genetically modified varieties of cotton and newer practices—IPM et cetera—we are now finding our use of pesticides is a lot lower than it used to be and that it is becoming less of an issue. I guess all these activities, these sponsorships and community projects, are directly tied to the security of our access to water—the security to keep our businesses running so that sponsorship can continue to be available.

CHAIR—You would no doubt be aware of the terms of reference of the inquiry and particularly of the suggestion for COAG to take some leadership and look at a national framework for at least dealing with water policy and particular issues that may be relevant here as a result of reforms that have been undertaken at the state level. Many issues or concerns may have been brought about as a result. No doubt you would have heard from the previous witnesses. Are you in a similar circumstance to them in terms of the same sorts of views coming up?

Mr Robinson—I guess with what I said about the irrigators association basically being a similar body to the grower association, we 100 per cent endorse what Dick Browne has said previously. We are also happy to discuss the on-farm situation more. I was listening before to suggestions of piping and these sorts of things. The increase in developed areas has obviously become an issue of great concern to a lot of people outside the industry. With storages, we are increasing depth as one of the ways to try and reduce the toll of evaporation. With the piping of water, the sorts of pipe sizes that we would require to pipe our water would be basically 1,500 millimetre pipes and probably if you are pumping 300 megalitres you would probably need a couple of them. They run at around the cost of \$500 a metre. As a simple scenario, one kilometre

of 1,500 millimetre pipe would cost us \$500,000. In the present situation, that is just not affordable.

Just to go on with that, I was talking about the developed area. The area of development is increasingly driving water use efficiency and agronomic efficiency—we are using stored soil moisture—so we are not necessarily using more water when we are developing more country. We are trying to increase the efficiency of the water we are using.

Mr Kahl—In the first instance, the Lower Namoi Cotton Growers Association does not disagree with too many of the other witnesses you have heard from today and at earlier hearings. There is a common interest between the cotton growers association, as irrigators, and water users in general. In fact, most cotton growers are irrigators in general. There are very few monoculturalists in cotton these days anyway. We really see ourselves as one and the same. Certainly, there are enough similarities between the Namoi Valley and the Gwydir Valley that the views are going to be pretty common here today.

In going forward with the water-sharing plan, there are about four broad areas that they in principle have tried to focus on. Throughout the whole term of the water reform process, as irrigators and certainly as cotton growers, we have never debated or disputed that those four principles ought to be there; it is just the application of some of them that we have come to see differently.

I should also say at the outset that right through the whole thread of this is the matter of security for irrigators generally, whether they be cotton growers or otherwise. That is the bottom line in really being able to go forward in any manner in regard to the issues. Every issue comes back to the fact that if there is security there then there will be investment to follow to create the outcomes, or at least to work towards the outcomes, that everybody wants. Without the security, we will not have the investment, the confidence to invest or the financial institutions' confidence to support the investment.

The broad principles run around sustainability—I hate the word but I do not know a better one—the efficient use of water, the socioeconomic impacts of water reforms and general river health and the longevity of the river systems as they run in Australia. We do not go away from those principles in our objectives, either. I will touch on each of those four briefly.

As cotton growers, we believe that sustainability is a priority of ours and that is evidenced by the historical improvement in returns that cotton has provided with the use of water—and the water we use. We are commonly accused of being the biggest water users in Australia. That is simply not true. The cotton industry uses about 15½ per cent of the water that is used for irrigation in Australia. That is near to only a third of the highest user.

The difference between our usage and the licensed allocation is the biggest issue in the reform process, particularly as it relates to ground water. It was touched on just before smoko by the witnesses then and they were quite right. The same applies in the Namoi. The issue with ground water is that there is an attempt to reduce the allocations to match the recharge. In fact, the status report—which is only a couple of years old now and is still very relevant—put out by the New South Wales department indicates that the average usage over the last 15 years was actually well

below what is believed to be the sustainable recharge. We are talking about figures of 97,000 megalitres recharge as opposed to an average yearly use over 15 years of 77,000 megalitres.

We have to manage the peaks and troughs but overall that is not the issue. The issue is not the usage; it is the potential usage by the over allocation of licences in the first place. Evidence on that debate has been taken before so I will not go over all of that. But it is the same issue in the Namoi. To truly seek sustainable economic outcomes we need to focus on that over allocation that has in fact been unused and deal with that so we do not tear apart the fabric of communities that are based on the productivity of the sustainable water that is being used now.

With regard to the implications of efficient use, we simply need to measure where the industry has come from and where it is going. The increase in return per megalitre of water use in cotton is improving constantly and certainly over the last 10 years has taken a significant step up. Incidentally, this has also been driven simply by economics, and not solely by the economics of water use. It has been driven more by the economics of farming cotton. The margins are narrowing and if we do not improve the efficient use of all resources, including water, the industry will be out of business anyway because we cannot continue to compete with northern hemisphere subsidies. All I am saying is that there is more than one motivation here. Water happens to be a significant one.

The efficient use has also been supported and driven by BMP, which is best management practices. This involves the adoption of an industry wide manual which occurred 10 years ago. There was an audit undertaken by the industry at that time—an environmental audit, independently conducted—which showed there were a lot of nasties in the closet in the industry. It identified over 40 areas where improvements needed to be made, and a lot of those related to water.

That audit was reconducted this year. The results of that are fresh. The current audit has indicated that all 44 of the individual recommendations of the first audit have been attended to. That does not mean to say that they have all be successfully completed—a lot of them will never be successfully completed because the goalposts keep moving. But it does recognise that all 40 have been recognised, dealt with and improved on. All that says is that the cotton industry is aware of its position and its responsibilities. We are dealing with them. We do not really believe it is fair that the we keep getting tagged with being the nasties.

Socioeconomic aspects relate to sustainability. They also relate very much to the trading issue. We believe that in terms of the trading issue, it needs to be freely traded—and that is a very broad term—between uses and users. It really needs to be governed within some parameters and areas of detail that we are going to have to deal with in going forward. It does need to have some parameters to govern it so we do not disrupt the social impacts of the way the distribution of water is used in the country now. In the last four decades we have managed to build up the fabric of community societies based on the economic output of the water licences where they are. So we cannot allow free trading to suddenly take all the water out of the Namoi Valley and place it in down in the Darling somewhere and leave Gunnedah, Narrabri and Wee Waa as desert towns. We only need to look at the impacts of the serious droughts which we get every decade or so to demonstrate exactly how quickly that will happen. We only need to look at what happened to Moree's economy in the early nineties—and to the economies of some other towns in this more recent drought—to see the impact that will very quickly have. The other area is simply the

economic one. That means that the irrigation industries have allowed communities to build up and sustain themselves. If you look at local government rating issues and start to remove all the water licensing from a shire or a local government area, the rating levels are going to crash because it is the irrigation farms that are providing the rates that provide local government to a very large extent.

The final issue is river health and the longevity of the river. I can only say that, as irrigators and cotton growers—and we have been in the Namoi Valley for over 40 years, and when we went there we planned to be there for over 40 years—we are not about to do anything that is going to cut off our lifeline. We are well aware that the river needs to remain healthy and to be in that condition for a long time yet, otherwise we are wasting a lot of investment and a lifetime of effort. I refer you to the water report offered to a water reform forum in Canberra last month by Dr Marohasy regarding river health, particularly the levels of salinity and mineral deposits in the Murray-Darling Basin. That clearly points out what we have believed for a long time: yes, the irrigation industries and the way they were conducted through the seventies and eighties was going in the wrong direction and there were some things happening then that were not good. There was some contamination of rivers and the salinity levels did seem to be going largely in the wrong direction. However, and quite frankly to the credit of the green voice, that created a fuss in the eighties and, as a result of successive governments spending a lot of money since then, that is starting to be corrected. We need to recognise this and stop living with some references to the condition of rivers that might have been true 10 years ago and start living with the condition of the rivers as they are today and use that as the basis for going forward.

As for the other reports that are available which support this, over the past decade the central and north-west region's water quality program has been an ongoing process conducted by the Department of Land and Water Conservation, as it was, in New South Wales. The reports on this are freely available as well. They also note in particular the strong decrease in contamination of the rivers in the cotton industry areas, particularly in relation to the largest chemical that we use—or the one we use the most of—Endosulphan. They also refer to the fact that the BMP manual that the cotton industry adopted over 10 years ago has largely been responsible for a change in attitudes; it has helped bring this about. Finally, the two industry environmental audits are both available. The second one clearly indicates that vast improvements are being made. Thank you.

CHAIR—Mr Smith or Mr Greste, do you wish to add anything to the comments that have been made before we go to questions?

Mr Smith—No.

Mr Greste—No.

Senator McGAURAN—I have just one question, and it follows on from the questioning by Senator Ferris of the previous witnesses. The previous witnesses broadly supported the Wentworth Group's paper, which surprised me; I thought that would be the last place we would find the support of the Wentworth Group because the perception is that it is the Wentworth Group versus the cotton growers. I understood Mr Browne's explanation—it was quite a good one—and where he was coming from. You may be more 'pure' cotton growers than the previous representatives.

Senator HEFFERNAN—Go away!

Senator McGAURAN—I mean they may not be mixed growers.

Senator FERRIS—All cotton growers.

Senator McGAURAN—Yes. Therefore, can you give us your views on the Wentworth Group? I know Mr Kahl warned us against free trading, which is the Wentworth Group's mantra. Can you comment on that?

Mr Kahl—Yes, I would be happy to. Like your previous witnesses, we do not have an objection to the Wentworth Group per se at all. I think some really good things came out of it. As Mr Browne said, it has been a great catalyst for drawing attention to the issue, which we have been struggling to do for a decade. I would like to thank it very much for that. I mentioned free trading, and I believe that is the term we are going to have to go forward with, but it needs to be regulated with some very strong parameters put around it for the reasons that I said. We do not want to see a whole geographical area denuded of its water by free trade, because you would then have some very big social outcomes that are not nice. That is our worry.

I believe the free trading needs to be within the confines of users and uses. That might eliminate the people who the Wentworth Group is referring to who sit in a tall tower in Sydney and buy and sell, lease and play with water as if it were a commodity on a screen. We really do not support that view. We do need to free up the trade because that will improve the efficient use of water. We do not have a problem with the Wentworth Group; it is only the detail of how it put what it wants to achieve together. I believed that right from the very first comment I saw it put out, in that I thought, 'This is not bad; this is not wrong; but the devil is in the detail.'

Senator McGAURAN—What do you think of the idea of a trust?

Mr Kahl—Environment interests need to have an identity. They are fairly faceless in the operations of the environmental flows. They need to have a face, they need to take some responsibility for their own actions and they need to participate in the water distribution, the same as any other participant, otherwise there is just too much grey area.

Senator McGAURAN—It is a bit like the wool stockpile.

CHAIR—Following on from that, would you agree with Mr Browne's statement then that there needs to be more rigour on the environmental side, particularly in terms of a free market?

Mr Kahl—Yes, but not only in the free market. I would agree with what he said entirely in that there needs to be more rigour with their claims for water and water use. Quite honestly, I have never found a practising irrigator who was against good use of water for the environment. What we keep seeing is wastage in water claimed to be used for the environment.

Senator HEFFERNAN—Would it be fair to say that in the long term this is a unique catchment in that you have wetlands, and that this is not just about a bland statement on the health of the river? You can actually measure your environmental outcomes here a lot better than in some other river systems.

Mr Kahl—I think that is true, but I am speaking for the Namoi and we do not have any recognised wetlands in the Namoi, but we are contributing to wetlands for the dam.

Senator FERRIS—Following on from the discussion about the Wentworth Group, I think one of the difficulties—and I was speaking to Mr Browne about it during the morning tea break—is that the cotton and rice industries are seen as the ugly sisters of the irrigation industry. I am wondering what your industry is doing to address that image. Can you tell us a little about the funding for research and development on cotton varieties that take less water and something about the technology that you are using to try to reduce water usage? I think that these are going to be very important parts of the public argument when the final decisions are made on water allocations.

Mr Kahl—There are two issues there. One is our image. The effort and the determination to deal with our image waxes and wanes a fair bit. We get encouraged to do something about it, but when it becomes so difficult to achieve much of an outcome in that area then we start to refocus on the real world and get on with trying to achieve some better outcomes, whether or not they get reported. So the image issue is almost in the too-hard basket, but that is because we would rather spend time and effort, and research and dollars, on achieving better outcomes. The cotton industry contributes quite a significant amount. I do not know the exact dollars but, if you wish, I can find those out for you. We contribute a fair amount to research and development through voluntary levies. Largely that has been focused, through the growth phase of this industry, on plant breeding and varieties.

The second issue is water use. It is fair to say that that has not been a priority and that plant breeding to date probably has not contributed much to the more efficient use of water. Cotton primarily uses the same amount of water today as it did 10 or 20 years ago. However, the amount of research done is a little difficult to quantify, simply because most of it is conducted in the farming operations themselves. It is not a structured, measured, scientific research project as such. The previous witnesses were talking mostly about storages and how we conduct those. I can only add to that by saying that storing water in wintertime is not a big contributor to evaporation. We know that from our own measurements and our own experience. Certainly, we lost less than two per cent in evaporation, over three winter months, from our own storages this year.

Senator FERRIS—What do you say to the argument that—and I am sorry I do not have the paper with me, but I will try to recall it as clearly as I can—if you are talking about outlays of water there are more efficient crops to grow, based on your allocation of water and the cost of water, than cotton or rice? I am simply trying to put to you arguments which are likely to be put to us in the future—and which certainly have been put to me in the past—about these two industries. I am very keen to get a response from you while we are here, early on in this inquiry, so that we can test it when we meet subsequent witnesses.

Mr Robinson—I will quickly put forward my answer to a couple of questions you asked earlier. There actually is a lot of work going into varieties which will use less water. There is also a lot of on-farm driven research where we are trying to get more yield from the same amount of water. So big steps are being made that way. As to the question about the media, what we put out probably is not considered newsworthy, but someone—whether they have evidence or lack

evidence—can make a statement and it will find its way into the print media. Generally speaking, any time we then try to argue the case in the print media we never get our point across.

Senator FERRIS—We sympathise with you on that.

Mr Robinson—For example, one of the UTS professors came out, and he was the one who first said: ‘In the driest continent, why are we using such water-thirsty crops?’

Senator FERRIS—It is an easy argument, isn’t it?

Mr Robinson—But his numbers were incorrect—that was at about page 2 or 3. The rebuttal came the following day from Gary Fitt from the CRDC. It was at about page 10 and it was a small article. I believe there was an apology later to say that the numbers the professor had used may have been incorrect, and that was at about page 30. Trying to get interactive media access does not work for us.

Senator FERRIS—I understand that, but if you have those two documents, particularly your rebuttal, I think it would be very useful to supply them to the committee in due course because I feel sure that, as this inquiry progresses, there are going to be issues raised along those lines and it would be useful for committee members to have had your argument before them.

Mr Smith—I would say that, in the last 15 years, we have seen probably close to a 30 per cent increase in yield for the same amount of water, going from approximately three bails to the acre to, say, four bails to the acre, and some are pushing well beyond that mark. We have had five-bail averages on farms this year. In the early eighties, three bails was exceptional, so the breeding program seems to concentrate on yield but it has a dramatic effect on water use efficiency.

Senator FERRIS—It would be very useful if you could present some sort of summary to the committee. There is no hurry but, if you do it in due course, we would have that evidence before us when we receive subsequent witnesses.

Mr Robinson—We are doing a lot of work on those issues now on a field-by-field basis. We are keeping information, working out exactly how many megalitres are going onto fields and what the production of that field is. A professor—I cannot remember his name—said we used three or four megalitres to produce \$100 of profit. We have evidence of particular fields where that statement is 20-fold incorrect, and I think that is pretty common.

Senator FERRIS—I have a recollection that this was a study of various industries—and I think it may have been done by CSIRO—looking at the use of a particular quantity of water and the dollar return as a result of that for various crops. That work is probably five years old.

Mr Robinson—One of the issues there is where you are growing cotton, too. That is Australia wide. The border rivers, the Namoi River and ours are the prime cotton growing regions. Going further south, it becomes more marginal for growing cotton. However, we are now seeing cotton being grown down in rice country. I do not think their productivity in growing cotton could compete with what we are doing; however, there is a move to high-value water use crops. To respond about the permanent crops, Senator Ferris: at the moment, if we increase our cotton

production by 10 per cent in this country, we are going to have a very slight impact on the world cotton market. If we were to turn around and, as the suggestion is, grow all these higher value inputs, where is our market? That is the first thing.

If we all grew oranges or citrus or whatever else, the effect on the citrus market generally would just be catastrophic. It is all well and good to say we should go and grow these higher value crops—we can grow them. There has been a lot of money spent on studying growing conditions in this northern region, and the results are that the horticulturalists believe we could probably grow citrus more effectively or efficiently than in areas around Mildura. However, that does not answer the question of where we are going to put this citrus.

Senator FERRIS—I was not for a moment suggesting that. I was simply putting the proposition to you that I am sure will be put to us as this inquiry progresses. I am keen to have your response to it before we have those witnesses so we have the response in front of us.

Mr Robinson—We are aiming to use the water resource we have to generate the greatest profits we can. At this stage, cotton is by far the leading profit-generating operation that we can conduct in this valley. Another point on that is security of water. With our present security of access, permanent plantings would be pretty dangerous, pretty risky. We have seen that in Bourke this year. They do not have a permanent water supply, and their permanent plantings have suffered and have been set back years, through trimming of limbs and other things. But that is another issue.

Mr Kahl—The extract I have there is from the current independent cotton industry audit, which has just been completed. That is this year's information. That points out a return per megalitre, but we need to keep in mind—and Joe has just referred to this—that, obviously, as an enterprise operation we have to be concerned with ROCI. We really have to focus on the return on our capital invested as much as the return on the water, because the water is only one of the resources we are putting into the enterprise.

Senator FERRIS—This looks very interesting. If you have anything else that you could send in, it would be useful.

Mr Kahl—We can arrange to send you a full copy of that audit.

Senator FERRIS—That would be good. Thank you.

Senator BUCKLAND—We heard yesterday, and again today a couple times, about best practice on farms. Can you explain what that means in the cotton industry? In most industries it means get as much out as you can for the least cost, but other things come into it. Can you explain what you mean by best practice on the farm?

Mr Robinson—Cotton Australia has probably driven the best management practice manuals. Specific areas have been targeted. Initially, pesticide application, storage and usage are a unit. It is about how to have the least impact on the environment when we are applying them, how to store them for safety purposes et cetera. There is an occupational health and safety unit in that best management practice manual which deals with all the infrastructure on the farms and what specs need to be met. BMP is consistent with the laws that apply to each of these areas of our

business. There is a unit on the development of a farm—the property layout—and what the best management practice is for irrigation efficiencies at this time. That is basically the framework of the BMP. It is an ongoing program. There are new areas introduced or coming online all the time. I can get an up-to-date copy of the best management practice manual to the committee if you would like to look at it.

Mr Greste—It is a living document, part of an ongoing process. What is considered industry best practice at the time is put out to growers. It is continually being redrafted and modules are being added to it. The primary motivation for starting it 10 years ago was basically focused around pesticide use, because that is what was creating the most grief in the industry. It has expanded into broader issues now, including OH&S, water reticulation—the best way of containing pesticide run-off on farms—and so on. That has led to water use efficiency gains as well, through people looking at how they manage stormwater and on-farm run-off.

Senator BUCKLAND—I heard this morning that you have to manage on-farm run-off so that the water does not get back into the river system. How do you handle that?

Mr Greste—Through engineering structures, which are basically surge dams. So there might be an area of land which you have banked off. You manage that in such a way that you try and keep it empty, because stormwater events are pretty unpredictable and can range from an inch to six inches at one time. It is part of our licence conditions as well that we capture that run-off and that none of that run-off enters the water course.

Senator BUCKLAND—Are there standards that the industry sets itself that individual farmers must comply with?

Mr Robinson—The standard in best management practice is to be able to retain the first 50 millimetres of a rainfall run-off event. The position is that the first 50 millimetres will contain the majority of pesticides or additional nutrients that come off the fields.

Mr Greste—It is also a condition of use for some pesticides that you capture that run-off. So you cannot use a pesticide unless you have the engineering structures in place to capture the run-off.

Senator BUCKLAND—Are there monitoring stations off-farm to ensure that these are being complied with?

Mr Robinson—Not cotton grower sponsored ones, but there is water testing done on the rivers and if there is a compliance problem then we would know about it. It is a legal thing. If there are pesticides found in rivers, they will try and find the source and it could lead to prosecution.

Mr Greste—In that second audit there is some evidence put forward that the amount of pesticide in the river has reduced significantly. There have been water quality tests done.

Senator BUCKLAND—Thank you, I appreciate that. What is the number of people employed per hectare for cotton in this area? Can you quantify that? It might be a bit difficult if you look at the off-farm component as well.

Mr Robinson—I think a benchmark is about one man per 400 acres of irrigation. It is variable, obviously.

Senator O'BRIEN—That is an awful lot of acres to weed! Given the discussion you were having about returns on irrigated cotton crops, in the event that water is not available presumably other crops are put in; for example, grain crops?

Mr Greste—Yes.

Senator O'BRIEN—What impact does that have on the income of the property? Is there a dramatic change?

Mr Greste—It is a huge change. Take, for example, our own situation in the current drought. We have had to let go five permanent employees out of a total of seven. So there is a huge impact. Cotton is a much more intensively managed crop than some of these broadacre cereal crops so there is huge impact. The flow-on effects are huge as well. There are many service industries built around the cotton industry, things like engineering shops, machinery and chemical sales et cetera.

Senator O'BRIEN—When you take into account the cost of inputs, the question I am asking is: is the return still substantially different? There is a higher cost of inputs for cotton.

Mr Robinson—The gross return for a hectare of cotton is somewhere between \$4,000 and \$6,000 depending on yield—compared to about \$400 for wheat. The cost for wheat might be \$100.

Senator O'BRIEN—Could you give me a ballpark figure for the cotton?

Mr Robinson—Not \$100; probably \$200. You are talking \$200 a hectare of profit margin compared to thousands with cotton. In my situation, if we have a big winter crop cereal year and no cotton, we will be lucky to break even. That is just the cotton production farms or irrigated properties and all of the profit is driven by the efficient use of irrigation water. So when there is none available, there is no profit.

Senator O'BRIEN—In terms of the Gwydir River system and the wetland factor, you were saying that that is not the case for the Namoi. With regard to the amount of water that goes through the system, what work are you aware of that we should look at which would give us a very strong handle on the contribution that the Gwydir and the Namoi make to the Murray-Darling system?

Mr Kahl—Contribution of?

Senator O'BRIEN—Water to the system. We are hearing from some people, 'We don't make any substantial contribution except in major flood.'

Mr Smith—The main channel of the Gwydir River ends in a flood plain delta. The Carole Creek and the Mehi River end in the Barwon River. Our February event was quite a major flow event and the contribution that we could get out the end was something like 4,000 megalitres a

day when the peak flow was about 90,000, I believe, in the Gwydir River and the rest stays in. We have a real problem when we have an embargo on our supplementary flows, as was the case in February. We contributed a significant amount to the Menindee Lakes system. I think it was about 50,000 megalitres of what went down. It came from the Gwydir, but that event was at least 160,000 or 170,000 megalitres in our valley and the rest—the irrigators got none of it—was just all overland flooding of pasture and went into the wetlands to an extent. But it is quite a closed system. There is very limited scope for contributing. We can contribute that amount—and most people I have talked to are happy to do that for the Menindee system—but we believe that that wastage was a real pity. That could have really given us a start for this year's crop.

Senator O'BRIEN—You have that information. What is the reliable scientific source for accessing that information for the purpose of any report that we want to write?

Mr Kahl—State Water. The managers of the river would have those figures.

Mr Smith—And the irrigators association will be able to follow that up.

Senator O'BRIEN—That would be good. It is important that the contribution that the catchments make to the river as suggested by your evidence can be backed up scientifically.

Mr Kahl—More specifically, the director of the region is Jubrahil Kahn and his office is here in Moree.

Senator O'BRIEN—Any reference that you can give us would be useful. Do I take it from what you said that there is an element of crop rotation used with the cotton in this valley?

Mr Greste—Yes, a big element. There is a vast difference between farms and people's operations speaking purely from the Namoi point of view. It is an integral part of the health of our farms and our soils that we rotate for disease and maintain our soil structure. But again, it is more from a sustainability point of view. We do not grow rotation crops primarily to generate income; it is more about cash flow and those sorts of things. It is the add-on benefits that we get from those crops that are the primary purpose of growing them. They include things like some winter legumes, our vetch crops, mung beans, fava beans, wheat, barley and sorghum.

Mr Smith—This is a good follow-on from Senator Buckland's questions to the irrigators association about why we are not spending big amounts of money on efficiency infrastructure. Basically, we are aiming to grow one crop of cotton every two years, so we are really irrigating for four to six months in a two-year period. We are a full year out, plus we get these droughts. To service the debt required to set up that amazing infrastructure, you would be forced to grow an irrigated crop in that paddock every year. So you would only use water on half of your farm, and then you would be running that soil down and growing lower yields for the water you use. There is a real challenge there. We are really opportunity irrigators. Generally, we have been developing on the basis of getting one crop of cotton every two years. That then allows us to store moisture in the soil, which is the most efficient place to have it for evaporation reasons. When the opportunity is there, we irrigate. That is part of the reason our infrastructure is like it is—so that we can spread that around.

Mr Greste—I think that one of the reasons why we have not seen a bigger push towards drip irrigation and more efficient irrigation methods is that, again, as Troy was saying, we have a crop that makes us money every second year, so it is just not feasible to recover the capital costs. If you did the figures on growing a cotton crop year after year after year, it might appear cost-effective to go towards that technology. But, if we did, we would not be able to maintain our yields and our soil health.

Mr Smith—Can I also make a point. The losses in our systems have two sources generally: evaporation and seepage into the soil. This country's soil is very banded; there is virtually no subsurface drainage in most of this country. That is a specific circumstance, but it is one of the reasons why pipes and concrete channels are not justified out here—our soil is very much banded. Evaporation is still an issue, but I can imagine that in 20 years time there will be covers on a lot of these dams and channels, as the value of the water is increasing. That would potentially be the way to do it, instead of pipes and concrete.

Senator HEFFERNAN—Will it be the price of the water or the price of the commodity that will eventually force you into trickle irrigation and smarter water technology?

CHAIR—Before you answer the question, can I ask you to keep the answer short. I am mindful of the fact that we are more than 15 minutes into the next witness's time to appear and I want to make sure that there is time for others to have their say.

Mr Robinson—I think the price of the water will be driven by the price of the commodity. They will be tied together—that is my answer. The price of the water is driven by what we can produce from it.

Senator HEFFERNAN—Will the price be driven by availability if we go into a speculative regime?

Mr Robinson—People will only be able to afford to pay for water what they are able to generate from it. Even if there is none of it, we are not going to pay for it at 10 times its value.

Senator HEFFERNAN—If it is a great cost, you may have to grow something else.

Mr Robinson—Yes, but if something were available for growing that would afford us the ability to pay 10 times as much for the water, then we would be growing it.

Senator HEFFERNAN—What about in a freer market situation, which is happening in the Riverina now, where the rice guys are getting it in the neck? That could happen here if Australia and America open up the market.

Mr Robinson—If there is an industry that is—

CHAIR—Before we go any further, I am mindful that other people have travelled from outside of Moree and may need to travel back to their own destinations. We need to keep to some strict time frames.

Mr Robinson—Very quickly, if there is a commodity that we can grow and sell which is profitable then we will go that way. It would be great to see an airport here flying fresh produce into Asia or something but the market is not there at this stage.

Senator HEFFERNAN—Will you be greatly distressed if the capital base of your water asset under a free trading arrangement is captured by investment vehicles? I will be.

Mr Kahl—Yes.

Senator HEFFERNAN—One of the furphies is that no-one will do it because there is a yearly trade, but in my view they are really after the capital base value of the water. I think that you blokes are going to be subject to a proposition which will be an asset stripping operation.

Mr Kahl—I agree with you, and that is the danger. That is why there need to be constraints on how free the free trade becomes.

CHAIR—We might finish on that note. Thank you for appearing here today and providing assistance to the committee. The committee secretariat may be in touch if they need further information. A copy of the *Hansard* will be available some time soon.

[11.52 a.m.]

KILLEN, Mr Jeremy James, President, Coordinating Committee of Namoi Valley Water Users Associations Inc.

CHAIR—Welcome. Would you like to make some opening remarks before we move to questions?

Mr Killen—Yes, thank you. I am a retired cotton farmer. I produced cotton and beef on my farm at Narrabri. I now represent nearly full time the Namoi Valley irrigators, concentrating on the surface water issues. I have a laser levelling business, which contracts to the irrigation industry. That might answer some of your questions later on about the impact of some of these things. I will start with a summary of the activity in the Namoi Valley, which is much the same as you have heard this morning. On about two per cent of the land area we produce between 35 and 40 per cent of the entire gross income of agriculture every year. The business that is created by that activity is critical to keeping our communities and shops open while the drought is going on. That is why irrigation communities are quite strong compared to some other communities out there in agricultural Australia.

In terms of water use, we use about 24 per cent of the end-of-system flow. Scientific panels tells us that if we use under 30 per cent of the end-of-system flow our valley should be healthy, all other things being equal. But more about that in a moment. Our committee has been active since about 1967. The committee that I am representing here today was formed because of a drought in 1967. Interestingly, in our records we have letters from our association to successive state governments urging them to stop issuing water licences. One could say that we were not very successful in having that happen. Now we are seeing the other side of the coin, where we are blamed for using too much water.

We have been very active in research initiation. We have been active in accessing NHT funding and any other funding we can find to initiate research. A good example is the north-west water quality testing program. We agreed to 50 per cent fund that from irrigators' own pockets to find out what was actually in the water and where we were going. That was during the eighties, when there were a lot of difficulties and a lot of headlines. That work was groundbreaking within Australia and probably the world. That program was hugely successful. A great deal of work has gone into salinity in the irrigation areas in the northern part of New South Wales, most notably in the cotton-growing areas—the Macquarie, the Namoi, the Gwydir and the McIntyre. That work is finished and is fully available from the cotton research centre. That is basically a background of our organisation.

I want to touch on the issue of productivity. Last week I spoke at a conference in Sydney. In reality, the trouble with the data we are seeing on productive use of and value adding to our water is where that return is quoted. It is really interesting that for the rice industry—and this comes from SunRice Australia—\$16,000 a megalitre is the return value added, at a wholesale level. That came straight from SunRice Australia last week; that is their peak return for rice. In the cotton industry, one bale of cotton potentially produces 200 pairs of jeans. Taking a retail price of \$100 a pair, that comes out to about \$20,000. That is a manufactured return. But I must

caution that there are a lot of differences in the numbers. There are too many numbers—I am in the same trap, because about five per cent of cotton produced nationally is used here in Australia and the rest is exported.

Senator HEFFERNAN—I go for King Gees. They are cheaper—they about 25 bucks.

Mr Killen—But they do not last as long. Quality always dictates. There has been a lot spoken about this morning that I am not going to mention again. I will talk about security of tenure and some core issues to be dealt with about water property rights. A property right has to include a definition of terms of use; a security of supply expectation that is modelled and is easily available; and the ability to be mortgagable and transferable, with defined volumes that are fully described in relation to availability. This right should be given to all users of water, including the environment.

I will talk briefly about the market. In the Namoi Valley we are very conscious of the activity that the available water creates in our valley and our community. During the water-planning process that the New South Wales government introduced, we were quite parochial as a community. One of the few things there was consensus around the table about was that we had to have some restrictions on the transferability of water. We determined as a community that water should not be able to be sold out of the Namoi.

We have real concerns about environmental management. This was brought up this morning. It is quite evident that some legislatures really have not got their minds around how they going to better manage the environment. I spent two days in Canberra last week at an MDBC Community Advisory Committee meeting, and the integrated catchment management initiative is far from being demonstrated as having been properly implemented. That is going to create some real issues for us. If you take water away from productive agriculture in the name of the environment when the catchments have not been properly managed, the water quality is not going to change. You cannot just rip the artery out. If you have not addressed the catchments, all the water in the world will not help environmental outcomes in the riverine environment.

I just want to touch briefly on infrastructure maintenance and investment. I am lucky enough to have flown myself from Narrabri to the Murray mouth, to Mildura, to Hillston and right up to the top of the Paroo River. I have been having a look around in the last six months. I would like to advise this hearing—I do not want to use too strong language but I would really like you to take notice of what I am saying—that some of the infrastructure that is in the river system, which I have seen with my own eyes, is virtually a national disgrace in terms of managing a resource that is so valuable to us for better environmental outcomes.

I am talking about hand-operated barrages, I am talking about weirs that are piles of rubble with rusted out sheet piling, and I am talking about the Barwon-Darling system that has the European fish ladders, which are nearly vertical. Our native fish are a bit like us Aussies: sometimes they cruise a bit and they do not have the energy to get up. There is a great deal of rhetoric about where we are going with environmental management but I do not see much rubber on the road yet, and that is a real disappointment.

I would like to also touch on some more global issues. I have been doing quite a deal of research into the impact of shift of yield of potable water as an outcome of global warming. I see

a lot of rhetoric about global warming and initiatives that might be implemented nationally. The danger I am seeing is very easily demonstrated. I have given your executive officer today a copy of this presentation that was given to the Murray-Darling Basin Commission people some time ago. It demonstrates that within 30 years in the eastern half of Australia the irrigation industry we are talking about today could be dramatically changed. If the rainfall goes down 15 to 30 per cent, as are some reliable estimates now, I can tell you that the hydrology of our catchments will die. There will be hugely less than that maximum amount of run-off, because we will never get the rainfall rejection levels that we have now when we have a 15 per cent reduction, let alone a 30 per cent reduction.

I and our organisation feel that we really need to be proactive in dealing with some of the issues that are facing us, rather than being reactive. With most of the issues that we are talking about this morning, we are reacting to where we have been. There is a distinct lack of a national vision about water and some of the solutions we might come up with for Australia to keep on prospering as a nation. It is not only irrigation that is going to suffer from this global warming impact of shift of yield; it is going to be our cities. There is scientific evidence available, which I note has been presented to the committee in I think submission 113 on your web site, that demonstrates the difficulties that Perth, Adelaide, Sydney, south-east Queensland and Bundaberg—and, dare I say it, Tamworth, because it has been impacted too, on the imagery I have seen—are having, and we need to address that.

To finish my preamble—I am being as quick as I can—the community consultation and ownership issues are very sad. The summary would be very sad under our state legislature. Out of all the plans, there are still 10 under challenge in the Land and Environment Court. I am one of the people sitting at this table submitting to you that there is not much ownership of some of these plans out there, despite the best efforts. There are some agencies, state and federal, that I propose have a great deal of difficulty demonstrating to me accountability in information that has been put forward for the community to make decisions on. For us to move forward, in any sense of the words, I would submit that we really have to have ownership of whatever it is we are dealing with. I see evidence that there is a lack of ownership of some of the problems and there is a lack of integrity of process quite regularly at bureaucratic levels. Thank you very much.

Senator O'BRIEN—Thank you for that.

Senator HEFFERNAN—Mr Killen, when you were down at the Murray-Darling meeting last week—and I entirely agree with your proposition about the up to 30 per cent decline in the run-off in the next 70 years or so—did they also talk about the impact of the double bung of the 2020 vision of the plantation forests, which is calculated at about 1,000 gigs gross?

Mr Killen—No. Under my questioning at a local catchment management board level, where they are proposing forestry plantations in the Namoi and the Gwydir incidentally, you cannot get any answers from our bureaucrats or from government advisers to recognise the decline in yield of major reforestation of the catchments, if that answers your question.

Senator HEFFERNAN—As I understand it, there has been no environmental planning ever done by state forests on the impact. As you would be aware, from 24- to 32-inch rainfall the impact between a pasture, a plantation eucalypt and a pine forest is bugger all. But once you get

above 35 inches it is up to five megalitres per hectare per annum. Where do you think we ought to be going with the question of plantation forests under the 2020 vision, given that you have got a global situation?

Mr Killen—I have an answer for that, because in the Liverpool Plains area a great deal of Natural Heritage Trust money and research has gone into dryland salinity. CSIRO, the ag department and numerous other agencies have got quite a vast amount of money for that. They have delivered the report on how to manage rising watertables and it does not specify plantation forestry as a way to address that. In fact, in the report they have demonstrated to land-holders in the Liverpool Plains that, instead of going from 18-month to two-year fallows, they can change back to 18-month fallows. In other words, just put one more crop in every five years and that will manage the watertables. There is also some work that was delivered in that report about native grasses and their role in looking after the watertables. I think that we have been quite myopic in looking at plantation forestry to manage watertables within the catchments and address biodiversity. I will also add while I am at it that, for the life of me, I cannot see why there is such a concentration on native plants for biodiversity when you are dealing with the global issue of vegetation cover and activity of insects and the whole of biodiversity rather than just concentrating on the other.

Senator HEFFERNAN—In your study of the global aspect, have you become aware of the potential impact of plantation forestry in the high-rainfall catchment on the run-off?

Mr Killen—Yes. There has been some work done on that and on what each tree actually uses on a daily basis. It is about 1,000 litres a day for a six-inch red gum.

Senator O'BRIEN—I am interested in the way the access to off-allocation water will work in the Namoi catchment, whether that raises the issue of sleepers and dozers in that catchment as well and how that will work out.

Mr Killen—In the Namoi, as in most of these other valleys, we have actually had a water market since August 1986. At that time we had quite an area of undeveloped licences. Within a matter of about 12 months all of those licences became active; it might have actually been within 18 months or so. Since then we have had fully active licences. That has quickly amalgamated usage, and what is actually happening now is that the pattern that we are seeing, based on the work that we have done, is so variable along the linear length of the river that the actual volume required or able to be pumped in terms of supplementary water, or off-allocation water, is very hard to model. It seems to have stabilised at a level of use that is probably averaging about 76,000 megalitres a year, when we can get it. But it is very hard to model actual behaviour. People will take the water if it is available and if they can. You have to recognise that weather patterns in this part of the world enter the area from the west and isotests increase as you get close to the hills—in other words, the orographic uplift and our rainfall increase quite rapidly as you move east. So when we get a big rainfall event that causes off-allocation events to occur, quite a number of our farms are full up with water anyway.

Senator O'BRIEN—I see that documentation we have received says:

Access to 'off allocation' water will now be licensed under new supplementary water access licenses.

These supplementary water licenses will be issued to all those who will hold general security access licenses in the Lower Namoi regulated river. The share component each licence holder receives will depend on their previous history of 'off allocation' water extraction.

Does that mean that some people are effectively being gradually frozen out of access to off allocation water because of the problems with them accessing it, thereby reducing the amount of water that is able to be taken out for water allocation?

Mr Killen—Our association's formal position at this stage is that there should be an attribution of a share of the available supplementary water across all entitlement holders. I might add that the supplementary water issue is subject to a challenge in the Land and Environment Court as we speak. There are signs that there might be a resolution to that issue with our new minister, Craig Knowles, but that is still a work in progress and I cannot say much more than that. The whole subject of supplementary water is in the Land and Environment Court as we speak.

Senator O'BRIEN—But is the effect of the current situation that people are gradually falling out of the system?

Mr Killen—We do not know until we get a determination and a decision from Minister Knowles on where we are going to go in terms of the implementation of the plan and what plan is finally implemented.

Senator HEFFERNAN—Unfortunately, I did not have an opportunity to ask the previous people, but can you talk to us about the ground water in the Namoi Valley?

Mr Killen—I will leave that to the experts. They are all behind me here, and I notice they have a spot this afternoon. Those guys will be intimate with the community consultation process. I think that they will give you a really good description of what is happening there.

CHAIR—No doubt you have heard the views in relation to the Wentworth Group and the approach that they have taken. Given your work with the MDBC as an advisory committee member and so on, do you think that the process that has been gone through—particularly the suggestion of looking at the establishment of an events based management trust—solves the problem of making sure that whatever is put in place is driven locally, as opposed to something that might perhaps be put in place by the state government through departments and ministers, and so on?

Mr Killen—I think there is going to be a great deal of difficulty in determining who is actually going to manage the environment. It is not at all clear to me at any level of government—whether it is at the state or basin level—that anyone is even talking about proactively managing the water resources we have. A demonstration of that is there is a great deal of reluctance at the Murray-Darling Basin Commission level and at DIPNR level—who own the structures—about managing Menindee Lakes for better outcomes, for goodness sake. The only reasonable work that has been done at Menindee Lakes in the past few months—because they miscalculated the amount of water that was available for Broken Hill—turned into an absolute political imperative to do something, so they called in the bulldozers. Moving into

the future, it is not clear to me at all that any group or party might be able to proactively manage, especially given the bad state of some of the infrastructure.

Walking out on barrages in the Coorong, I was horrified when talking to the guys who actually work on that structure. There are five kilometres of hand-drawn drop boards. With a Hyab truck they can change 36 feet, in the old terms—I do not know what that is in metres. Those people actually walk the boards there and try to manage with the infrastructure they have. They have huge difficulties. No matter what the number is that is determined that should be delivered, we have some problems. In terms of loss of water—the number was brought up here this morning—740,000 or 750,000 megalitres a year just goes up in dust at Menindee Lakes, yet if you ask the question of the commission they will change the subject. They do it every time, because I have been bringing it up for quite some years. I am really concerned about outcomes. If we are looking at real outcomes with the reforms we have got, we have got some problems.

CHAIR—Obviously the committee itself is not going to get down to the sort of level of detail, as far as site inspections go, that you did on the trip you took recently. Did you prepare some sort of report to the commission as a result of that? Is that something which might be provided to the committee as part of our need to look at some particular issues that might be raised with the commission if we hear from them?

Mr Killen—No, I have not, because it has been part of my usual business as a member of the State Weir Review Committee in New South Wales, the community advisory committee to Goolwa and Irrigators Inc. I have been to Melbourne, Adelaide and so on. I could very easily write a report. I would be delighted to produce something along those lines and point out some snapshots, the reality of what we are looking at.

CHAIR—We would be happy to see that.

Mr Killen—I was very fortunate. I went down to Barwon-Darling River with a panel of scientists. We went to every weir, from Mungandai through to Wilcannia. That was in 1996, and I can tell you there is now one fish ladder going in, from all those weirs. They finally got agreement, and there will be one fish ladder going into Brewarrina Weir. That is really sad, because scientists identified the issue in 1996, yet we are advised by our legislatures of what a good job they are doing of managing resources. I have a different story.

CHAIR—If you would not remind preparing that, we would be happy to receive it.

Mr Killen—I would be delighted.

CHAIR—Thank you for appearing today and for taking the time to come from Narrabri.

Proceedings suspended from 12.16 p.m. to 1.19 p.m.

CAROLAN, Mr Jeffrey, Chairman, Lower Namoi Groundwater Association

HAMPARSUM, Miss Juanita Anne, Secretary, Upper Namoi Water Users Association

WARNOCK, Mr John Patrick, Former President, Upper Namoi Water Users Association

CHAIR—Welcome. Mr Carolan may wish to make some opening remarks on behalf of the group and, if others wish to add to his comments, you are more than welcome to do so before we move to questions.

Mr Carolan—Thank you for the opportunity to appear before you. The ground water association has been going for 25 years or so with the express aim of achieving sustainability. That has been our main aim. We have, as you heard earlier, lobbied successive governments in our state to reduce the issuing of licences because we did not feel it was sustainable. We were assured that the resource was larger than we thought, but that does not seem to be the case today.

We have not argued at all about the need to reduce usage for sustainability. From an environmental point of view, we need to be sustainable but we also want to link that with social and economic sustainability and look after our communities and the people on the ground. From that point of view, although we hear a lot about return on megalitres as being the driving force and certainly we need to have good and efficient returns on megalitres produced, those also need to have a bottom line which produces economic sustainability in the businesses and that will provide economic sustainability in the community. We really need to make sure we drive those.

That is conceptually where we stand and what we are driving for. Jack might want to flesh it out a little bit more in terms of the upper and lower Namoi and how it joins together and what the aquifers are and how it works.

Mr Warnock—The senators would be aware that this process of water reform really got under way in 1994 with COAG announcing that these things would be dealt with. Certainly, sustainability was at the head of the list of items to achieve. The Namoi ground water review started not long after that and it got particularly serious from 1998 onwards. So for the last five years we have been trying to achieve better outcomes for our resource and for the communities. During the lunch break I dropped off a very poor photocopy that I had done a few moments before. That top section outlines very broadly for you the extent of the Namoi ground water system. The area extends from around Quirindi in the south to Narrabri as the upper Namoi and then from Narrabri west in a big fan towards Walgett, Rowena and Pilliga.

The upper Namoi has very complex variations in the ground water system and we have 13 different zones there. Each has particular characteristics which make it very complex to try and articulate what needs to be done in a public sense. So over those five years that we have been working with the state government in particular to try and get better outcomes we have had to keep in mind the complexity of the system and the difficulty in dealing with something that people cannot put their hands on because it is all underground and behaves very differently to surface water systems. The lower Namoi was originally divided into seven different zones but because of the difficulty of trying to define those zones—some were defined by bitumen roads

and barbed wire fences—it was decided to better manage that area in one single zone. The Namoi has retained those 13 distinct zones.

As Jeffrey mentioned, we have always been prepared to look at the sustainability of the resource as the key issue. So right from the beginning of this process that was something that we understood was paramount. But what we also argued was that to achieve that sustainability would require massive change and that the people who were going to be affected by that change could not do it on their own and they would need some help. For example, the worst case scenarios around the area adjacent to the township of Quirindi is that the overallocation there means that to achieve sustainability we need to have cuts of 87 per cent.

For some individuals that does not mean much because they have not been using the water. But for other individuals, it may mean a lot. I cite the case, Senator Heffernan, of David Wallis and his family who grow lucerne and convert that into chaff. They have introduced drip irrigation for that cropping system. They will lose 87 per cent of the water that they have been used to having access to, yet adjacent to them is a land-holder who does not use the water and he will get the same share of that resource under the current state government policies. That has been something extremely difficult to deal with.

In a general sense, the issue is one not of overuse but of overallocation. To achieve sustainable outcomes we need a cut of around 60 per cent—from 500,000 megalitres to roughly 200,000 megalitres—across the valley. There are some zones in the upper Namoi and parts of the lower Namoi where overuse is a concern, and they need to be managed differently. At the same time, there are people who will suffer cuts not because of overuse but because of overallocation. We have been fighting to try and get a decent social and economic outcome for our communities because of this huge impact, and we have not been terribly successful. Despite the fact that people recognise the difficulties we all face, we have not been able to get the assistance that will take us forward. Unfortunately, a lot of the things that we predicted would happen in terms of the impacts of delaying these moves are now starting to happen. Juanita is in an area where overuse has become a really big issue. Juanita will now outline the involvement of her family over the last 30-odd years

Miss Hamparsum—Our zone is zone 3 in the upper Namoi, which goes from Breeza to Gunnedah. The first irrigation bores were put in in the mid-1960s. At that time everyone was on what they called an area licence. The aquifer is a high-yielding aquifer and, as a result of that, once the success of one irrigator was acknowledged, a lot of other irrigators were encouraged by government to also develop. In fact they were given advice from what was then called the Water Resources Commission on engineering, as well as grants to sink bores and low-interest loans to develop the water if it was there. In the eighties, with our area obviously being a very productive area, irrigation took off. The government decided it needed to measure the water coming out so it converted everyone's licences into volume licences, which means that you are allowed to extract a certain amount of megalitres per annum.

At that time the government issued an enormous amount of licences for an amount of water greater—it was probably in the ratio of 2.1 to 1—than the amount the aquifer could sustain. The science from that date to today has not changed significantly. The government decided to mine the resource over a life of 30 years. The water user associations back in those times vehemently disagreed with that; however, they were overruled by the government of the day and more

licences were issued, which is why we are in the predicament we are in now. Unfortunately, our zone in particular is one of the worst in the valley. The reason for that is that it is one of the most productive areas and it is very well suited to irrigation.

We have licences for 55,000 megalitres of water out there and we have a sustainable yield of 17,000 megalitres. That information has not changed since the eighties. My family in particular—and my father was one of the first irrigators in the area—has constantly questioned governments and alerted them to the problem. We said, ‘You have overallocated the resource. We do not want you to mine it; we want you to put in a moratorium and stop any further development and issuing of licences for five years until we can work out what this resource can handle.’ The government, again, did not listen to us, and the prophecies of my father, who passed away in 1998, have come true.

My father managed to convince the licence holders in our zone that we had to take immediate action back in 1995. It was known as something called the green paper for our particular area. The Namoi Valley, especially our zone, is the most studied zone on a hydrological basis—according to my understanding—within the entire state. The reason for that is that we have such an enormous issue of mismanagement. Back in 1995, the irrigators voluntarily agreed to take a 35 per cent cut on their allocation as an immediate measure, because nothing was happening at government level. That cutback was taken across the board.

That meant that, whether you were using the water or not, you received the same amount of cutback as your neighbour. It seems equitable, but in fact it is not. What ended up happening was that those that were fully developed lost active water and all the others that had not developed suddenly said, ‘Shivers, we had better use it,’ and so they developed up to their 65 per cent. So whenever you talk about water management, you have to be extremely aware that it produces jobs. It is extremely productive and profitable as long as it is in harmony with the resource.

People make decisions on farms based on how much they can survive and become viable. When actions by government do not recognise that, it exacerbates the problem. In our zone the government was meant to stop any further development in line with that 35 per cent cutback, and they did not do that. Now the extraction, post those cutbacks, is almost the same, if not higher, than prior to those cutbacks. It is a very valuable lesson to learn.

Senator HEFFERNAN—When do you think they decided to mine the thing?

Miss Hamparsum—The policy discussions were in 1982-83, and the community was asked to comment on that. Irrigators voted overwhelmingly for no more licences to be issued, but the government went to land-holders—that is, graziers or potential investors—who voted that they would like a licence, so the irrigators were overruled and the government had the mandate to issue more licences. That was put into policy in 1984. It is interesting that we are almost 20 years on.

Senator HEFFERNAN—Can you tell us who the dopey minister was?

Miss Hamparsum—To my knowledge I cannot remember.

Mr Warnock—It could be a bit hard to identify.

Senator HEFFERNAN—It is hard to believe.

Mr Warnock—That suggestion often comes back to haunt us. It is fired back at us as if we, as water users, accepted the principle that we would only be in existence—in the case of where I am from—for 15 years. I cannot repay my debts in 15 years.

Senator HEFFERNAN—It is a pity we cannot ring up and find out who the minister was to satisfy my curiosity! I cannot believe it.

Senator FERRIS—It would have been Armstrong.

Miss Hamparsum—At the end of the day it is a very powerful lesson to understand that there are 775 licence holders within the valley who have ground water access. Within the valley about 48 per cent of the businesses are supported by irrigated agriculture. The statistics are there—they are in how the community grows and builds. It is a very viable community if you have a sustainable resource. As a result of these cutbacks it is estimated through the task force process that occurred that over 300 jobs will be lost. It is estimated that over \$30 million per annum of production will be lost. There are better ways of making changes and keeping people in jobs and keeping the resource at an appropriate level.

Senator O'BRIEN—So is there a solution?

Miss Hamparsum—Absolutely.

Senator O'BRIEN—And what is it?

Miss Hamparsum—In my opinion, the solution is not an easy one and it is definitely not a one size fits all type of thing. In particular for ground water, trading is not the solution because ground water can physically only be traded within that zone. If that zone has a resource issue, by trading you are only activating more water which is already in a stressed zone. In other areas trading is a result, but it is not the panacea. In a nutshell, the users generally know what the solutions are, and we have been asking for them since 1998. They are complex but they are specifically appropriate for that problem. So we need to match the solution to the issue. If you have a one size blanket fits all type of policy, you create an enormous amount of unrest that should not occur and does not need to occur.

Mr Warnock—Senator, you will be familiar with the language of 'sleepers', 'dozers', 'ghosts' and so on. One of the things we did early in the piece was to redefine terms to have licences described as either 'active' or 'inactive', because some irrigators have both active and inactive portions of their licences. Five years ago we were told that there would be no provision for the removal of inactive entitlements by the state government. In other words, we had to deal with the issue of overallocation and take into account those inactive entitlements in a fair and equitable way. Trying to find a solution was quite difficult when you had that constraint on you, and the state government was saying that they were not going to provide any funding for the removal of those inactive entitlements. In the case of this ground water system, they were to decrease it from 500,000 to 200,000—by 300,000 megalitres. There are more inactive than active entitlements.

Back in 1998 we met with the state minister at the time, Mr Amery, to seek a process to try and find a solution. Jeffrey and I were members of what was then the Namoi Groundwater Expert Reference Panel. We wanted to get together a group of people who had experience with restructuring in other industries. We ended up with a panel of 18. So you can imagine trying to get quick solutions was not going to happen. That did not result in a decent outcome, so we again approached both state and federal governments. After a public rally in Gunnedah in February 2000, the Namoi Groundwater Task Force was formed. Again, with all the constraints that were put upon us by both governments about what we could and could not do in regard to active and inactive entitlements, we met and came up with the Namoi Groundwater Task Force report. That has within it solutions to the problem that we were faced with at the time. The state government delayed any response for close to 12 months and then ultimately decided to treat all entitlements the same and apply across-the-board cuts. That meant that, whether you were an active user or a wholly inactive user, you took the same amount of cuts.

Senator HEFFERNAN—I take it that that was to make the grower feel the pain rather than the government provide compensation.

Mr Warnock—We have never really been satisfied with the reasons why that was done, but certainly from a social and economic point of view it was not the best outcome. Even the study that was done by the state's own department of agriculture highlighted that that was the worst possible decision you could make. That report is confidential, but it is within this report. So here we are still faced today with the proposition that we will all be cut at exactly the same percentage, but it varies between zones. I am sorry that it is such a complex issue. The average is 60 per cent but the people at Quirindi are 87 per cent. In Jeffrey's area it is 49 per cent, and in my area it is 56 per cent. It is all over the place, but the impacts are going to be the same—that is, people in business in the Namoi are unlikely to survive the change because it is so huge. If people suggest that we can become more efficient—I think most people think in the margin of five to 10 per cent might be achievable, with some improvements on farm—we say that you cannot adapt to the 60 per cent or 70 per cent where Juanita is or the 87 per cent where David Wallis is.

Senator HEFFERNAN—Given that he has got the ultimate efficiency, too.

Mr Warnock—Yes.

Senator HEFFERNAN—Do you blokes have a solution hidden in that folder?

Mr Warnock—When we put this down, we thought it would be accepted by state and federal governments. We are talking about 2000. Here we are, three years down the track, and we are still in trouble.

Senator HEFFERNAN—Is there a summary of that?

Mr Warnock—There is a summary of it. Unfortunately we did not bring it with us but we could get to you.

Senator HEFFERNAN—Could you make it available to the committee?

Mr Warnock—We will do that. When the state government moved away from this solution to the one with across-the-board cuts, we had to try and formulate an alternative strategy that would be acceptable. It certainly was not as good as we wanted. We have never got to the stage of coming up with an acceptable strategy that would deliver a better and fairer outcome that people could survive. I say all the time that most of the calls I get from people within our community come from those who are contractors—laser-levelling contractors, operators of the local hydraulic repair shop, fuel distributors, tractor salesmen or whatever—because the impacts are going to be right across the community.

Senator HEFFERNAN—The original decision to mine the aquifer—which I find pretty amazing—was in 1982?

Mr Warnock—And it was implemented as policy through the early nineties. It was encouraging people to go ahead and develop, even though the government realised that the number of megalitres of allocation out there was unsustainable. The principle was that not everybody would use their licence.

Senator HEFFERNAN—That is as corny as the logic of having a bore licence but no aquifer. Do you have any of those, by the way?

Mr Carolan—There are a few areas where there are no commercial quantities of water to obtain, but those people still have a share of the resource.

Senator HEFFERNAN—It is a 1,000-megalitre licence. Is that taken into the calculations for the drop in the allocation?

Mr Carolan—Yes.

Senator HEFFERNAN—That is cuckoo land stuff.

Mr Warnock—As members of all these committees that we have sat on—Jeffrey and I have sat through hundreds of meetings and met with all the ministers—we asked that the department ensure that there were no existing licences out there that are what you would call a ghost—in other words, it is just sitting there with no water underneath. We were assured that there were none. Some people described some operations where the corner fence post is supposed to be their bore, because to achieve an active licence and to keep that active licence you had to put in a bore. So rumours abound that people just put in a length of bore casing at fence post height and decide it is a bore. We do not believe that there is too much of that out there—none that we could identify.

Miss Hamparsum—One of the issues we have is that, in the nineties, the New South Wales government sent letters to licence holders saying, ‘Either use it or lose it.’ They were given a 12-month time frame in which to develop a licence. If they did not, the licence was taken away. That led to an example where one person spent \$1½ million dollars to develop a licence and one person did nothing. Yet the person who did nothing still has that licence and was never penalised. The government never carried through with withdrawing the licence.

Senator HEFFERNAN—The logic of that is clearly ingrained in my brain.

Miss Hamparsum—The other problem we have is that, unfortunately, a bore licence, because it is attached to people's land, is more valuable. Therefore, whether or not they have used the water, there is an equity situation that we have to acknowledge. Even though they may be a sleeper or dozer, the finance industry has valued that land at a higher value because of that piece of paper. That higher value is not reflected only in the market rate upon selling the property; even the valuer general recognises it when he values your property for shire rates, whether or not you have used it. If you take that away from people—in the Namoi's case, it is a quantum change; an 87 per cent, 70 per cent or 67 per cent cut—they may not be able to raise credit, even though on the face of things nothing has changed. That person has just as much direct impact, even though they have never used the water before, as someone who has used the water. Those are equity issues. It is something that we have always said has to be taken into account. Even though they have never used that water, it has an intrinsic value that people have lent and borrowed on.

Senator HEFFERNAN—What about the ghost?

Miss Hamparsum—The ghost is no different. A bank does not say, 'Are you are ghost?' It just says, 'You have in your hand a piece of paper which is an asset.'

Senator HEFFERNAN—But while it is tied to your land it has no value.

Miss Hamparsum—It has a value, because you can borrow from it.

Senator HEFFERNAN—But that is bad—

Senator FERRIS—It is built into your equity.

Senator HEFFERNAN—Yes, but that is buyer beware. If you have a licence that attaches to your land but your land has no aquifer, I think any consideration of compensation for that is a public fraud.

Miss Hamparsum—It is a difficult issue. It may be something the industry has to sort out. But, unfortunately, the reality is that, when someone purchases a property, the potential to develop that licence—

Senator HEFFERNAN—is zero.

Miss Hamparsum—They may not know that, or there may be the ability to develop it but not—

Senator HEFFERNAN—That is buyer beware.

Miss Hamparsum—You may be right. I can see where you are coming from.

Mr Warnock—Just to reiterate, in the upper and lower Namoi we have been assured that there are none of what you describe as ghost licence holders. There are areas where the yield from a bore might be so low that Jeffrey, Juanita or I would consider it uneconomical, but people

might decide in the future that they can run chickens on it or something. We believe that bore licences being issued where there is no sustainable yield is a minimal issue.

Mr Carolan—In the task force report we recognised the asset backing that that licence gave. To solve that, we said that if people were inactive but had a licence it had a value to them and that that should be recognised in a buy-out compensation type scheme.

Senator HEFFERNAN—But the licence, in effect, applies not to the water but to access to the water, doesn't it?

Mr Carolan—That is right.

Senator HEFFERNAN—And if you do not have the water to access then, really, the whole thing is a joke.

Mr Carolan—The access licence is pretty poor. That is correct.

Mr Warnock—In preparation for the task force we engaged private consultants to give us a valuation report, the details of which are included in the task force report, on the value of inactive and active entitlements. Remember that we were given the direction that those inactive entitlements would be recognised. We wanted to know what they were worth in putting together a package to, in our case, encourage those people to voluntarily surrender those entitlements. But that never saw the light of day, in a sense, because it was never accepted by the state government.

Senator FERRIS—Mr Warnock, in terms of solutions, what about the Wentworth Group?

Mr Warnock—You asked the question of some earlier witnesses. My view of the Wentworth Group is a bit different from what the earlier witnesses outlined. One of the concerns I have is that that group is a self-appointed group predominantly comprising ecologists and economists. There are no social scientists within the group. Unfortunately, a lot of their solutions have been developed remotely from us, the communities that live out here. In that sense, while they might be coming up with some ideas that are close to what we would like, it is always difficult for people to accept something that has been developed remotely in high office or wherever. From that point of view, any group that has such a high profile as the Wentworth Group worries me when it does not represent all of those who are affected. That is where I have some difficulty with the group.

Senator FERRIS—Have you tried to put that position to them?

Mr Warnock—I know members of the Wentworth Group. In fact, one of them worked on the expert panel report, and I chaired a group that he was involved with. I guess I do not find them very accessible. We do not have a forum in which we can express our point of view to that group.

Senator FERRIS—Has there been an attempt, perhaps by your association or your group of residents, to invite them to listen to your views?

Miss Hamparsum—At the association level, no, purely because I did not think it was a negotiable decision. I have very little understanding of their charter, what their terms of reference are or what they seek from people. My understanding was that they had a dream or a vision and they put it out there and people accepted it.

Senator FERRIS—People have not accepted it. Mr Warnock has not accepted it. One of the things that happen with these sorts of reports is that if they go unchallenged they do have a currency. If you as a group of residents, or this region, have a concern about something as fundamental as the social science in that document—or the lack of it—then it seems to me that it is important for the region to have the opportunity to put that view to those people. As you say, the report has currency and will perhaps get more currency as time goes by and it remains unchallenged.

Senator HEFFERNAN—Yesterday in St George we were given evidence that the Wentworth Group had come to a conclusion about the water that goes past St George—that the floodout area in the lower reaches was in fine fettle; it was in good order. It was just bloody rubbish.

CHAIR—It was not so much the Wentworth Group. For the record, it was Peter Cullen, who just happens to be associated with the Wentworth Group.

Mr Carolan—It has been very difficult for us to get social and economic issues recognised in this. We have made a direct representation to the New South Wales government on this. It is something that we are really strong on, because the way the community is tied to ground water—in particular the way it helps these communities to survive in drought times—is really important. For the majority of people in our valley, as you know, ground water is part of their daily lives. They brush their teeth and wash their children in it. It is the water that we use. So we value it and its sustainability very highly. Never at any stage have we wished to put it under. As I say, we have been arguing for 25 years with the government that their activities do not appear to be sustainable. At the same time, they were encouraging us to use the resource.

I have been farming for 40 years and in that time I have been encouraged all the time to get myself some irrigation, to diversify, to make myself less reliant on rainfall and to have a diversity of crops so that I am not subject to world markets and all those things. Having done all that, now I find that I am public enemy No. 1 because I am using water. I would like to make the point that the cost of developing ground water resources has been our cost. We have sunk the bores and put the infrastructure in. Then these cuts came along. In our case we are losing 51 per cent of the water. You could say by association that 51 per cent of my infrastructure is redundant and I have to wear the cost of that.

Senator HEFFERNAN—The tragedy of your being the devil in all of this is that it was a deliberate state government decision in 1982, and a succession of governments of all persuasions in the meantime have gone along with the decision. The difficult situation that everyone finds themselves in now is that a state blunder has a national consequence and no-one wants to have financial ownership of the original blue.

Mr Carolan—That is why it has been very convenient to sweep away this compensation issue—and it is not just compensation to individual farmers; it is community compensation,

really, because the community is developed upon these assets. We are very strong on that. We feel that it needs to be recognised.

Senator FERRIS—It raises interesting questions about duty of care.

Mr Warnock—Yes, and we would consider that the responsibility that we have as tenants of this land—most of us have this cliched view—is to pass things on in better condition than they were in when we received them. Senator, could I just follow up the comments about the Wentworth Group report. I attended a conference in Canberra last year called the Fenner Conference: Agriculture for the Australian environment. A significant number of members of the Wentworth Group were there, and within an hour of being there I felt quite out of place. The hair on the back of my neck was standing up because the message I was getting was that these pre-eminent people—generally professors, doctors, academics and bureaucrats—were suggesting that agriculture was most unsuitable for Australia and that the best thing we could hope to do for our environment was graze kangaroos and harvest wattle seed. One of the members of the Wentworth Group was quoted on that on *60 Minutes* just a couple of days later. When I want to challenge the Wentworth Group—'Here's little Jack Warnock out in the country, challenging eight or 10 pre-eminent professors and doctors of the standing of the members of that group'—I do not get heard. Premier Carr and Prime Minister Howard will embrace the Wentworth Group and their views, but unless we as members of this community have a forum to get that message across we will not be listened to.

Senator HEFFERNAN—That is why you are here.

Mr Warnock—That is why we are happy to talk. But, in the effort that we have made as a collective to try to get better outcomes, we have tried every process. At the moment these two groups are in court trying to get a better outcome. We have tried everything: using political persuasion and the media, and embracing arrangements with New South Wales farmers, the Irrigators Council, Cotton Australia—everybody. The unfortunate thing is that the Namoi Valley in some respects is the chicken, or the egg or whatever it is: we came first. We have had to deal with these issues that a lot of other people are only now starting to wake up to as being really major issues.

Senator HEFFERNAN—Earlier on you said there was a solution to all of this, but you did not actually say what it was. You said a lot of words but you were not game to say what you thought the solution was. Does anyone have the courage to say what the solution is?

Mr Warnock—It is complex. That is the first thing you have to say. The criticism of this report was that—

Senator HEFFERNAN—Is this compensation or not?

Miss Hamparsum—Yes.

Mr Warnock—Yes.

Senator HEFFERNAN—Well, say the word.

Mr Warnock—We were not allowed to say the c-word.

Senator HEFFERNAN—You can use it today.

Mr Warnock—Compensation—adequate funding—will allow those who wish to move out of the industry to do so. It will give those with inactive entitlements the choice of handing in their entitlements and moving on. And it has to be fair. That is what we tried to establish: what is a fair value for those entitlements?

Senator HEFFERNAN—You did not happen to put a price on those, did you?

Mr Warnock—We did, and it is in the submission. For inactive entitlements, it was \$300 a megalitre. For active entitlements, it was close to \$1,100 a megalitre.

Senator HEFFERNAN—To bring the aquifer back to order, what would the total be?

Mr Warnock—We estimated in this study that it would be \$120 million and we proposed that we share that between the survivors of the whole reform process—the users—and the state government and the federal government. That was the basis of this report. It was a sharing between the community and state and federal governments, and it was \$40 million each. One of the reasons we did that was the argument that governments would not provide compensation for the removal of inactive entitlements, which meant that we did not know who would wear the cost. If they are to be treated fairly and equitably, who is going to pay?

Senator HEFFERNAN—If you take the sleepers out, does that fix it for the mature licence users?

Mr Warnock—It goes very close, because there are 500,000 megalitres of entitlements—200 megalitres sustainable—and usage is about 200,000 megalitres.

Senator HEFFERNAN—If Telstra were sold, some of that money could be put towards this. I am sure the state government would embrace the idea; I am not so sure what the federal government would do. I am talking not on behalf of the government here but on my behalf. Don't you think that would be a good idea?

Mr Warnock—We do not care where the money comes from.

Senator FERRIS—This is not in the terms of reference, Senator Heffernan!

Senator HEFFERNAN—I just thought I would get it on the record!

Mr Warnock—We do not mind where the money comes from, but we think that it is unfair for the impact to be worn by a small section of the community—in this case, people like us, our associates and fellow community members.

Senator FERRIS—It is the same as the salinity argument, where within our lifetime tax incentives were given for tree clearing. Now those properties are trying to deal with salinity and the cost of it on their own.

Miss Hamparsum—One of the important parts of the solution that the task force identified was that it was up to the individual licence holder to make their own decision about how they would adjust to this change. The underlying principle of the task force was that anyone who could prove that they were directly and adversely affected by these changes was entitled to apply for assistance or compensation. Those two principles are very valid. One of the problems is that, with water in particular, every farmer has a different situation. They have done different things with their water, they have developed a different way or they have never developed, or they have physically built up their businesses and employed people differently. By having a one size fits all approach, people have no say in their own destiny. One of the things that the task force allowed to occur was that the individual licence holder made his own decision, whether he sold his licence and gave it up voluntarily or he stayed within the process and then applied for assistance after all the cutbacks had occurred.

Senator HEFFERNAN—How much forestry is in the upper catchment and the recharge area for your aquifer?

Mr Warnock—Most of the recharge for the systems that we are talking about is from within the plain on which the ground water system is based. There is some recharge, particularly on the eastern side of the area where Juanita is, upstream from Gunnedah, but if you can imagine the situation downstream from there most of the recharge is from either rainfall or the rivers that recharge it.

Senator HEFFERNAN—Not only would you have excess harvesting of the floodwater; it would also be impacting on the recharge.

Mr Warnock—Yes. We all talk about the single resource. You should be looking at the water picture in a much more complex way than we are talking about. We are sticking to the ground water system here in this session, but you cannot divorce it from the fact that most of the water that goes into the ground water system has been surface water at some time.

Mr Carolan—One of the things that I should bring out is that the association that we represent comprises stock and domestic users, shire representatives and so on, so it is just not an irrigator group. We have spent a lot of time during this process to inform people about it. The basic driver has been the sustainability of the resource and the best outcome for the community. You can imagine that if you get 50 or 100 farmers into a room and start asking them what is the best solution, you will immediately be told, ‘What is best for me.’ At the end of the day that is not an achievable aim. We have to get results that are best for the community, and that is the common driver of what we have tried to do.

If we tell someone who has a licence that he has not used that he really should sell it for the benefit of everybody but we will pay him what it is worth in a commercial sense, we know that that is the best outcome. No-one likes to be told what to do—that you cannot use your backyard or you have to lock up your spare bedroom—but, effectively, to get a proper outcome on this that is what we have to do. We are being driven by that community base to come up with this plan. It is not a simple plan which is A, B, C and D and you can legislate and it happens; it takes time and commitment from governments and community.

Senator HEFFERNAN—In that plan you have included compensation for, as it were, ghosts.

Mr Carolan—Absolutely.

Mr Warnock—Active and inactive.

Senator HEFFERNAN—I suppose that is so that you do not get your head cut off when you walk down a dark alley somewhere. I have the very strong view that you are wrong about that. You cannot say that but I can, because I am further away from this constituency.

Mr Warnock—In our view there are more inactive than active entitlement holders.

Senator HEFFERNAN—Yes; I hear the point.

Senator McGAURAN—I do not think that the Wentworth Group have as great a currency in Victoria as in other states, because the Victorian Farmers Federation have been very strong in countering them. I just wanted to make that point. You mentioned the New South Wales Farmers Federation. Have they put on paper anything to tackle the Wentworth Group over?

Mr Warnock—I cannot speak for the—

Senator McGAURAN—The Wentworth Group are definitely not the friends of the farmers.

Senator O'BRIEN—Are the Wentworth Group and the National Farmers Federation—

Senator HEFFERNAN—They got married the other day.

Senator O'BRIEN—I would not have put it that way.

Senator McGAURAN—I cannot decipher the two voices coming down from the other end. Please speak one at a time.

Senator HEFFERNAN—They put out a joint statement.

Senator FERRIS—They used to put out joint statements with the Conservation Council too.

Senator O'BRIEN—The NFF and the Wentworth Group put out a joint statement.

Senator FERRIS—That does not necessarily mean that they embrace everything.

Senator O'BRIEN—No, but the statement said what it said. I am just saying that—

Senator FERRIS—Which was what?

Senator O'BRIEN—Which was that there was a lot of common ground and they were proposing to work together.

Senator HEFFERNAN—That was a different group, wasn't it?

Mr Carolan—That was not the Wentworth group.

Senator O'BRIEN—I thought it was the Wentworth Group.

Mr Carolan—I think the point we are trying to make is that we are professional farmers and we have had to become professional resource managers who understand a lot of issues. Unfortunately we are not public relations consultants or spin doctors, and our ability to influence that sector, as we all understand, is pretty small.

Senator FERRIS—That is why you have the NFF.

Mr Carolan—Also, the understanding has been the fact, when oftentimes it is not. They have created a perception that they are experts on all things and we perhaps believe they are not. The perception about the cotton industry is that it is a pretty nasty industry. I think the fact is that the cotton industry is a pretty decent industry these days. A lot of people grow cotton because we do it better than anyone else the world, and our water use efficiency on pound of lint produced is better than anyone else's in the world. So we are world leaders in efficiency in what we do, and that drives us, but the perception out there is that the cotton industry uses a lot of water. I could say the same thing about the town of Moree: it uses a lot less water domestically than Sydney does, therefore Sydney should be shut down because Moree uses less water, but other facts change that statement because more people live there, and so on. The cotton industry uses only 15 per cent of water that is used for irrigation purposes in Australia. It is not the biggest user and it uses it very effectively.

Senator HEFFERNAN—Could you say that again?

Mr Carolan—The cotton industry uses 15 per cent of the irrigation water in Australia.

Senator BUCKLAND—I ask this question out of self-interest more than anything else. We heard this morning that more water is going into the aquifer than is being drawn out. Do you agree with that?

Mr Warnock—Again, I am sorry about the complexity, but it does vary with different parts of the ground water system in the Namoi. You are alluding to situations that we have in the Namoi where watertables are rising, but within 50 kilometres they are dropping. Unfortunately, to get down to the kind of detail that is involved in understanding how the system works and how it relates to other parts of it is terribly complex and not the sort of thing that gets on the evening news, because it is so dull and complex.

Senator BUCKLAND—It might be dull to some, but it is of some interest here.

Mr Warnock—It certainly is important to us. In the area I come from there was a situation where, in our management committee process, the sustainable yield for the area was suddenly dropped by 20 per cent. Naturally, we challenged that—what was the basis for the change? A study completed by a University of Technology student in Sydney showed that the sustainable yield was perhaps lower than we originally thought. I asked the simple question: 'Was that study peer reviewed?' The answer was no. I asked: 'How can you make that dramatic change?' The answer was: 'Well, it's the only science we've got.' So, even though it is not good science, it is

still used to justify the argument that sustainable yields should be lowered. The reality in this area is that water levels are the same as they were before we started irrigating in the early 1980s. It is not unsustainable. The reality is that for 20 years—and I am repeating myself—overallocation has been the problem. But very active irrigators will still suffer a 56 per cent cut because of the overallocation, not because of the overuse.

Senator BUCKLAND—Over a period of time have any studies been done to measure the quality of the water coming out? I suppose you can tell whether it is good water or bad water, but I am not sure how you do that.

Mr Warnock—There was a quality monitoring program in place for a long while and then the government stopped doing that.

Mr Carolan—We still paid the fee, though.

Mr Warnock—We still paid fees for it. There is a big gap in our knowledge and it has been reinstated only in the last couple of years. The only thing we can say is that, in the majority of cases, the quality of the samples taken in the last few years is better than it was 15 or 20 years ago. That is a very general statement but that is the broad conclusion.

Mr Carolan—I just want to add something regarding there being more recharge. The sustainable yield in the Lower Namoi, where I am from—and we are talking about the aquifers from 35 metres down to about 80 metres; we are not talking about perched water tables, as there are really none of those in our area—is deemed to be 86,000 megalitres, and a long-term history of use is 77,000 megalitres. If you put those two figures together, there is more going in than coming out. But aquifers are not like a bucket. They have open ends and there is continuous movement through them.

Senator McGAURAN—On that point—which I think you just made, but to be sure in my mind—you are saying that at present the take from the ground water is not as great as the replenishing.

Mr Carolan—In both the Upper and Lower Namoi the allocation has been greater than the recharge, but the active use has been less than the recharge on average. In some places it is above, and in some places it is below.

Senator McGAURAN—So it is not a great crisis in reality, is it?

Mr Carolan—It is.

Miss Hamparsum—Getting back to the complexities, you have 12 zones in the Upper Namoi and one in the Lower. That is 13 zones. Essentially, four of those zones are not only overallocated but overused. You have just hit the nail on the head. There is overallocation and underuse, which is what was just being talked about, or overallocation and overuse. If the aquifer is overused, it is stressed. It is depleting ground water levels, and in droughts you are going to have major issues. Extraction needs to be reduced.

Senator McGAURAN—That was my next question: is that overuse because of the drought?

Miss Hamparsum—I am talking about long-term overuse. If you take any one year in isolation, the usage levels will always be up and down, because in this area we are not a marginal agriculture area. We are what are generally called ‘supplementary irrigators’. We do have rainfall that is provided for in the plan, and in stress periods or during summer you might supplement that rainfall if it did not occur at the right time. You will always have in every year a usage that will vary the ground water extraction, depending upon the climatic situation as well. Obviously, in a drought some people will probably pump their entire allocation in that year because it is a drought year. But in an average year, like a normal climatic year, they may only pump half of it. When you look at someone’s use, you need to look at their long-term average use. When you look at the long-term average use—that is, the extraction from that aquifer and what that aquifer should sustain—in most cases in the valley the extraction is less than the aquifer can cope with. However, in some specific cases—in particular, zone 3, zone 8, parts of zone 2 and parts of the Lower Namoi—the aquifers are overused.

Senator HEFFERNAN—Thanks very much for those deep and insightful questions, Senator McGauran. Going back to the global thing in your catchment, are you in favour of speculative trading of water?

Mr Warnock—I will answer that by referring to how trading is to operate in the ground water system. It is to be restricted to each one of those zones, so in the ground water system you can only trade between other licence holders in that hydrogeological zone. In that sense, if an outside entity—a speculator—comes in, he would hold those entitlements, but he only has a market within the group that occupies the zone.

Senator HEFFERNAN—I was really referring to the generic proposition of river trading.

Mr Warnock—We are not in favour of speculators entering the market, because that will ultimately mean the irrigators will have to pay more. What are these people in there for?

Senator HEFFERNAN—The money.

Mr Warnock—They are only there to benefit from the improved management of the money. Where we suffer is that we have fixed returns for our commodities and any increase in costs, whether it is through interest rates, wages or cost of water, makes us less viable. Also, as you know, Senator, the terms of trade and agriculture have been on a constant decline and the margins that we operate on are very slim—often not good enough to meet normal—

Senator HEFFERNAN—Over a period of years, if you go to a paper trading culture, you will actually change the culture of water farming to one where you more or less have tenant farmers applying to the spot market for the water where the wealth—the creation of the huge increase in the value of water—is going to be held by investment vehicles. I am seriously opposed to that, and I hope you all are too.

Mr Carolan—We are very strong on the fact that we need to have security of tenure of water from the government licensing point of view. If it is being held in the hand of a speculator, then I do not think we have any tenure.

Miss Hamparsum—I support that view completely. Water should only be traded between those people that have the capacity to use it. Water is for the benefit of the entire region, not just for someone who happens to be in Sydney and is shoving a piece of paper in a drawer to constrict the market and then leasing things out to the highest bidder under desperate circumstances. That to me is not going to benefit rural communities, let alone the person who is going to use that water in the first place. So I would strongly agree with your point of view that the ability to trade that water must be between the people who can physically use it. You also have to understand that when you trade water downriver all of a sudden the social wealth of that region has been ripped out and shifted to another region, because jobs mean the viability of a community. Once jobs start to decline to a certain level, it is almost like a cliff face and all of a sudden services drop off to that town. Banks no longer go there. No-one starts to distribute their stuff there. It is a self-fulfilling prophecy of doom and gloom, so you need to ensure that that regional economy is viable so that people are attracted there and the jobs are there. If you were to rip out that wealth through a piece of paper that has the power to make or break a community, I would be strongly opposed to it. One of the slogans that we have had all along during this entire battle we have had at state level is: life grows where water flows. It is not just for humans and economies; it is everything—the environment, everyone.

Senator HEFFERNAN—But in effect you must not lose sight of the fact that it is an asset-shifting operation—as well as a cash flow thing, it is an asset thing, which is what they are really after. I have to say that all the banks are strongly opposed to my view on this.

CHAIR—I thank Miss Hamparsum, Mr Carolan and Mr Warnock for appearing here today and providing assistance to the committee.

Mr Carolan—Thank you very much for hearing us. We appreciate the opportunity and we are available if there needs to be further follow-up.

CHAIR—For those that were here this morning, I made an announcement that there would be an open forum to give people that had not had an opportunity to participate as witnesses to appear before the committee and perhaps make a short statement for three minutes. I had also made it clear that they would not be subject to committee questioning but that the contributions would be part of today's record of proceedings and be considered by the committee in preparing its report. We have received one request from someone wanting to take up that opportunity.

[2.13 p.m.]

DILLON, Mrs Meryl Lurline, (Private Capacity)

CHAIR—Welcome. Do you have any comments to make on the capacity in which you appear?

Mrs Dillon—I wear a lot of hats when it comes to the water debate: I am a councillor on the Moree Plains Shire Council; I am a representative on behalf of the Nature Conservation Council; and I am on the water management committee in relation to the Gwydir for ground water—the unregulated and the regulated river. Further, I am a member of the catchment management board, but I also represent regional development on the unregulated river and ground water committees of the border rivers. So I have had a great deal of experience in relation to the whole water debate.

Senator HEFFERNAN—In reality are you a farmer or not?

Mrs Dillon—I used to be a farmer, but I do have an irrigation licence, even though it is a relatively small ground water licence of 18 megalitres. So I have a great number of perspectives. That is related to the issue I wanted to raise with you today. The water debate has been a very divisive debate within our communities. In many ways we have been told we should find internal solutions to the problem, and in many ways it has rent our communities apart. We have all sorts of different competing positions that come from the irrigators; the wetland graziers, who have been impacted by decisions about water allocations; the Aboriginal community, in relation to both their spiritual reliance on our rivers and the fact that many of the Aboriginal communities utilise the rivers as a food source to this day—they are great fishermen—and all the other things that impact on them; and recreational users of our rivers, whether it be for rafting or fishing. And, of course, there are the environmental issues that have been involved.

It has been a really divisive debate. I am really impressed that we have a Senate inquiry that is looking into it, because in many ways I find that many of the solutions cannot be dealt with at a local level because of the competing powers within our communities and the pressure that is put on people in relation to how they should react and the things that they should say. I am probably in a very privileged position inasmuch as I can actually speak my mind without recourse. There have been situations whereby people have tried to persuade me that I should take another view. So it is really good that an external view will be taken of the issue.

I have only really listened to the ground water comments, but the position in the Gwydir has been that the current usage is about equal to the sustainable yield, so there is going to have to be some adjustment made between inactive and active users. I think that is the challenge: how to come to that adjustment, whether or not it requires assistance and how that assistance is actually going to be applied. It is a very hairy debate and hopefully we will come to some solution that can be accepted by the whole community. That is where I believe that, somehow, external solutions are probably a little bit more palatable inasmuch as everyone then has someone they can look to to blame and they are not necessarily blaming one another.

The big issue in our community is that there has been a lot of blame apportioned. Hopefully we can get to a point where our communities can go forward and live with the decisions that are being made. It really concerns me that there has been that friction within our communities over this issue and I would like, somewhere along the line, for a solution to be found that allows people to go ahead and make the adjustments that they need to make and go on with their lives. That has been a real issue. I do not think the community and the participants involved are really aware of quite how momentous the things that we are facing and doing at the moment are. But hopefully that will come to pass and we can all then go on and live together and hopefully do some of that healing that needs to take place.

CHAIR—Thank you very much for that. Specifically and generally, the committee would be happy to receive further submissions if there is a feeling that there may have been some oversight. At the same time, for other witnesses that have appeared, if there is a need to look at supplementary submissions being put in to clarify points or other issues then we are happy to receive those as well. On some of the other matters that you raise, we are well aware of them. Our third term of reference picks up the point that, where we take a view that perhaps there may be some deficiencies in views being put forward, then certainly it is open to us to look at the submissions that have been put into the other processes and other inquiries in train. From here—and it is an invitation to the committee members as well—we will be meeting with representatives of the Aboriginal Employment Strategy in Moree to hear their particular views from an Indigenous perspective.

Mrs Dillon—I make the comment that the Aboriginal community are as diverse as the white community.

CHAIR—I am absolutely sure of that.

Mrs Dillon—There is no one view. It is really important that that also be looked at.

CHAIR—Thank you.

Committee adjourned at 2.20 p.m.