COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

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

TUESDAY, 18 FEBRUARY 2003

BRISBANE

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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

Tuesday, 18 February 2003

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

Members in attendance: Mr Adams, Mrs Elson, Ms Ley, Mr Secker and Mr Sidebottom

Terms of reference for the inquiry:

To inquire into and report on:

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

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

WITNESSES

Committee met at 8.51 a.m.

BEAVERS, Mr Peter David, Senior Engineer, Department of Natural Resources and Mines

CHAIR—I declare open this public hearing of the House of Representatives Standing Committee on Agriculture, Fisheries and Forestry's inquiry into future water supplies for Australia's rural industries and communities. Today's hearing is the fourth for the inquiry. It follows the hearing we held in Boonah yesterday, which I am quite sure all the committee agree was an eye-opener into the many problems facing a country town very close to Brisbane, so I can only imagine, the further we go out, what the drastic and increasing results will be. We are not just taking evidence in capital cities; we are also visiting rural areas to see and hear at first-hand some of the problems and solutions associated with future water supplies. Later today we will be travelling to the Lockyer Valley to continue our program of rural visits. At today's public hearing we will hear evidence in relation to submissions from local government councils, the water board and community groups.

Before we hear from Mr Peter Beavers about water recycling and the use of grey water, we will take Mr Beavers's presentation as part of the evidence and record it in *Hansard*, although I expect that our discussions may be a little more informal than the usual public hearings related to the submissions we have already received. Although the committee does not require that you give evidence under oath I should advise you that these hearings are formal proceedings of the parliament and consequently warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. I understand that you are going to make a short presentation and then the committee may have some questions for you.

Slides were then shown—

Mr Beavers—The objective of my presentation this morning is to provide some technical information on grey water, which I hope will answer the question I have posed in the title: *Grey water: a potential water source?* I would like to start off with a statement and then go into the broader aspects of water recycling. The first point is that there is no new water formed. The best way to explain that is by looking at our natural water cycle.

You can see that with the natural water cycle—this occurred before man and animals came on earth—you have precipitation that comes into the streams and the oceans. It replenishes the ground water supplies. It is also associated with other land use functions. After it falls it goes through evaporation and forms water vapour in cloud. That condenses and falls back to earth as rain, sleet, hail and snow, and that cycle has gone on for millions of years and has not changed. Consequently, even with the natural water cycle no new water was formed.

We now have urbanisation and agriculture et cetera, which have brought in new aspects to this water cycle. We now have a more engineered transport of water, but the same principle is there: even though we may use water to irrigate our crops, in towns and for industrial use et cetera, it still comes back ultimately to a stream, or through evaporation back through the full cycle. Unfortunately, in most cases we use it once and then throw it away. The main point of my presentation is: why should we throw it away? How can we stop throwing it away? How can we make some more use of it?

Before I move on it is worth while to explain the terminology I will be using through the presentation. Water recycling is what we regard in Queensland as the sustainable and beneficial use of appropriately treated waste water, urban stormwater and rainwater in ways that safeguard public health and environmental values. That comes from the Queensland Water Recycling Strategy—and I have left a copy of that with you. The term 'effluent' is used quite a bit. That is just the treated or untreated liquid waste flowing from a sewage treatment plant. Grey water, which is the main topic this morning, is water that contains waste from the bathroom, the laundry and kitchen. It does not contain human waste such as urine and faeces. Black water is the waste discharged from the human body, which is what comes through the water closet and the urinal. There is quite often a bit of confusion about some of that terminology, I have to admit. I often get strange phone calls and it takes a little while to work out which one people are talking about.

With water recycling, what are the sources of water we can recycle? Firstly, let us look at industrial effluent. Currently in Queensland about five to 10 per cent of our municipal waste water is made up of industrial effluent. Usually there are fairly strict trade waste controls before it comes to a treatment plant. A small percentage of organisations recycle their own water internally. Agricultural run-off or agricultural effluent comes from intensive rural industries such as piggeries, feedlots, dairies and aquaculture. Unfortunately it is very high in organic loads. It is fairly easily treated but the quantity of organic waste from one piggery might be the same as organic waste from a town like Toowoomba.

There has not been a great deal of use and recycling of urban stormwater, although there are several projects throughout Australia now which are taking on and using stormwater. In some of the newer subdivisions many are using urban stormwater for aquatic areas, nice lakes and so forth. Then there is municipal effluent, which we are probably all familiar with. Currently in Queensland 330,000 megalitres are produced annually. Approximately 11 per cent of that is recycled, mostly for golf courses and recreational areas. Finally, when we come around that cycle, there is grey water. Probably 15 to 20 per cent of Queensland's population is not connected to a sewerage system. That is increasing because more rural type subdivisions on the outskirts of major towns and cities are not sewered, and probably will not be sewered at all because of the expense.

Looking at municipal effluent, what are some of our reuse options? Some can be applied to small communities such as Boonah, which you visited yesterday, and to some of the places you are going to today. In a lot of small towns they are being applied, particularly in landscape irrigation for golf courses. I was involved many years ago in the coalmining towns in North Queensland, where that was one of the major forms of using water because of the short supply there. We designed the treatment plant around the fact that the golf course and sporting ovals could be watered with the effluent.

With regard to agricultural irrigation, some of it goes on at the present time. There are also feasibility studies currently under way into taking water up to the Lockyer Valley from Brisbane for agricultural irrigation. With regard to industrial use, there is some in Queensland, particularly down around Gibson Island. Brisbane City Council have put in a couple of projects there, particularly with BP, using waste water for industrial uses.

South Australia has some ground water recharge. It has not been used too much in Queensland. I gather from the ground water experts that it is a little difficult with the aquifer

structure of Queensland. It is very big in the United States. Reusing waste water for environment and recreation areas into wetlands and the places there is quite big in the United States; it is not so much in Australia. The other option—I suppose what we could call indirect water use—is where water can be placed into a stream or the headwaters of a large storage area. It is then taken from that storage through the water treatment plant and then back into urban use.

In terms of grey water as far as Queensland is concerned, in unsewered areas it may be used with approval from the local government. If you want to split your waste water between black water and grey water, you would go to the local government and get their approval to install a system, and it can then be used to irrigate gardens, landscape areas, lawns et cetera. Currently within the Water Act a person in a sewered area must discharge all human waste to the sewer. There are penalties, and prosecution is through the courts. That is administered by the local government, who would take the action. That regulation is currently being reviewed by the government, with the idea that hopefully in the next 12 months it will be relaxed and some use of grey water in sewered areas will be permitted. Honestly, I am not too sure how far it will go at this stage; we are starting on working through the policy on that. There have been a couple of meetings and I must admit there is probably not total agreement between all the departments at the present time.

The sources of grey water are as follows: 38 per cent comes from the bathroom, normally the shower and basin; and the other sources are the laundry and kitchen. An interesting point is that about 91 per cent of the external usage of water in the home is for garden watering. Normally it pans out in Queensland at about 50 per cent for inside the house and about 50 per cent for outdoor use. I have some figures for Brisbane water use: in the laundry, 135 litres per dwelling; in the shower, 193 litres; in hand basins, 28 litres; in the kitchen, 44 litres; and in the toilet, 186 litres. These figures are all per dwelling per day. If we take out the toilet, that leaves, for a three-bedroom home, approximately 400 litres per dwelling per day that possibly could be used around the house. Those figures do not take into account water-saving devices such as low-flow shower roses. The last study was done in Brisbane in about 1993. Since then there has been quite a move for water-saving devices, so it is possible that that 400 litres could be a bit less now.

The characteristics of grey water vary according to the dynamics of the household. With two adults in the house the grey water would be quite different from that of a house with two school-age children or a baby. There is quite a considerable difference in quality and volume. Laundry water improves in quality from the wash water through to the rinse water. However, most of it is polluted chemically by the presence of detergents or washing powders, which introduce phosphorus, ammonia and nitrogen. There is also hair, lint and dirt in it from the clothes. Microbiologically, indicator organisms—which we term thermotolerant coliforms and which indicate whether there is faecal contamination—can range from as high as 10 to the seventh organisms per 100 millilitres down to 25. One of the main concerns with wanting to use laundry water is that people who have babies will not wash the nappies in it, so there is an education program involved in that. The bathroom is probably the least contaminated source.

Mr SECKER—Where are they going to wash them, then?

Mr Beavers—They can either take the laundry out of the grey water system while they are doing that or look at some of the options. The bathroom is the least contaminated, but there are still things like soap, hair dyes, toothpaste et cetera. Kitchen water is the most heavily polluted,

with food particles, oils, fats, other wastes and detergents. With a lot of schemes for reuse around the house it is generally recommended that kitchen waste water not be included in grey water. But you cannot make that sort of blanket statement, because people like to use composting toilets and that sort of thing in their dwellings. You must have somewhere for the kitchen waste water to go, so the treatment might be a bit more involved where the kitchen is concerned.

To give you some idea of the quality changes, you can see on the left-hand side of this slide that the source of water, which could be a natural stream or reservoir, comes in, gets water treatment and comes up to drinking water quality, which is normally the highest quality that we would expect. After household use, the quality of that water drops because during use we add a whole lot of contaminants. It drops down to grey water quality. You would then apply treatment to the grey water for the use that you wanted. We have used subsurface irrigation, which is probably the lowest quality. Surface irrigation quality is higher. If you wanted to use it for toilet flushing, you would not need drinking water quality, but a higher quality than for irrigation. That gives a concept of how the treatment would be applied over the period of that water use.

What are some of the health and environmental risks involved in grey water use? I have spoken about pathogens, which can be bacteria, viruses and protozoa. Bacteria can be transported into grey water by a whole range of different mechanisms. Some of them will die off very quickly in the hostile environment; others can survive for extensive periods of time in waste water and, if the water goes onto soil, even in soil. Some studies have shown that they can survive for up to 150 days or longer in the soil environment.

Mosquito breeding is probably one of Queensland Health's main concerns about recycled water use. Water that is used in surface areas and allowed to pond provides a good breeding ground for mosquitoes. The treatment and storage system for water is also an issue if it is not maintained properly. For example, where the lids are left off, that provides an ideal breeding ground for mosquitoes. It is not hard to remember that there have been reasonable outbreaks of Ross River fever in Queensland and there have also been cases of Dengue fever. These are all diseases transported by mosquitoes.

If you store grey water untreated, leave it in a holding tank for about 24 hours and then turn on the pump and spray it out, I can assure you the odour is absolutely horrendous. From our department's perspective and from that of local government, the major complaints over the years in relation to the use of grey water in country areas or unsewered areas have related to odour. It can become quite stressful for people where this practice has been permitted. For example, the next door neighbour may turn on his system at nine o'clock at night just before he goes to bed and the odour wafts across into the next door neighbour's house. If it is a hot night and the house has to be closed up, it becomes quite stressful. There have been lots of complaints about that. Subsequently, in about 1998 Queensland legislated that all untreated grey water had to be disposed of by a subsurface system.

Excessive watering using grey water can result in unsightly areas of grey-green slime. I can still remember parts of Brisbane before it was all sewered. Grey water was pushed out into the yard and there would be grey-green slime on the footpaths. I have often told my kids that we did not need such things as skateboards when I was young, we could just slide down the footpath on the green slime from the grey water. The land requirements are fairly important. For sustainable

water use, you need adequate land for what you are going to use it for. It must also be applied sustainably to meet the requirements of plants and not result in overwatering.

The next slide shows an example of one of the primary grey water systems that we have in some guidelines at the moment. It comes into a small surge tank—there is really no storage in there. In some cases you could have a pump or use gravity feed and, as soon as it reaches a certain level, the pump comes on and it goes out into the landscaped irrigation area. You can see there is a filter on the inlet. What is suggested is a material type of filter such as a stocking. They probably only have to be changed about once every two or three weeks. One of the problems that always seem to come up with those sorts of systems is that home owners are not particularly keen on changing that filter. Consequently, the whole system can break down because of that lack of maintenance of the filter. The irrigation system may get blocked if the filters are not cleaned regularly.

Secondary treatment systems involve further treatment to remove more of the oils, greases, solids and organic material. It could also be disinfected to meet standards and, if it is disinfected, it could then be used in spray irrigation. It produces a higher quality effluent which is suitable for other options. Unfortunately, with secondary treatment systems the more you have to treat the water, the higher the establishment and maintenance costs. Particularly in unsewered areas, there are quite a number of small treatment plants ranging from activated sludge to sand filters. Most of them combine grey water with black water and they treat that to a standard where it can be used around the property.

Rules for grey water use come under the positive aspects. First of all, regularly service the grey water system—it is most important. There have been a number of studies, including one in Melbourne a few years ago. They put a grey water system in four or five houses and regularly monitored and checked them. At the end of the two-year trial, I think only one or two of the households decided they would like to keep the system. Most of them just said, 'No, it was too much work to look after.' The same result seemed to come out of the study that was done in Western Australia, and similar results have come from Great Britain and the USA where they have done these types of studies. The home owners start off enthusiastically but, after a couple of years, the enthusiasm drops away and most of them ask for it to be taken out.

We say, 'Don't drink or play in the grey water,' but, my goodness, with my involvement with on-site sewerage it is surprising what you see. I have seen people allowing their children to play in it or drink it. I have actually seen photos of a kid bending over a spray irrigation spray head and having a drink of what is purely secondary treated effluent from the small treatment plant. The main thing you can do is just keep educating and talking.

Do not allow anything that is to be eaten to come in contact with the grey water. Here again, with primary treatment systems, we certainly would not recommend that you water your lettuces or those sorts of things with grey water. If you do, make sure you wash them thoroughly before you eat them or they can be cooked, which minimises the health risks.

As we have talked about before, do not allow it to pond on the surface or run off the property. Do not wash domestic pets in grey water or allow them to drink it. The number of people that we have found that wash their pets in laundry tubs is surprising. Whatever they wash their dog in, and the water from the laundry tubs themselves, does not do the treatment plants a lot of good. They tend to cause breakdowns in the plants.

With regard to keeping the soil healthy, grey water with detergents and so forth in it can, in some cases—depending on the soil—cause changes in soil properties and in the structure of the soil. Subsequently, it can become quite impermeable after a while. All you do is put the grey water at the top and it does not go into the soil. Certainly that has been found in some clay soils. Some native Australian plants do not grow very well on grey water. There is an overload of phosphorus and some of those plants do not particularly like it. It is an interesting concept that we are now trying to water a lot of Australian native plants but, after all, most of them grow in areas and climates where they get very little water and probably go for many months of the year without water. Now we are saying, 'We've got to keep watering them.' I probably have to look at changing some of the thinking there. You should also dispose of any filter material waste by burial. In other words, the stocking that you might have taken off is probably best buried, because it is usually fairly contaminated.

To briefly summarise what I have gone through this morning, we looked at the water cycle and the multiple uses of water components in urban industrial and agricultural areas; we looked at some sources and the characteristics of grey water; we saw the health and environmental risks of using grey water; we considered the beneficial uses of grey water; and, finally, we went through some of the basic rules that we believe should be followed for the safe use of grey water, be it in an unsewered or even, ultimately, in a sewered area. Thank you very much for the opportunity.

CHAIR—Thank you very much. That was very comprehensive and I am quite sure there are some questions to be asked by the panel. After listening to this I wonder why we are looking at grey water if it has such potential to do harm. I must admit that I reared eight children on grey water—we had no choice on the farms where we were—and each of them is healthy. We see so many reasons why we should not be using this water. I do not see a difficulty with it because I have been using it for years and I had the system maintained on a regular basis—when you have no other choice of water you do the right thing. But why don't both councils and state governments encourage people to have an underground water tank? If we are using 400 litres a day that are then wasted but we are worried about all the damage that that grey water would do, why aren't we catching rainwater in the good times and storing that underground until we are ready to use it? I am talking about household use in urban areas as well. Councils do not seem to encourage it and I wonder if it is because there is money to be made out of the consumer using the water through their system rather than if people put in a tank.

Mr Beavers—It is difficult to answer why that is. I think a lot of it is just that, for some reason, rainwater tanks went out of favour. To some extent I grew up using rainwater tanks. In our case when the reticulated water came through we thought, 'This is great—we don't have to go for X weeks of the year struggling with a little amount of water.' Whenever we got long periods of dry weather we would have to get a tanker in to fill up the tank. So they probably went out of favour for a lot of those sorts of reasons. I should not point the finger at another government department but Queensland Health were not keen on rainwater tanks because they were good places for mosquitoes to breed. I believe some local governments have laws that do not allow rainwater tanks.

Mr SECKER—That is right.

Mr Beavers—But there is no state legislation overall that says, 'No, you cannot do so.' In the years I have been involved, we have never said that you cannot use rainwater tanks or that we do not want you to use one.

CHAIR—I just wondered why we did not encourage more people to put in tanks.

Mr Beavers—In the last couple of years there has been a lot more encouragement through the WaterWise program. If you look at some of the high-density urban areas, in a lot of cases there would be very little room to put a rainwater tank onto the property. By the time they put the house and everything on it there is very little room left.

CHAIR—That is why I was asking about underground tanks.

Mr Beavers—In a greenfield site, putting it underground is probably an ideal way of going: it can be put in before the house is built.

Mr SECKER—The councils I was on legislated that people had to have so many thousand litres of water collected but it was for firefighting purposes. We could not actually legislate for rainwater purposes.

CHAIR—I lived on a rural property where the council brought in a law that tanks were not to be used. Once they put on town water they cut out the tank water, which I thought was rather silly. We kept both—we got permission—but they did try to stop you from using both. I think it would be a way of consuming water in the good times rather than have the risk that this shows we have. I just wondered why they do not encourage more tanks.

Mr Beavers—I would prefer to see more of a push towards rainwater tanks than the use of grey water, but that is a personal view. We have talked about using grey water when we were growing up. From observations over the years that I have worked with on-site sewage systems, people who have lived in country areas all their lives are very familiar with grey water and seem to be able to use it quite safely. We have found within the last 10 or 15 years a proliferation of rural developments on the outskirts of the city. People have moved from the city, where their properties have been connected to the sewerage system. In many cases some of them still believe they are connected to a sewerage system. It is not until somebody knocks on their door to service a treatment plant or do something that they realise they are not even connected to the sewerage system. So they have no concept of what goes on.

Mr SECKER—When you say a treatment plant, do you mean a septic tank?

Mr Beavers—A little septic tank, yes. Peter Jelliffe did an extensive study of 100 dwellings in the Maroochy shire. He was horrified to find that something like 60 per cent of them just had their grey water coming out of a little tank with a hose and it was just being discharged down the back to the nearest stormwater drain or to the nearest creek. Those were some of the issues we have been finding, and that is why we have started to bring more control over what has been happening.

Mr ADAMS—That was a pretty negative go at grey water, Peter. What about opportunities for local government to use grey water on parks and reserves and issues like that? Is that occurring in Queensland?

Mr Beavers—Yes. Most local governments are taking water from their sewage treatment plants. They are using it on their sporting ovals where possible. Some school ovals use grey water. They are also using it on golf courses. There are a number of schools in country areas that have set up fairly sophisticated small treatment systems so that they can use that to water their sporting ovals. So they are moving down those paths.

Mr ADAMS—With respect to the technology for having smaller operations and being able to bring that down to a much smaller level, I take it from what you are saying that some people are unable to understand it or have come from an urban situation where it is all laid on for them, so they do not understand how to maintain it. Is technology giving us more and more opportunities to bring it down to a smaller scale?

Mr Beavers—Yes. The first system that came in for domestic dwellings, and even for schools, was the small aerated treatment system—household treatment system. The technology there is quite good. It does require service and maintenance by the home owner. We now have intermittent sand filters—sand filtration systems—which are excellent. They require much lower maintenance. There is probably a bit more capital cost required in the first place, but maintenance costs are lower and they are easier to look after than, say, the aerated system. Part of our program is essentially to evaluate and approve the systems. We are now starting to see technology bringing in micro filtration, membrane filtration and some of these aspects. They will certainly be used in the future. I think with the whole market it just comes back to cost and simplicity. I was looking at a membrane filtration system recently, for which maintenance costs would be a lot lower.

Mr ADAMS—My last question goes to the cost of taking grey water on a large scale and treating it. Do you know the cost of that? You had a graph where you took it and stored it and treated the bacteria at different levels.

Mr Beavers—Are you referring to the black water and the grey water—everything from the house—or separating the two?

Mr ADAMS—Do you have different figures?

Mr Beavers—No. For a sewered development these days, if you are going to sewer a small subdivision or something, I think it is probably about $5,000 or $6,000 per allotment. That includes the treatment.

Mr ADAMS—That is the sewage treatment, but, if you are collecting grey water and treating it to a drinking level, what would the cost of that be? Do you have any idea?

Mr Beavers—If you are going to take it to drinking water level, you are probably talking about $8,000 or $9,000.

Mr ADAMS—What about in other countries of the world? I think they tell you that you drink London water 14 times. I guess it is a continuous cycle.

Mr Beavers—We do in Australia too, to some extent.

Mr ADAMS—In these large cities in other parts of the world they seem to be able to recycle water extremely efficiently and at a cost that they can survive on and that their societies can pay for. We never seem to be able get those figures right.

Mr Beavers—It probably comes back to some extent to high density and the larger population. Unfortunately, most Australian cities—even Sydney, which is much higher density—by comparison to what I have seen in European cities, is still very low in density. So it probably comes back to that issue.

Mr ADAMS—Is the density rate of Brisbane increasing? Are there smaller blocks and higher apartments?

Mr Beavers—In recent years, the blocks closer to the city have become smaller. They buy larger blocks and then they take the house away.

Mr ADAMS—So the block ratios are going up.

Mr Beavers—Yes, it is changing in that respect. I have to admit that there is a lot of opposition from the local people who have lived in these suburbs for many years and who do not like seeing high density.

Mr SECKER—I have only ever lived with a common effluent or home effluent system on the farm with a drainage pit and that sort of thing. For the sewage, you actually have a grey water outlet and a black water outlet, do you?

Mr Beavers—Normally the sewage all ends up in the one pipe.

Mr SECKER—That is what I thought. So to go to a system to separate black water and grey water would be extraordinarily expensive.

Mr Beavers—Probably the expense is when you want to separate the two.

Mr SECKER—Then you would have to have a switch or a tap or something in the laundry so that you could switch it over if you were washing nappies, as you suggested.

Mr Beavers—Probably. It depends what you were doing with that grey water. If you were putting it through a subsurface irrigation system, probably it would not be anywhere near the concern because the potential for any contact between any human and the grey water is very low.

Mr SECKER—I know of several golf courses in our area that use common effluent water. I do not know that there is that much treatment. You always have blokes licking their golf balls to clean them and things like that.

Mr Beavers—It depends. Some of it is fairly highly treated and some of it probably is not. I have never seen any real epidemiological studies to show what the cause and effect of some of that might be as to whether there is a higher incidence of people getting disease. I do know that

there was a case in Brisbane where a club member complained that his case of campylobacter originated from the golf course he played on.

Mr SECKER—And the chemical sprays and everything else they use.

Mr Beavers—I did not get heavily involved in it. He did ring me a few times about it. There is a difficulty unless you have the studies to prove it.

Mr SECKER—We all know water is a finite resource and we would all like to use it in the best and most efficient way, but I despair a bit because I think there is going to be a huge cost in changing all the existing common effluent systems around to have grey water and black water. Secondly, I think there are going to be many public liability problems—which you were just talking about—people suing the government 'for allowing us to use this grey water that hasn't been treated properly'. You only have to look what happened in Sydney when they had that bacterial problem for a few days that shut down the water system.

Mr Beavers—The other thing when you talk about separating is that if you are going to treat your household waste water, in most of the treatment processes we use these days, which are all biological, it is far better to combine the two because the black water is what provides the nutrients and bacteria for the breakdown. So separating them, to some extent, makes it far more expensive to treat the grey water.

Mr SECKER—Yes, we grew the best vegetables around.

Mr ADAMS—Do you know what do they do overseas?

Mr Beavers—It is America that I am most familiar with. It is fairly similar to Australia, apart from the fact that a lot more people live in the cities and there are a lot more unsewered developments. Something like 25 per cent of the population in America lives in unsewered developments. However, they do have enormous problems over there because of the on-site systems. Septic tanks have caused lots of problems and some of the ground water has been contaminated through the high-density use of septic tanks.

Mr SIDEBOTTOM—What is the average household consumption of water for non-potable use in sewered areas?

Mr Beavers—If I take my own home, the meter says it is probably about 1,000 litres per day. In the last three months, between 400 to 500 litres would have been used outside. We may have used a bit more around the yard than other people but I cannot be sure when I look around the street.

Mr SIDEBOTTOM—Yes, given conditions at the moment, you are probably more aware of the need to conserve water. What would be the average cost of that non-potable water?

Mr Beavers—It is 80 cents a kilolitre in Brisbane at the moment.

Mr SIDEBOTTOM—I notice that in the government's policy positions on-site grey water recycling in sewered areas is a no-go at the moment, but that you are considering changing the legislation to do some trials.

Mr Beavers—Originally, there was talk about doing some trials but the committee that was looking at those trials has made a decision that we will scrap the idea of trials and move straight into the legislation allowing it.

Mr SIDEBOTTOM—It strikes me—and I suppose it is contrary to what Pat was saying in a sense—that a whole education process needs to go with this. We talk about home ownership, which is one of the biggest decisions you make—it is a bit like having a family, and we all know how much effort goes into educating people for that, right or not—yet to help answer these questions of what are the responsibilities of owning a home and transferring properties and things like that, essentially there is nothing. I am not saying you do not run any education programs but generally speaking it is a brochure or something. We do not have a systematic program in place about the responsibilities of home ownership—what it means to be a home owner or property owner—and it strikes me that half the problems you have with grey water use come from the fact that no-one tends to take the responsibility of saying what the responsibilities are of being a property owner and what will be required when there is a change of ownership.

Mr Beavers—That is a correct statement. One thing that I have been pushing with local authorities for a long time is that there should be more education, particularly as to the change of ownership when a person buys or sells a house, to make sure that the new person that comes in is fully aware of what they have on their property, particularly in an unsewered area, and what they are going to be in for. I feel that a lot of the problems that have evolved with grey water—it is probably the same with rainwater tanks—are purely because of a lack of education. It should probably to some extent come back into schools. They should start teaching kids about it and get them thinking about it at school age so that as they grow up it becomes a thought. So it is purely about more education.

Mr ADAMS—In Denmark every house has a book that has to be maintained by the owner. It lists double glazing, water issues and structural changes. If the house is sold the book goes to the new owner.

Mr Beavers—It is certainly a problem. I have had many phone calls from people who have moved into a dwelling and say, 'I have this treatment plant. I did not know I had it. Why the hell have I got it? Why can't I be connected to the sewer?'

CHAIR—Thank you very much, Mr Beavers. You have given us a lot of other aspects to look into before we come up with our recommendations. You can be assured that we will make sure that you get a copy of the recommendations as soon as the inquiry has been completed.

Mr Beavers—Thank you very much. I will be most interested to read them.

[11.44 a.m.]

HOFFMANN, Mr Edward William, Chief Executive Officer, Chinchilla Shire Council

McCUTCHEON, Councillor William Colls, Mayor, Chinchilla Shire Council

O'LEARY, Mr Darryl Thomas, President, Chinchilla Water Users Association

CHAIR—Welcome. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are a formal procedure of the parliament and, consequently, they warrant the same respect as the proceedings of the House itself. It is customary to remind witnesses that the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make a brief statement in relation to your submission? We will ask questions after you have done that.

Councillor McCutcheon—That would suit us wonderfully. I would like to recognise the *Landline* program. They gave us five days at Chinchilla, covering our melonfest, and we thought that was great. It is probably not part of our submission but, after listening to your previous speaker, I think we can honestly say that people from rural areas have a totally different conception of how grey water should be used. We are inclined to think that the discharge of hundreds of thousands of megalitres of secondary treated grey water into the ocean is a waste of a very valuable resource. I think it should be investigated as a matter of urgency how that water could be productively used in our rural areas. As I said, that is not part of our submission, but, obliquely, it is.

Mr ADAMS—It is not a bad statement.

Councillor McCutcheon—I should set the scene about exactly where Chinchilla is on the river system. You would probably all recognise that it is at the top end of the Murray-Darling system. It is probably well known to all of you here roughly where the city of Warwick is in Queensland—in from the Gold Coast. That is where the Condamine River actually starts, which is the longest part of the whole Murray system. It then takes a big loop up to Chinchilla in Queensland. We are about the furthest northerly town on the whole system. There is a population of roughly 3,600 people in Chinchilla. We are approximately one-third of the way down the river system before it heads to Dirranbandi at the border. Dirranbandi is probably well known through the controversy over Cubbie Station et cetera down there recently. Chinchilla is also a major monitoring point of the flows of the river and the quality of the water in the river.

You are probably also well aware that water resource plans are being developed right throughout Australia but particularly here in Queensland. We fully support the state government in the production of these water resource plans. I think they are very important in getting to the final result and getting it right, but we are critical of the time it has taken to get to where we are now. We wanted the results two years ago but, anyway, we are still progressing down that track. The upper Condamine area, as we consider it, reaches from approximately the headwaters at Killarney down to Chinchilla. The midreaches of the river, as we consider it, once again, are from Chinchilla down to about the township of Surat, almost to the Beardmore Dam at St George. By the way, the Condamine River changes into the Balonne River, roughly halfway

down. The lower reaches of the Balonne have their own particular set of problems. I think the Cullen report, which came out recently, came up with some scenarios that we have not had time to fully investigate and go on with. On the first reading of it, I think it is probably the way that some of the flows could be handled—in other words, event based flows rather than trying to set arbitrary figures at the beginning of the season.

The interesting thing about the area is that the upper Condamine is fairly well committed for irrigation and water extractions and, at times, depending on the time of the year and when readings are taken, the flows at Chinchilla can reduce to about 40 per cent to 60 per cent of the natural flow of the river. Interestingly enough, by the time it gets down to Beardmore Dam it is resurrected to about 80 per cent. So, from our stretch down, we are actually putting water into the river—not just out of Chinchilla Shire; two major tributaries come in just below our monitoring point at Chinchilla and they contribute substantially to the flow of the water from there on.

Another point that is often not taken into consideration is that lot of the country out there is heavy brigalow country, which in ancient times was covered in melon holes or gilgais. What those depressions in the ground are called depends on which part of Australia you come from. They absorb huge amounts of run-off water. It has been proven in trials on uncleared country up there that it takes up to six inches of rain to make water flow off melon hole country. That same melon hole country is also very rich agriculturally. Over the years it has been cleared and levelled because these holes were not too good to grow things in. Now, with two inches of rain, the water starts to flow. We are producing more water off those plains, which used to be scrub and melon hole country, than before the white man's time. More water is being produced and actually flowing into the system.

We then come to the business of irrigation and why Chinchilla did not develop as quickly as everything else. The causes of that are geographical as well as historical. There were large areas of very flat country—thousands of acres—on the upper and lower Condamine very close to the river and extraction points where they could flood irrigate and spray irrigate quite easily. Around our area, the country is much more undulating and the technology was not there to use that water well. Since then, changes in irrigation technology have been fantastic, as people around the world realise. We now have trickle tape irrigation with electronic monitoring. I will not try to go into the details of that; Darryl is much more experienced than I am about that.

In addition, horticultural crops have come into our area and production from those crops has been enormous, as have the returns to the farmers and to the whole community, compared to traditional broadacre irrigation. For example, the irrigation of cotton used to return about $250 per megalitre. It is conservatively estimated that growing watermelons and other horticultural crops could return up to $5,000 per megalitre of water. The returns are just enormous and so different, but I stress that it is the change in technology that has made that possible. Darryl will not be backward in blowing his trumpet about farmers out there, but they are at the cutting edge of world technology on this and they have been around the world to check on it. They are using world's best practice. The employment benefits to our area would be enormous. For a relatively small extraction of water from the system, we would have 400 direct jobs. When you have a population of 3,600 then 400 is a hell of a lot of people. That extraction should also create another 400 jobs indirectly from the accumulating benefits.

We are looking for more water, not only from the river but also from the major tributaries. I do not know whether it is part of your committee's charter at the moment, but at one stage the state government was looking only at the main river. It was not looking at including tributaries in its resource operational plans and the tributaries are the crucial things we will depend on. In particular, Charleys Creek and Wambo Creek have a lot of horticultural land adjacent to them which could easily be developed. Our plan suggests that an extraction of 40,000 megalitres would be appropriate for our area around there. When you consider that one property alone in the lower Balonne has 400,000 megalitres, we think we are asking for a very moderate amount. The resource operational plans, which I have referred to, are the most important thing to come out of this planning system and we would certainly like to have a lot of input into that.

I have been to many meetings over the years and I have spoken to people from South Australia and Victoria. I realise that they have great problems with river flow down there, with quantities of water and with salinity. However, the figures will prove that, of the tiny bit of water that comes out of Queensland, less than one per cent will ever get to the mouth of the Murray River. The little bit of extraction we are asking for from our section of the river would be infinitesimal in comparison and more than compensated for by the increased water flows that we already have in the area from the productive land and, most importantly, from the way our farmers can utilise that very small amount of water.

CHAIR—Thank you very much. Would anyone else like to comment?

Mr O'Leary—I am a horticulturalist and melon grower. I was one of the first in the area to adopt new technologies. We introduced seedless watermelons into Australia and we were the first growers to grow them commercially. From that, we started to get into trickle irrigation and subsurface irrigation. We travelled to Israel and looked at the fantastic way they use their grey and black water combined. They even sold it to the Jordanians next door who use it for drinking. We are really pushed. We use very little water. In good years I have produced $25,000 per hectare on one megalitre of water. That is with in-crop rain; it is just the way we use it. The Queensland water efficiency program people have been out our way and they walked away, shaking their heads. They said they could not help us any more because we were so efficient.

Most of us are fair dinkum about it because we are in such a dry area and we have no water. We have electronic moisture monitors. We follow them religiously to ensure that we do not put too much water into it because then we would just be wasting it. You will find that many growers have little holes in the creek. We irrigate out 30 or 40 megalitres. Out of that 30 or 40 megalitres I can keep three people fully employed for the year—myself, two employees and up to 10 or 12 people in our picking season. Many of the growers have had discussions about this and at this stage most of us would not want any more than 500 megalitres of storage, which is nothing, at the end of the day. We are now studying whether to put caps on the big dams so that we get no evaporation from them at all. If we can get some water, we can use it a lot more efficiently and go on from there.

The biggest thing that has really hit us during the dry time is that, because Chinchilla has been such a big melon growing area, we used to grow dryland melon. For years, we would grow up to 600 acres of dryland melon per farmer. Now, because the market is so tight, having regard to specifications, and the fact that you have to supply week in, week out, we have gone away from that and we have gone to irrigation. During these dry times we are losing our market share and our region will miss out because as soon as everybody hears that Chinchilla has no water,

every other area in Australia will try to grow watermelons during our time frame. This year we have adapted some new technologies and we have come on with a bit of melon. We are trying to regain our market share. It will be a big thing for the district if we cannot maintain that market share.

Mr Hoffmann—My contribution will be a summary of where we are at. Everyone is aware that Australia has a very dry climate, especially in our area and west of our area. Water is vital for our industry and for the survival of our rural areas. We have problems with keeping jobs, and more water will allow more employment in the area. We have trouble attracting industry because we cannot get access to water. Industry has looked at establishing in the Chinchilla area, but the big problem is getting access to water.

We are asking on behalf of small water users and small irrigation systems. They are not large, multinational or corporate bodies. They are just a group of farmers who want to be more efficient. We believe that some of the Commonwealth competition policies have an undue influence over water allocation, especially access by the smaller farmers to water. Some of the comments from the southern portion of the Murray-Darling Basin disturb us with respect to what is happening in Queensland. With respect to the water pipeline from Brisbane, and the use of Brisbane's waste water, Chinchilla would be on the western end of that. But we can see a benefit there for the whole system. We believe that the Commonwealth should become involved in that.

I refer also to the issue of coal seam methane. This issue has come up since we provided our submission. There has been a lot of investigation into the extraction of coal seam methane gas in our area and the Surat Basin coalfields. To extract that gas, a lot of water would have to be taken from the underground aquifers. At this point there is no use for that water. It can be used for livestock. It is presently evaporated away. We believe that both the state and the federal governments should be involved in research and development into finding a use for that water. We do not believe that evaporating it away is the best way to go. So, in summary, there are a couple of issues there.

CHAIR—Most definitely. Thank you very much for that. It has given us a lot more to think about.

Ms LEY—I am interested in your comments about federal government competition policy and also your thoughts about what is restricting your supplies of irrigation water. Is that competition policy or is that more the cap on the Murray-Darling system? What is your view of the cap given that southern irrigators think that you are ignoring it, at our expense?

Mr O'Leary—I guarantee you that in our district we are not ignoring it. Our council brought in rules and regulations that stopped us building ring tanks—did not stop us but they controlled the growth in the number of ring tanks and water development. We are about the only shire that did it. All the other shires did not; they just went full hog and it was all out of control. At the end of the day when the cap came on we were still sitting on our hands because we were trying to do the right thing, and this is where we have missed out. We had applications in also to get water systems going but the cap came in and squashed it. The rule was we had to let X amount of water pass at the Queensland border and that way the Queensland government would have picked up X amount of dollars from the Commonwealth government.

Ms LEY—What is your view of how that is progressing? The competition payments were under threat because of the state government's perceived—

Mr Hoffmann—The state government has put up a number of proposals, not all of which we would support. There are a couple of controversial proposals there concerning our area where we want water and where some of the water could come from. We do not want to talk about that. The Cubbie Station issue is the controversial one—I may as well talk about that. We believe that some of that water could be more efficiently used in our area.

Ms LEY—In your case, what is actually preventing you from accessing the extra water that you could provide?

Mr O'Leary—You cannot develop anything.

Councillor McCutcheon—The cap—

Ms LEY—The cap is preventing that?

Mr Hoffmann—The cap and developing plans.

Ms LEY—And those plans are state government plans?

Mr Hoffmann—Yes.

Ms LEY—How is this federal government's competition policy affecting you?

Councillor McCutcheon—As I understand the situation the state government came up with a suggested model that X amount of water will go over the border. I do not know who it was from the federal department or the various states—whether it came through COAG—who said, 'That is not enough.' So they asked them, 'What is enough?' Nobody has said what is enough. They have said, 'Go back and do your plans again.' So nobody knows what is enough. Nobody is going to say what is enough and, until such time as somebody does say there is enough, there will be no competition funds flowing through as far as the Murray-Darling is concerned.

There seems to be a stalemate between the two governments. Whether that has progressed any further since October last year when I last had discussions with the state government on it, I do not know, but I believe that was the situation then. It was the X amount of water that was allowed to go over the border. Since then the Cullen report has come out. I think that might have thrown more light on the subject. I think they do have figures to work to now, and I hope the state government is working frantically to get these water resource plans out as soon as they possibly can.

Ms LEY—So your issue is the payment of competition money to the states to allow—

Councillor McCutcheon—I really do not want to talk about things I am not 100 per cent sure of, but that has been my understanding of the situation as of now, yes.

Ms LEY—You have stated it in your submission.

Mr Hoffmann—We believe the COAG arrangements are holding back the allocation of payment of funds to the state, and it all needs to be sorted out eventually.

CHAIR—With regard to Cubbie Station, how do your growers feel about the cost they have to pay for their water compared to the costs that Cubbie Station pays?

Mr O'Leary—I would love to pay it.

CHAIR—I saw some ridiculous price—

Mr O'Leary—If they would just give me the water, I would be so happy to pay for it.

CHAIR—If you could just get the water—

Mr O'Leary—If I could get the water I would not blink an eyelid.

CHAIR—How does Cubbie Station get so much and pay so little?

Councillor McCutcheon—They would be historical licences that they had in place for many years.

CHAIR—Is that it?

Mr O'Leary—This has been another issue for conjecture within Queensland—how those licences got to be all allocated to one place. There is a lot of conjecture about how that happened' also why, at that end of the system, water licences were allowed to be transferred. In our system we cannot transfer licences. There are probably enough licences going within this WAMP system—once they are activated and transferred within the nodes, that section of the river—to get our shire started at this early stage.

Ms LEY—So under the cap, without increasing the total use, the idea is that you can transfer water from some other area which would allow new development for you—

Councillor McCutcheon—We are not allowed to.

Mr O'Leary—We are not allowed to. We think there is enough to get us started for now but for future development there will be a bit more required.

Ms LEY—But you are prevented from doing that under the Queensland government legislation, not under federal government legislation.

Mr O'Leary—But that cap came about because of the COAG agreement.

Ms LEY—It did. But the whole point about water competition policy is to allow water to move from licences where it is not being used or where people want to sell it to an area to allow new development.

Mr ADAMS—Especially using the modern ways that you seem to be using. You seem to be way out there in front and you should be the ones leading the way.

Councillor McCutcheon—We have another problem in Queensland that a lot of people in the southern states do not seem to grasp. As an example, we took some Murray-Darling Basin Commission people on a trip once—this may have been 10 or 15 years ago. They did a trip right up the whole system. I think they stopped in Moree or somewhere for the night and then they travelled the next morning to Toowoomba. They crossed the MacIntyre River at Goondiwindi and were very impressed there. Then they came on the bus and the bus driver said, 'Condamine River is coming up shortly.' 'Oh, yes,' they said. Then they said, 'Where is this river?' He said, 'We crossed that 25 kilometres back.' They said, 'Turn around and take us back.' They could not believe that the Condamine River was just a creek with no water in it. They were expecting something like the Murray or the Murrumbidgee: 100 yards wide and 20 feet deep. What they crossed at Goondiwindi was 100 yards wide and 20 feet deep, but it was a weir. The conception down there is that the Condamine is flowing all year round and that there is 20 feet of water coming in all the time. Its normal state of flow is nil. It is a totally different way. When it does flow an enormous amount of water goes down there. The idea is to try to capitalise on it.

CHAIR—You do not have any dams, in other words?

Councillor McCutcheon—Yes, we do. An awful lot of off-stream storage has been built up and down the system.

CHAIR—Are they private or are they owned by the state?

Councillor McCutcheon—Private properties have off-stream storage; that is, extracting the water from the river or from the flood plains and putting it into ring tanks. This is the development that Darryl was referring to that we were trying to control in Chinchilla Shire, so that it was not a matter of upsetting the neighbours. As he said, other shires did not. They went in and did it. There is still a lot of potential out there to develop that. I think there are about five or seven weirs on the river. Some are very small: 300 megalitres. Ours is only 10,000 megalitres, so they are very small structures.

Mr Hoffmann—Weirs on the river are not seen as being very efficient. There is one at Chinchilla and there is a proposal for a weir further down, which would make the operation of the Chinchilla weir more efficient, by piggybacking.

Councillor McCutcheon—Actually it was to use the overflow of water. We are in a rather crazy state in Chinchilla where they are letting up to 100 megalitres of water go to supply a person downstream with five megalitres of water to do his irrigation, because he had a licence there and has had it for many years. So the rest of the water is virtually wasted.

Mr SIDEBOTTOM—Thank you for your detailed submission. It is very interesting. You were talking about the potentiality of your district and particularly high value adding industries. I thought your comparison with cotton and your own developments was really interesting. It is a phenomenal return for the need of water. I was fascinated to see that aquaculture plays a significant role. You mentioned it in this, but you did not actually formulate anything. Could you inform me a bit about that?

Councillor McCutcheon—We have a very large aquacultural venture that has well and truly started in Chinchilla now, growing mainly silver perch but experimenting with others. Ed, you may be more up with the latest details of how much he has expanded to now.

Mr Hoffmann—He is using the latest technology in his development—in his ponds. He plans to be able to export 800 tonnes of fish to Asia. That is his plan for the future. At this point in time, he has only exported eight tonnes but that was an experiment and it went off quite well. We had a restaurateur there for the Melon Festival who used his product. He said it was an excellent product. He is going to start using it in restaurants here in Brisbane.

Mr ADAMS—At the restaurant, is there a recipe for melon and—

Mr Hoffmann—Yes, the melon fish. So it is only a new industry out there but it has potential.

Mr SIDEBOTTOM—Again, I assume he is being adversely affected by the whole issue of water.

Mr O'Leary—He cannot expand. He has bought a property with a minimum licence on it and that is all he can use at this stage.

Mr Hoffmann—That allowed him to establish—

Mr O'Leary—To get started.

Mr Hoffmann—but others cannot establish because the water is not there. We have the same problem with industry. The water is not there to be allocated.

Councillor McCutcheon—As part of the submission, one of our suggestions is that more off-stream storage with a bigger capacity should be allowed to be built around that area, rather than trying to extract it straight out of the river.

Mr ADAMS—How big are your storages now? What are the biggest storages on farm?

Councillor McCutcheon—On farm in our shire?

Mr ADAMS—Yes.

Councillor McCutcheon—About 1,000 megalitres. That would be the biggest in our area that I can think of; most of them would be a lot smaller than that.

Mr ADAMS—So you do not have the big ring tanks?

Councillor McCutcheon—They are ring tanks, but not the ones that you will see down at Dirranbandi, where they have walls four kilometres long or something like that.

Mr SECKER—In my former life I was an irrigator, but obviously one of those evil southern irrigators who do not understand your problems up here and who disturb you because we do not

understand your issues up here—which I would reject. Councillor McCutcheon, you made the point that only one per cent of your water will find its way to the Murray mouth. It is a pretty big system. What do you think would happen to the Murray mouth if 100 other areas said exactly the same thing?

Councillor McCutcheon—I would agree, as you said, that we would probably have problems. But I get awfully tired of the Premier of South Australia in particular who is very inclined to come out and say that it is those horrible Queenslanders that are causing the lack of water for the city of Adelaide. This comes back to what you were saying: it is the distortion of facts that is very difficult for us to live with up here. We do not like being branded as people who are sacrilegiously raping the river to put money in our pockets. That is not happening. There have been developments here that are probably regretted, but a lot of it was done with the very best of intentions.

Mr SECKER—I do not think there is any problem with that. Things have changed from 20 years ago; there is no doubt about that. I think some people are still going on the idea that the water is wasted, as it was in many places 20 years ago. What concerned me was this 'them versus us', which is exactly what you are saying: that we down south are saying this against you and then you are probably reacting by coming back and saying the southern people do not understand you. We are one country.

Councillor McCutcheon—Exactly. The problem is—and you must admit this yourself—that, for political purposes, Queensland has been labelled with this brand, particularly in South Australia and Victoria, not so much in New South Wales.

Mr SECKER—I think they are actually pretty fair about it because they knock New South Wales as well.

Councillor McCutcheon—Yes, they give New South Wales a pretty fair hiding too.

Ms LEY—It is fair to say to you that Patrick and I are a lot closer but the irrigators that we represent would not agree with each other either. It is a good point that if you sit a group of irrigators at the table they are not going to agree. Until they do, we are not going to solve the problems in the Murray-Darling system.

Mr O'Leary—I do get down to that area a fair bit—I have melon growers who grow for us in that area. When I drive through some of those areas and see flood irrigation on some of the dairy farms I just shake my head—

Ms LEY—Whereabouts?

Mr O'Leary—Up the top of the Murray, down through Shepparton and those sorts of areas.

Ms LEY—The Goulburn Valley is very prone to that.

Mr O'Leary—I just cannot believe it—it is just wasteful.

Ms LEY—In your defence you were talking about the amount of water under natural conditions. Of course, there is an argument that we are no longer under natural conditions. But you were saying that there would not be that much water coming at the junction of the Murray and the Darling, that it is a proportion of the whole system actually joining the system there. Your argument is that you have an opportunity to make use of it, and that it is not going to get there anyway.

Councillor McCutcheon—We are looking at a bit of an equity issue too here, I suppose. Development was started down there back in the late 1800s and early 1900s and development in Queensland only started in the last 20 or 30 years. That is a historical argument that has been used over and over again.

Ms LEY—It is a tough one to win, though.

Councillor McCutcheon—We are using the same argument with our area because we never had the technology to use the water up until now.

CHAIR—In your submission you said you would like to see the transfer of grey water from Brisbane out to your areas. How would you perceive this could happen? Have the costs been looked at? This inquiry has to look at sustainability.

Mr O'Leary—They have costed to the Lockyer Valley and on to the inner downs.

Councillor McCutcheon—They are waiting for a further round of funding to progress it down to the final engineering stages.

Mr ADAMS—It is 800 million.

Councillor McCutcheon—We do not see that water actually arriving in Chinchilla. By the way, in case it is not made clear in our submission, the idea is not to pump the water over the range, drop it into the Condamine River and let it flow downstream. All this water is proposed to be contained in ring tanks and distributed through a distributary system to the farms up there. What we are anticipating will happen is that once they start pumping water up over the range there—300,000 megalitres of water a year—that cannot be turned off. That cannot be supplied just when the farmers want it; it has to come up all the time. Therefore, we can see the farmers up there for a while having their own licences on the river and saying, 'We don't need this water any more. We've got to use all the stuff coming from Brisbane which we're paying for, so we'll sell our water downstream, in either permanent or temporary transfers.' This is where we can see the benefit moving down to our area: it will free up water within the system.

Mr ADAMS—One of the arguments that has been put to me is that there will be some more water in the system—the environmental argument.

Mr Hoffmann—That is right.

Mr O'Leary—Whether it goes to the environment or whatever.

Mr Hoffmann—There will be benefits for everybody.

Mr ADAMS—It is a win-win situation.

Mr SIDEBOTTOM—What role do you see the Commonwealth playing in the issues, challenges and potential you have raised? I am interested because I think it is really important that we understand where you see the Commonwealth in all this.

Mr Hoffmann—Probably the first role is in funding the development of the concept. It is a massive concept, as was said here earlier, and it will not happen unless the Commonwealth gets in there and supports the proposal in funding whatever reports are needed to see whether it is viable and whether it can happen, and later on into the development of the project.

Councillor McCutcheon—It seems to me that there is a political impediment too, in as much as the Queensland state government and the federal government seem to have an awful lot of trouble agreeing on a lot of aspects of the plans as they come up. I do not want to appoint blame to either side—I am quite sure a little bit of fault goes both ways—but it seems to me that this is happening quite regularly, that we are having confrontations over various things, particularly on the agricultural scene, which we are most involved with. The farmer is the meat in the sandwich and is sitting there being battered from pillar to post and feels totally helpless and inadequate to address it.

Mr O'Leary—We must remember that there has been no really big infrastructure on water in Australia for many years now. Recycled water could be one of the best things that has ever happened in Australia, as a start.

Mr SECKER—How long ago was the Emerald project?

Mr O'Leary—It was a fair while ago.

Councillor McCutcheon—It was 20 to 25 years ago.

Mr SECKER—The Ord project would have been at least 30 years ago.

Councillor McCutcheon—The Burdekin project would have been the last major one that was finished in Queensland. It was completed—I would be hazarding a guess—10 or 15 years ago now.

Mr O'Leary—You only have to go anywhere else in the world where they are using grey water. We went to Israel; there it is just unbelievable. There is a pipeline that you can drive four-wheel drive trucks through from one end of the country to the other.

Ms LEY—But the distances are smaller overall. That is the huge difference.

Mr O'Leary—I agree.

Mr Hoffmann—As far as the other states go, there are benefits for them in that there will be more water in the system. That could go further towards solving some of their problems, so they should share some of the costs.

Mr ADAMS—Do you think these water plans are the way to go? Is it for each region to work out where it is?

Councillor McCutcheon—Yes, honestly, I do. A suggestion was put forward to the Australian Local Government Association that this whole job should be handed over to the Murray-Darling Basin Commission to work out a plan for the whole lot. Personally, for Queensland, I would totally disagree with that. You need local input and local knowledge in these things. As we have just discussed here, there is no way in the world our situation would be exactly the same as your situation. Without that local knowledge, you will not get the cooperation of the people involved. I think that, as slow as they have been, the science that has been used in the operational water resource plans that they are doing at the moment is the right way to go. The Cubbie Station one was of course a hiccup; it put everything on hold. It was put on hold before that. It is taking miles too long to get there, but we are still committed to the outcomes. I am not saying that we are going to be happy with them, but we are committed to seeing the outcomes.

Mr ADAMS—But you get some direction.

Councillor McCutcheon—Yes, exactly. There is uncertainty at the moment.

Mr O'Leary—We do not know where we are going. We have even been looking at shifting down to St George and we have been away looking at properties. If that happens, that will be another person out of Chinchilla Shire. The shire can employ a lot of people. Our biggest melon grower has left and moved to the Territory. In full flight, they were employing 100 people in our season. He has left completely and is not coming back.

Mr ADAMS—There will be some areas that are probably going to lose, aren't there?

Mr Hoffmann—Yes.

Mr O'Leary—There should be some areas that lose too.

Councillor McCutcheon—I think it depends. On the scenario put up by Cullen, if it is managed properly, I do not think it will be quite as severe as the impacts would have been under the volumetric restrictions that they were talking about putting on before—that is, every year X amount of water will go across the river. The Condamine River does not flow X amount every year; it flows Y amount one year and 45 Xs the next. As I understand it, event based flow regimes that make sure the water gets through to the Narran Lakes and the other ecological areas sounds like a much more logical way to go about it.

Mr ADAMS—Can you repeat that. I did not quite understand what you said. What is done to make sure that the water flows where?

Councillor McCutcheon—To the Narran Lakes. That is the—what do they call it—national heritage wetland?

Mr ADAMS—The Ramsar wetlands.

Councillor McCutcheon—I think I remember that they said the natural flow used to occur once every 2½ years. At the moment, I think it is once every five or seven, if everything was let go with all the licences. They are hoping to get it back to once every 3½ years.

Mr ADAMS—Do you think the government needs to buy back any water?

Councillor McCutcheon—Yes.

Mr O'Leary—I would not say buy back water but to compensate for the infrastructure that the grower has put in. If that grower has gone out and got the licence, maybe they should be compensated for the infrastructure.

Mr ADAMS—Have you thought about how you would work that process out?

Councillor McCutcheon—No.

Mr ADAMS—If water is going to have a price, and melons are grown at a price—whatever it is—how do we get more for the melon? Is the produce grown at a higher price so that the cost of the water can be met?

Councillor McCutcheon—In relation to property rights, I see the problem that the value of water is going to be different in the various parts of the stream depending on who wants to buy it. If you have a multimillion dollar golf club, they can pay an awful lot of money for water to make sure they have green grass on which to belt little white balls around all year. A melon grower is going to be able to pay a heap more money than, say, a cotton grower at the moment. To put a uniform price on water and every bit of the river is difficult. You are suggesting that we could have full trading of water anywhere in the Murray-Darling system. I do not think that is feasible either and it certainly is not in our area. With the flows we have up here, I think that the plan will say—at least in the initial stages—that the water will have to be traded within a node so they can keep track of the flows and monitor it in that system. I would think that is the way it will have to be at least in the initial stages. Who is going to put a value on the water? Recently in central New South Wales, high priority water was sold at something like $5,000 a megalitre.

Mr O'Leary—They nearly got that at Emerald—2½ thousand for high priority water.

Mr ADAMS—Was it for growing melons?

Mr O'Leary—It would be for the big citrus farmers, I would imagine. You can afford to pay that bit more with the high value crops. The dearer you make it, the more efficiently you are going to use it. You are not going to waste it, are you?

CHAIR—Thank you very much. I am sorry we have to close this session now. It has been very interesting and, as we said, we really appreciate the distance you have travelled to get to this hearing. You have made a great submission that we can refer to, and we assure you that we will get a copy of the recommendations to you as soon as the inquiry is finished.

Councillor McCutcheon—Let us know when you move to Chinchilla and we will roll out the red carpet for you.

CHAIR—I will make sure I do that. I will let you know when I hit town next. We will take a short break.

Proceedings suspended from 10.25 a.m. to 10.41 a.m.

PALMER, Mr John Richard, Manager, Pioneer Valley Water Board

CHAIR—Welcome. Although this committee does not require you to give evidence under oath, I advise you that these hearings are formal proceedings of the parliament and consequently warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make a brief statement before we go to questions?

Mr Palmer—I do.

CHAIR—Please proceed.

Mr Palmer—Thank you for this opportunity. Firstly, the Pioneer Valley Water Board firmly believes that the viability of rural industries in Australia—and hence regional economies—depends on the availability of affordable water supplies in those areas. Governments at all levels must recognise that the underpinning of sound regional economies is through the availability of water at affordable levels for all users and that water resources are not simply another form of generation of consolidated revenues for government. Our submission to this inquiry deals principally with the impacts of the 1994 Council of Australian Governments agreement on a small water supply agency in rural Queensland. The COAG reforms are supported by the board but implementation has presented some significant concerns for us, particularly as to the future viability of our scheme and the costs of the reforms.

I was interested in the previous presentation as another significant point is that a substantial amount of very sustainable water supply development for irrigation has occurred in Australia and all areas do not suffer from the environmental issues of the much discussed Murray-Darling Basin. You will be pleased to know that Pioneer Valley is not in the Murray-Darling Basin, so we will be able to talk about something else, which is rare in discussions on water in Australia these days. Also, in a number of our catchments the additional development of water resources is possible within acceptable levels of environmental impact.

I would like to give you brief background on the board. We were formed in 1997, to build, own and operate the irrigation scheme component of the Teemburra Dam project. Teemburra Dam is the last major water supply development for irrigation in Queensland, and planning for its construction commenced following the previous major drought in the Mackay area in 1992. The dam itself was completed in 1996. It was partially funded through the joint Commonwealth-Queensland government Sugar Industry Infrastructure Package of 1993. As part of the approval of the project, the Mackay sugar industry was required to contribute one-third of the cost of the irrigation component of the total project. The scheme is now in its sixth year of operation and has supported the Mackay sugar industry through the last 12 months of record dry conditions.

The board and the adjoining state-owned Eton irrigation area support less than one half of the total sugar cane production land in the Mackay area. The unirrigated areas have suffered severely in the present drought and total production from the area will again be significantly reduced in 2003. Further substantial costs will also be incurred by those farmers without irrigation who have lost cane stool and will need to replant, provided we get some sort of wet

season this year. Our scheme has stabilised production over some 22,000 hectares of sugar cane during the present drought and demonstrates that government and irrigators in partnership can provide a firm basis for rural industry to support local economies. This approach must be reinforced and driven by the Commonwealth to ensure that regional communities and economies remain viable, particularly in catchments such as the Pioneer, where additional water resource development is sustainable.

I would now like to touch on the issues of the COAG water reforms that are causing us some concern. As we all know, the purpose of the COAG water reforms is to provide for the sustainable management of water resources through full cost recovery pricing, establishing water entitlements, environmental allocations and institutional reform. Dealing with the first issue—full cost recovery pricing—the Queensland government, in its limited consultation leading up to the introduction of price paths for irrigation in its scheme, clearly indicated that it would only apply lower bound recovery targets for irrigation water supply. Lower bound is intended to cover only full operation, maintenance and future refurbishment of assets.

In the current discussions we are having with the government for the next round of price paths, it is being made abundantly clear that the government will be seeking a return on those assets as well. This is simply another form of state government taxation on a group of water users who have no capacity to pass on additional costs through their produce. I refer specifically to the sugar industry, where the price received by irrigators is set in a corrupt world market. This cost recovery approach has little to do with sustainable water management and is clearly outside the intent of the COAG agreement. It will simply lead to rural industries closing down as irrigators who are unable to afford the increased water charges will place increased pressure on regional communities and social budgets.

The other aspect of rural water pricing in Queensland is that the present price paths have been set with some seriously flawed cost data for the operation of the schemes. The government is refusing to allow access to that data for examination by water users. My board, like most irrigators in the Queensland government owned corporation SunWater run schemes, has indicated to the government that we are prepared to pay the true lower bound costs of irrigation water supply. The imposition of water charges without details of actual costs of supply is a major impediment in Queensland to the acceptance by irrigators of the COAG water reforms.

With respect to establishing water entitlements, water entitlements have been established through a water resource planning process which, in the Pioneer catchment, has reached the stage of a water resource plan being issued and the preparation of a resource operation plan commencing. Water entitlements are not granted until that resource operation plan is finalised. The establishment of water entitlements is intended to create free trading to allow water to move to higher and better usage. This is relevant in the Murray-Darling to improve water management use but it is not seen as a critical aspect of the reforms in our area where there is a monoculture of sugarcane. The only prospective area for water to move to is to an urban and industrial area, which would be to the severe detriment of rural industry. Further, the irrigation supply at Mackay is only supplementary and demand can be very variable on an annual basis, depending on the seasonal conditions.

Since we were formed in 1996, we have delivered through our schemes a minimum of two per cent of our total allocation in the wet 1997-98 to 70 per cent in the dry 2001-02. With this background, permanent trading of allocation within the rural sector at Mackay is not seen as a

major requirement for water reforms. Allocation shortfalls in a particular season will be met through temporary trading, as has actively occurred in recent times.

The principal concern with water trading for my board has been in the area where water allocation ownership will rest when the resource operation plan is finalised. We currently manage the total bulk water allocation for the scheme, which is prescribed to individual properties through a series of schedules to our establishing regulation. Under the ROP, the board's establishing legislation which provides for the raising of water charges to finance borrowings will no longer exist. The board is very concerned as to its financial viability in a situation where individual irrigators have the opportunity to trade their allocation outside the board area. We can only protect our interests through formal supply contracts with individuals.

The major impact on the board of the water resource planning process has been the significant resources required by the board to fully participate in the process to ensure that the board's interests are protected as much as possible. We operate with minimum staffing to provide a cost-effective supply to our irrigators and the diversion of our staff to the planning process has been a major impost. We do not know what the cost of compliance with the resource operation plan when it is finalised may be, but this will no doubt add further costs to our scheme. These impacts on resources are all fully attributable to the water reform agenda.

As I said, the water reforms in Queensland are impacting heavily on our limited resources. We formally approached the Queensland government for financial assistance to implement the reforms but our requests have been rejected. The board firmly believes that the costs involved result from the required COAG reforms and, as such, should be eligible for funding from the COAG payments from the Commonwealth government to the Queensland government.

In summary, with respect to the role of the Commonwealth government, we believe that it must have a major role in the provision of future water supplies in rural and regional Australia because of the national benefits of maintaining self-sufficiency of agricultural production and maintaining reasonable population levels in rural areas. It must also be ensured that the water reforms commenced under COAG in 1994 achieve the aims of efficient management and use of water, and not just be attempted revenue generators for governments. Government funding for implementation of agreed water reforms should be available to agencies and individuals who are required to bear the full cost of the reforms. Thank you for the opportunity to make this presentation.

CHAIR—Thank you for that and for coming from Mackay; we appreciate it—it is a long way to travel. Would any members like to ask a question?

Mr SECKER—Thank you for coming down from Mackay and presenting your submission. I was interested in your comments about the problems of getting full cost recovery and in your statement about the inability of producers to affect the price, so that they are really price takers and, as a result, cannot pass on those prices to consumers. I would be interested in your further comments on that. I found it interesting that the process of creating water charges and the indices used are not being made available to people who in fact buy the water and whatever else. Could you elaborate on that a little more and why you think these charges and the indices used are not made available to those who are paying the prices?

Mr Palmer—There are a few points to that question. I guess the information is not being made available because the Queensland government has set up SunWater to manage its water supply infrastructure. SunWater tells us that the information of the cost of supply in our schemes is commercial-in-confidence to SunWater because it is open to competitors from somewhere—I am not sure where that competition may come in. That is the reason given to us as to why the information is not available for us to see what the true cost of supply in our particular scheme is. We were given some very preliminary information in the form of some fairly raw data from quite a number of years ago, and our examination of it indicates to us that, for the on-ground costs associated with delivering water in our scheme, this is what we have purchased in bulk from SunWater. There is about a 400 per cent overhead on top of that in what we are actually being asked to pay. We cannot get clarification of those numbers from either the government or SunWater.

Mr ADAMS—What is the cost of your water now? At what cost do people buy it?

Mr Palmer—We pay to the government—to SunWater—about $9 per megalitre for bulk water supply. Our cost to deliver to irrigators includes that because we run the infrastructure—we are paying off the infrastructure as well as paying for the operation and maintenance of it. We have five separate areas of supply and each area has its own charging regime. They range from about $30 per megalitre to about $80 per megalitre.

Mr ADAMS—What is it going to go to, John? Are there proposed changes? We would think that $30 was pretty cheap. Is $30 going to increase?

Mr Palmer—We do not know. The government has flagged that it is seeking a return on its assets but it has not said whether it is zero per cent, one per cent, 10 per cent or what. That $30 has the potential to go to about $50.

Mr ADAMS—How old is your system?

Mr Palmer—We were formed in 1996, so our infrastructure is virtually brand new at five or six years old.

Mr ADAMS—And the stuff you are buying from SunWater they are selling to you for $9?

Mr Palmer—Yes.

Mr ADAMS—How old is the infrastructure that you use to deliver to the irrigators?

Mr Palmer—As I said, that was built in 1997 or 1998. The irrigators in our scheme are paying off the original construction of that as well as a renewals annuity to fund the future rebuilding of it when we need to.

Ms LEY—I am interested in what you think of this government's view that unless state governments provide secure tradable property rights in water, competition payments will be held up from the federal government to the states.

Mr Palmer—In the context of seeking better use of water?

Ms LEY—Yes.

Mr Palmer—Yes, we certainly support that fully. What we are saying in our area is that water trading is about getting the water to move to higher and better uses when you are in a monoculture area, as we are; we are growing only sugar cane. At this point in time there is no other crop for it to move to. So we do not believe that for the short-term a water-trading regime is a high priority in our area. What we want to do is try and prevent that water from moving to another sector—an urban or industrial area—which will be to the detriment of the agriculture base.

Ms LEY—So that is really the only other place it could go to in your area?

Mr Palmer—At this point in time, yes.

Ms LEY—It could go to an urban or industrial area? You are quite close to Mackay, are you?

Mr Palmer—We are right in Mackay, yes. There is only sugar cane grown at this point in time. There is no alternative crop as yet in our area that has indicated that it is viable. But that may change in the future.

Ms LEY—What do you think is really preventing the water sharing plan—it is not called a water sharing plan in Queensland, I know, but the equivalent—from being completed?

Mr Palmer—In our catchment, that plan has been completed. It has identified how much water is available and it has identified that there is more water available for future development. We are quite comfortable with that.

Ms LEY—So there is future water availability?

Mr Palmer—We believe there should be more available. We believe you can screw the environmental areas of it a little bit more, but that is a debate we will have down the track. But we are quite comfortable that the plan does allow for some additional development.

Ms LEY—So, really it is the cost?

Mr Palmer—Basically, the cost to us of implementing the reforms at a local level, on our system, is our major concern. This resource operation planning process we are going through now has the potential to put significant cost onto irrigators to meet the requirements of the plan.

CHAIR—When are the findings of that expected to be released or when are they going to implement it?

Mr Palmer—They tell us there is going to be a draft plan produced in about six months and the final one in about 12 months. But some catchments in Queensland, like the Fitzroy and the Burnett, already have those resource operation plans in place, so it is a progressive process through the whole state.

CHAIR—And yours has been done and it will be about six months before they bring down the recommendations?

Mr Palmer—Yes.

Mr SECKER—In the oral submission you have just given us, you mentioned what you thought were going to be the costs to you—some of the operating costs and capital costs. Could you please go through that again because it was little bit quick? What do you think the cost of the water should have been based on?

Mr Palmer—You have to meet the full operation and maintenance of your scheme plus some provision for refurbishment of those assets. Some of those assets are quite old; they might be 80 to 100 years of age, so you need to be putting money aside. Building up to that, if you need to buy a new pump or rebuild a particular pump station you need to have the money set aside. We believe that water charges should be based on operation, maintenance and refurbishment.

Mr SECKER—But you never thought there should be a component of capital cost?

Mr Palmer—For our infrastructure, we are actually paying to build it as well.

Mr SECKER—Yes, but what about the capital cost of building the dam?

Mr Palmer—No, we believe that is a government commitment to the whole project.

Mr SECKER—So you believe that government should subsidise the irrigators by building the dam and not charging for it?

Mr Palmer—Other than major refurbishment. As I said, operation, maintenance and refurbishment, but not a return on the investment. A return on capital is what we are saying should not be included in the water charges.

Mr SECKER—Has there been anything in writing to say that it will only be on that basis or was there something to say there would be some repayment of capital costs as well?

Mr Palmer—In the preliminary round of discussion the lower band cost recovery targets were all that were mentioned. They were operation, maintenance and future refurbishment. On top of that there was the upper band, which we were led to believe only urban and industrial users would be required to meet.

Mr SECKER—So you never thought there would be any suggestion that the irrigators should pay something towards the capital cost of the dam?

Mr Palmer—The return on the asset or the return on the capital of the dam?

Mr SECKER—The cost of building it. Obviously, if you build a dam you have to borrow money to build it.

Mr Palmer—When this project was put together, that was when the sugar industry stepped in and put its money towards building the irrigation reticulation works component of the whole project.

Mr SECKER—I am not talking about that. I have heard you say that, and I understand exactly what you are saying. But you are saying the building of the actual dam is something the irrigators should not have paid anything towards?

Mr Palmer—It depends on what the project is. If it is just a dam to supply water into a stream and there is some requirement for a capital contribution upfront, then yes, I guess you would consider that on its merits. But as I said, in this particular project we were involved in, it was nicely subdivided that the government built the dam and industry built the infrastructure to utilise that water through irrigation.

Mr SECKER—I think the government is saying that there was always going to be some sharing of that capital cost of building the dam, and you are saying there was not.

Mr Palmer—No, that was the way the project was put together.

Mr SECKER—And there is nothing in writing to say one way or the other?

Mr Palmer—As far as the initial construction of it, yes, that is the way it would be. But there is nothing in writing about whether the government can now come in and say that, for its $50 million invested in the dam, it can get a six per cent return from the irrigators.

Mr SECKER—They are only charging you $9. I wish I could get water at $9.

Mr Palmer—That is only a small component of—

Mr SECKER—I know it adds up to between $13 and $18. I have put in my own irrigation and it is over $200 a megalitre based on a 20-year amortisation, but I still make money out of that. So I am a bit surprised—

Mr Palmer—If you are getting the return for the produce you are producing—

Mr SECKER—If I could not, I would not grow it.

Mr Palmer—That is right. So what do we do? Do we put the water prices up to finally sound the death knell for the sugar industry?

CHAIR—Concerning the question that Patrick asked, when the dam was built was it built for irrigators or was it built for urban use and irrigators?

Mr Palmer—The majority of the water is for irrigation but there is—

CHAIR—And is that still the—

Mr Palmer—Yes. There is an urban and an industrial component which, at this stage, have not been allocated to any users.

CHAIR—So it is all irrigation at the moment?

Mr Palmer—A small amount is being used for urban use but not very much.

CHAIR—We heard yesterday about a dam that was put in for irrigators which is now 20 per cent irrigator and 80 per cent urban use. That seems to be wrong. The reason for putting in the dam in the first place was to help the farmers but then the urban users got a little lazy, took out the water tanks and used the dam water. I am talking about rural towns not about—

Mr SECKER—And they paid between $800 and $1,600—

Mr Palmer—About another 6,000 houses—

CHAIR—Yes, I know. But if that is the case, they should look at better infrastructure if they are going to take away the tanks.

Mr SECKER—You are saying that you have not been able to access data on how to work out the price. I know that a lot of state governments and state government corporations claim commercial in confidence, but it does disturb me a bit that for something like this there is not transparency in the actual cost recovery.

Mr Palmer—It would take a lot of heat out of the debate if we could get access to that information.

Mr SECKER—At the moment you are saying that you do not believe their figures but you cannot prove them one way or the other, and they are not going to give you the information to prove them one way or the other. That transparency and accountability, I think, are very important. I am a bit disturbed that they are not happening, even if it were done on a confidential basis where you had a commercial liability if that information got out.

Mr Palmer—We would be happy to participate in that sort of forum.

Mr SIDEBOTTOM—Obviously the reliance on the industry is mammoth, but you said there are really no other alternatives in sight, certainly not of any commercial quantity—

Mr Palmer—Not at this point in time.

Mr SIDEBOTTOM—Just out of interest, are any trials taking place to look at diversification there now?

Mr Palmer—This year, because it has been in drought and some irrigators have had water problems, they have taken fallow cane land and grown forage sorghum for cattle feed. They have put it over into the dry area in the ranges. That is quite a good one. You can get caught in Mackay trying to grow some of those crops if you get a very wet season, which you can do.

Mr SECKER—So they are baling it up into silage or—

Mr Palmer—Round baling it and trucking it to—

Mr SECKER—They would be getting two or three times the normal prices in the drought this year so it is a moneymaker. That only happens in a drought.

Mr Palmer—That only happens in a drought, yes. If we knew when all the droughts were coming we would be right. There are a few trials for various things like macadamias and a bit of coffee, but only on a small scale. Industrial hemp is being tried in some areas. There are a few things out there but nothing at this point in time is there yet that I am aware of.

Mr SECKER—You couldn't grow flowers or vegetables commercially up there?

Mr Palmer—Again, you need a better climate in summertime than we have. If a cyclone comes through and drops a hundred inches of rain you swamp everything. Sugarcane can tolerate having wet feet for a substantial period of time and still survive.

Mr SECKER—Grow rice!

Mr Palmer—We are not experienced with growing rice. Burdekin tried that.

Mr ADAMS—The Commonwealth put some money into the sugar industry to help it reorganise or get through the difficult times it was having with the world price. Was any of that money going in other directions like to restructure?

Mr Palmer—I am not sure. That is outside my field. You need to be talking to the sugar industry people.

CHAIR—Thank you. There are no further questions. We really appreciate the time you have given us.

Mr ADAMS—It was good to get away from the Murray-Darling, wasn't it?

CHAIR—I thank you for your submission and for taking an interest in this inquiry. Hopefully it will help us with our end results.

Mr Palmer—I hope I have helped.

CHAIR—We will make sure that the report and recommendations are sent to you when the inquiry has been completed.

[11.08 a.m.]

EMMERSON, Mr Paul James, Chairman, Upper Lockyer Water Users Association Inc.

LOGAN, Mr Jeffrey Graeme, Delegate (Area Representative) Water Users Forum (Central Lockyer North)

VAN DER EST, Mr Gordon William, Executive, Water Users Forum (Central Lockyer)

CHAIR—Thank you for your submissions and for the time you have given us today. We look forward to seeing first-hand the Lockyer Valley district after lunch. Although the proceedings do not require you to give evidence under oath, I should advise that these hearings are formal proceedings of the parliament and consequently they warrant the same respect as proceedings in the House itself. It is customary to remind witnesses that the giving of false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Would you like to make some brief opening remarks? Then we will go to questions.

Mr Emmerson—On behalf of the representatives, thank you for accepting our submission and for giving us the opportunity to speak to you this morning. We certainly look forward to giving you a tour of the Lockyer Valley later today. Our group, which we represent in coming here today, covers a combination of about 16 different water areas in the Lockyer. There are significantly different features as you go from different creeks and different areas throughout the Lockyer. We have been working for over 15 months on what we call the Lockyer Water Users Forum, working together towards a common water management plan for the whole of the Lockyer. As water users, there are a number of issues we have to look at in putting that management plan together.

There is now, as in the whole of Australia, a significant cry for more water wherever it comes from. In the Lockyer we have some long established schemes which we say are not working as well as they could and some have not worked at all since they were put in. We are looking for some improvements to get those schemes working efficiently. We also have the very large Wivenhoe Dam in our area which we cannot get access to for irrigation water, and we are trying to get access to that. Our major concern at the moment is the argument coming from the state government's Department of Natural Resources and Mines that we need to be allocated and restricted and charged for our water because of the COAG agreement. We strongly disagree with their interpretation and with their rationale for that.

At this point, significant areas of the Lockyer, in the lower and middle parts, have been issued with proposed allocations for the water they will be allowed to have, whereas traditionally there have not been allocations or restrictions on access. Some of those allocations are as low as 25 to 30 per cent of current usage. Certainly what we have been told will be the cap for the allocations will be inadequate water for most farmers in the Lockyer to be able to operate. That will therefore render a significant part of the Lockyer uneconomic.

As you will see from our submission, during the height of the harvesting season when the winter crop comes off—which is about six months of harvesting—the Lockyer puts out approximately 500 semitrailer loads of produce a week. We have taken those figures from local

transport operators, who have told us what they cart out of the Lockyer. That means approximately $5 million worth of produce a week comes out of the Lockyer, which, if we do not have the water to grow that, will be under significant threat for its future viability. The critical thing with that produce is that it is not only supplying our domestic market but a lot of it is being exported.

Another issue in the Lockyer is the potential for us to be charged for water which, traditionally, we have pumped from our subartesian bores and do not pay for because we are in unregulated areas. There are no schemes or dams in those areas, so we have access to water which we pump and use. The suggestion is that we should now be charged for that water, but we have not been told of any benefit or return we are going to get for that fee. Therefore we have a great objection to having to pay when we are not going to be given any more water or any more reliable water for the fee that it is being suggested or proposed that we will have to pay for it. I come from a dairy farm and most of the people you will see today are vegetable producers. The whole lot of us operate on very small margins, and any increase in cost is going to significantly affect the profit line, if there is one, for the operators. That is a brief summary by way of introduction, and the committee can ask us any questions about the details.

CHAIR—Would Gordon or Jeffrey like to make a contribution before we go to questions?

Mr Van Der Est—Yes, just a brief one. Jeff and I are in the central Lockyer, which is the proclaimed area, the area which is currently going through the process of allocation and regulation. I have some other documentation here that I would like to present to you. I have taken a specific management area to show you the actual drops that people are going to experience. We also have a table that outlines the various quantities of water that different crops need. The only summation from this is that there is basically going to be a halving of incomes. Lake Clarendon and Lake Dyer are the two pieces of infrastructure that the central Lockyer is being allocated under, so if you took those two pieces away we would be exactly the same as Paul's area—it would be totally unallocated. One of the core issues that concerns us is that the infrastructure is a total failure, yet that is the reason we are being allocated. To put it simplistically, I would say it is the equivalent of going out and buying a brand new Holden one-tonne ute and putting one tonne in the back and it breaks in half. The infrastructure truly is not fit for purpose. If this was a commercial enterprise the customer would, I believe, have claims under the Trade Practices Act for us receiving a benefit that is not fit for purpose and does not even exist, yet the allocation process continues.

Mr Logan—I want to elaborate a little on the proclaimed area. The area was proclaimed under the supposed benefit from the infrastructure to which Gordon has referred. I would like to reiterate—it is an important point that people seem to miss—all irrigation schemes have problems at the moment because there is a drought, but this particular one would have problems under any circumstances. As Gordon suggested, it is basically a failure. SunWater are aware of this but cannot do anything about it because they have an operating licence from the Department of Natural Resources and Mines. The Department of Natural Resources and Mines understand perfectly that this infrastructure is a failure as well, but they are unable to do anything about it because of the NCP. There is no further funding available, so they are in the situation where they have provided an infrastructure that does not work and now everyone is powerless to do anything about it.

Mr ADAMS—Do you support water rates remaining with the land and not being transferred or traded?

Mr Van Der Est—Yes, we do. The reason is that water rights are in the value of the block of land. In our case, for example, when we bought our property part of the property was sold to a separate individual, and that part did not have water rights. The difference in the two prices per acre was 300 per cent. Currently, that difference can run up to 800 per cent for neighbouring blocks—that is, one that comes with water rights and one that does not. Queensland's Water Act 2000 divests the right to water away from the block of land. We argue that if you do that, you are taking away some of the value of someone's land and they deserve to be compensated. A lot of these farmers do not have superannuation schemes and these farms are for their retirement. If you take the water, if you divest the water from the land, you have caused severe financial hardship.

Mr ADAMS—If government continued to do that, how would you compensate for that? Do you have any criteria?

Mr Van Der Est—First of all, I think there has to be a national approach. So far, I have observed that different states are doing it differently with different levels of severity. In the Queensland case, I think they are more understanding than most. Again, they are driven by their COAG payment, which is in the area of $200 million plus. The current state government would do everything it can to meet the timetable to meet the implementation to get the money. A lot of the scientific data under which we are being allocated is for the purposes of monitoring and, all of a sudden, because it is the best data available—because there is no other data—that is what is being used to allocate us. I believe that the Commonwealth has to put the brakes on, put a hold on the whole process, look at it, give the COAG payments, take a national approach and do it properly. If this continues, the severity and the economic hardship that is going to be caused will be huge.

Mr ADAMS—Is drip irrigation being used in the valley? Do you catch your run-off from the dairy farm?

Mr Emmerson—We call it trickle irrigation rather than drip irrigation. It is being used increasingly and there are issues with its use. A lot of the irrigation is for one-off use and the economics of using it on a lot of crops are very limited. On our particular place with dairying, we are looking at over $2,000 an acre to put trickle irrigation under our pasture. If we did not have deregulation, we might think about it but with the current price of milk, you just cannot do it. And there are the current problems with water access, so the whole question makes it all very marginal.

In regard to run-off from the dairy, you can water probably five to 10 acres with that. Obviously, under the quality assurance programs we go through now, all the dairy run-off is caught in a dam. It does not end up back in any streams and it is pumped back out onto the paddocks. It is good fertiliser, but it also causes a weed problem so there are issues with using it, but it is used.

CHAIR—If you have a $5 million a week growing rate for your produce, that is a big industry—and a lot of jobs—for the Lockyer Valley to lose. Has there been a consultation period in which you can put your case before the government and say, 'We are going to cut out

this production'? Has that happened or did you just get this to say your production was going to be reduced by 25 per cent?

Mr Emmerson—The proposed allocations have come out. DNR has met with the group of farmers in the individual areas. One of the main reasons why we got the Lockyer Water Users Forum together was that all farmers could have some input. If you look at the Lockyer and how its schemes have evolved from area to area, it is like a creeping weed with its allocations and proposals. As they slowly move from one area to the next, they allocate and propose and it expands as it goes. People like me, who are not in the allocated area, are getting very concerned over the proposals which they have suggested will start from July this year. When they announced these proposals, that was the first time they had proposed allocations and restrictions in an area that was not on one of the dams or schemes. That is when we said, 'Once before you promised somebody water and'—as Jeff argues—'they did not get the water they were promised.' In exchange for those promises people were allocated and they got their allocations and they had to pay for their water. But this is the first time that they have put proposed allocations in an area where there is no benefit from any dam or any scheme and have said, 'You're going to be allocated and you're also going to be charged for that water.' Some of those people were originally deemed to be in benefit areas but, after the department did its own testing, the department agreed that they were not benefited. But now they have turned around and they are still going to allocate them, and I believe they are proposing to charge them for that as well. This was the first time—being in December, some 12 months ago—that they were going to allocate us and charge us outside of a scheme. That is a real concern to us.

CHAIR—A bit of a worry, isn't it?

Mr Emmerson—Yes. As far as the consultation process goes, the department has spoken to us members of the forum at meetings. Gordon is a lot better with the data than I am, but we dispute a lot of their data. They had bores for monitoring but the bores were never properly set up. They have used some meters—and we know this from farmers where the meters were—which were not working. Since they brought the proposals out, some farmers have had independent tests done of the meters which they have used for their data. I cannot tell you the figures off the top of my head, but there was one farmer with four meters and two of them were not working at all: one of them was measuring about 18 per cent of the water that went through it and the other one was measuring about 19 per cent. But the basis of those meters being used is to say, 'You traditionally use that much water—that is going to be your allocation,' whereas in fact he was probably using multiple times the amount of water which was going through those meters.

CHAIR—Has the department come back to retest them?

Mr Emmerson—No, the department has not. This fellow has had two independent tests done.

CHAIR—Are your farmers looking at a more efficient way to use their water? Has the state government encouraged you to implement smarter water use systems?

Mr Emmerson—From when I was hardly high enough to be able to carry an irrigator—a pipe—to now and what we use—boom irrigators running on low pressures and there are fellows who are using trickle systems for the likes of tomatoes and potatoes—we have always been

looking for something more efficient, but it has had to be cost effective. I do not know of anybody getting a subsidy to become more efficient, so everybody has to do it on the basis that it is going to be more efficient for themselves. Some people will do small experiments and will expand a system. At one of the places we will go to today we will hopefully meet one fellow who will say that he is now using 40 per cent of the water he used to use for the same crop of potatoes.

CHAIR—So he will be allocated—

Mr Emmerson—He is not actually in the regulated area; he is outside the regulated area. But the efficiency of water use has nothing to do with whether you are allocated or not. No matter where you are, you can say, given the way we pump water, that the average is $45 to $50 per megalitre just to lift the water to the surface. That is due to your electricity costs, let alone the costs of infrastructure and your capital. You are not getting water delivered to you on the surface in a pipeline under pressure. You have to pump it, so it is already a significant cost in your production to get your water to the surface.

Mr Logan—I would hate to see the baby thrown out with the bathwater in regard to allocations. In our area and the proclaimed area, the DNR is trying really hard to see that what we take out of the aquifer is sustainable. We support that. A lot of the science is accurate. Some of it is not; a lot of it is. A lot of farmers do have faith in the allocation process, but what is difficult for us is that the allocation process was on the basis of infrastructure that does not work. So there are two issues. One is the sustainability of the aquifer, which we all agree with, and the other is: why are they doing it if they cannot provide a benefit? That is the difficulty. What it comes down to, apart from where you disagree with the science, is a socioeconomic point that farmers have had generations of being able to use their own water on their own farm, and all of a sudden someone has come along and told them, 'You are doing it wrong.' Farmers are bewildered by this.

Mr SIDEBOTTOM—I come from the north-west coast of Tasmania, which is also a 'vegie bowl'. We are also a major dairying area, so I appreciate where you come from. In the conclusion of your submission, which comes to the crux of what you are saying, you say, 'Some form of management is inevitable.' I was wondering whether you thought it might also be desirable, rather than just inevitable, so that you can be proactive—although I do take on board your point that you have to be reactive because part of the process has not been done in a consultative manner. You talk about the ad hoc way that these reforms have been brought in. I appreciate that, and it is shared by others. I am quite prepared to hear that one too. You also raise the issue of compensation. I suppose I am interested in the desirability of management and what indices or criteria you put on compensation. I was also very interested in your survey, where you said there would be a halving of incomes for the majority. I would be interested in you taking us through that a bit more. Was that survey done on water allocation as proposed and on the cost? I would be interested in that one too. So there are three things: desirability as well as inevitability; the compensation, and how you see that working out fairly and equitably; and also reporting on your survey, which I found very interesting.

Mr Van Der Est—On the issue of desirability, I think everyone will agree that water management is desirable as well as inevitable. We have realised that it is going to be legislated for. I suppose the information has to be correct and the transitions have to be right. It is related potentially to the deregulation of an industry—for example, when the dairy industry was done.

It has to be done at a high level and has to be done with the least economic hardship. In terms of rationalisation, I think probably one of the most likely outcomes is for allocation to come in and, as volumetric access reduces, you are going to potentially see amalgamation—you will see some farmers getting bigger while the little guys will no longer be viable because they literally will not have enough water, for example, to do three crops a year. They will go down to half.

To answer your question on the survey: it was done last year—and I have a copy here which I will give you later. It was targeted specifically at those farmers in the central Lockyer. The average allocation across the board of all farmers came in at about two megalitres per hectare. For example, it takes two megalitres to grow one vegetable crop. I have a whole list of crops here that I will leave with you so that you can see what they take. Literally, you will have farmers who are currently doing three crops a year being forced to go to one crop a year. You will see all sorts of different behaviours where land will be taken out of production in an effort to actually subsidise land they also own. For example, if someone has 100 megalitres, and 100 megalitres cannot sustain 100 acres, then they will only do 50 acres. So that is part of what you will see.

Mr Emmerson—Could I comment on the issue of desirability and inevitability. In the discussions we have had with the department so far, they keep throwing at us the COAG agreement—that they have to do this and that the federal politicians have told them they have to impose rules and regulations.

Mr SECKER—That was an agreement between the states.

Mr Emmerson—Yes. We understand that, but, nevertheless, when we say to them, 'Why are you going to allocate us and why are you going to charge us?' they say, 'That is under the COAG agreement; we have to do it.'

CHAIR—So they nod their heads.

Mr SECKER—It is our fault.

Mr Emmerson—They nod their heads and say, 'This is what we've got to do to you. Don't blame us, blame somebody else.' Our issue is that the data they are using is not accurate. We cannot see that there is any benefit for anybody in what they are going to do to us. Unlike the western side of the range where the water eventually flows into South Australia, if there is sufficient of it to get there, we are on the eastern side of the range where it flows out to Moreton Bay. We are not in the situation where the water we are using is going to be reused once it gets past us. If it is not used by us, there is no benefit to anybody.

Mr SECKER—It might be useful in Moreton Bay.

Mr SIDEBOTTOM—For aquaculture.

Mr Emmerson—If the water went down to Wivenhoe it would be a lot more useful than what we would use. Two or three inches off Wivenhoe a year is the whole of our valley's usage, so I would argue that the impact on Moreton Bay is immaterial. We have a real problem with the desirability of water management if it is not done properly.

Mr SIDEBOTTOM—What about the compensation side of it? It is pretty important.

Mr Emmerson—Clearly, you pay a price for your land depending on how much water is attached to it. It is a simple rule in the Lockyer Valley that if you go up through Tenthill way land might be worth $7,000 to $10,000 an acre. At Laidley Creek it might be worth $3,000 to $4,000 an acre and in the lower Lockyer it might be around $2,000 to $2,500. That simply reflects the water that is attached to the land. If you lose your water rights or they are sold off, (1), the land will not be useable and, (2), it just will not have the value. Therefore, the issue of compensation is very difficult. In the Lockyer we have identified 16 different groups, which includes two groups from schemes, from 14 geographical areas where the features are different. The table we have here is the best that can be put together on an average usage of water. But as you go from area to area and there are different soil types, some people need 10 to 12 megalitres of water per hectare per year and others use four or five. The average says around seven or eight, and they are talking about capping it at four. So there is this great matrix—

Mr SECKER—You cannot have 'one size fits all'.

Mr Emmerson—That is right. But when we go to the meetings and the department says, 'You give us a water management plan,' it would be simpler for us to put one rule across the whole valley and that would be it. That would be the simplest solution. I believe they are trying to get a reasonable water management plan. This year we have met with DNR, SunWater and the Department of State Development to get a contact liaison group in the valley. Hopefully, through our forum, people will have input directly with the people who are making the decisions. Hopefully, we will have more meetings with them this year. We have an agreement with them from June last year, after the Premier came to the valley, that we will put down our rules for what we think are the water management policies for the Lockyer and they will do the same. We are due to sit down in March with what we think should be some water management rules, and they should have what they think are water management rules at the same time. I do not know whether we will be ready to go in March, but we will be very close to it. We are putting together what we think are the basic guidelines or overriding principles, but at the same time we will need specific rules for specific areas because some places will need different rules from others.

Ms LEY—I have a question about the COAG process. The federal government and state governments obviously agreed to this. Under the process, once the water reforms are put in place, large sums of money will go from the Commonwealth to the states. The idea is that the states then use those large sums of money to compensate farmers where they lose out in the process. I suppose you could also see that competition payments could be used for improving the infrastructure, which has obviously run down to a shocking state. I know that we cannot control what happens at those levels, but we are talking about large sums of money. The Deputy Prime Minister has said that we very much believe that property rights should be secure, should be tradable and that there should be compensation for them. That is where the competition payments come in, although state governments might have other ideas about how to use them. If competition payments could be used and if it is inevitable under the process that the property right for land and water is separated, would you see that as acceptable or would you see there still being a problem? Is it just a matter of working out how the compensation should be arrived at or is it a more fundamental problem of having that separation between the property rights?

Mr Emmerson—There are two issues, if I could answer that question. Gordon might want to answer it too, because it is something he has spent a lot of time on. Firstly, with regard to the compensation issue, the response we have received from the department, when we asked what compensation there will be, is that because we do not have an existing allocation we do not have a right. Therefore, we are not entitled to any compensation whatsoever.

Ms LEY—And they haven't looked at the history of use at all in making that statement?

Mr Emmerson—No, they said, 'If you have no allocation and no existing allocation, then you have no right.'

Ms LEY—So you are unregulated?

Mr Emmerson—We are unregulated, so we have nothing. They are taking nothing off us because they are saying it is not ours anyway; therefore, we get no compensation if they take all our water off us. The second issue is from a personal point of view. My family has been on the farm for about 130 years. If you take the water off us, we are going to have a weed bowl, because you cannot farm unless you can work the land. If you do not have the water, you cannot work the land, and if you cannot grow anything and you cannot make a profit, what are you going to do with the land?

Ms LEY—Are you saying it comes down to a community issue? In other words, nobody can do anything with the land and the water moves maybe next door.

Mr Emmerson—It is not just community; it is community and environment. There is nothing worse than having the farm next to you full of weeds, because in the next flood or in the next wind storm you are going to get all those seeds. The whole place has to be managed properly. You do not want the farm next to you having nutgrass and Johnson grass in the paddocks. This is what I believe: the places that do not have water—even if they are hobby farms—will just be weed patches, and you cannot farm next to that.

Ms LEY—Of course. You are really concerned and are not confident that the process whereby you discuss these issues with state government representatives is going to have an outcome such that your views are taken into account?

Mr Van Der Est—We have raised it probably on two or three occasions with senior members of the DNR. It is unequivocal that there will be nothing. I suppose it comes down to what the definition of allocation is. Their definition is that you have a defined amount of water, say 1,000 megalitres. They are saying that if under this plan they cut us back to 500 megalitres we are entitled to compensation. We say that, because it is open, that is almost infinite compensation. But I agree that there should be an upper limit to define what 'infinite' is. Therefore, because of that, we are not entitled to anything.

Small farmers are really the ones that will be the most severely disadvantaged. They are the ones that are going to hurt the most because at the click of your fingers they are going to be put out of business. Part of their case is that the small guys are not viable anyway. Today you will see guys that have 40 acres, running a single-person operation, who are very viable. We would argue that, in running a farm, even though you are in commodity markets and sometimes you can end up being price-takers, sometimes you can be price-makers too. We would argue that

they are like any business. One of the key components of any business is how you manage the financial position. Some of these guys do that very well. They are equipped to manage better than some of the big guys because they can take advantage of market fluctuations. They do not have banks involved in the business. Each farm is a set of individual circumstances. You cannot make blanket policy remarks like, 'Small farms aren't viable.'

Mr ADAMS—I have a different appreciation from Sussan, maybe because I am from the other side of politics, of what I think the Deputy Prime Minister might have said. But where the money was going to be allocated to was not agreed upon. I think that if the federal government wanted to do more, they could do more et cetera. I wanted to square that off a bit. The situation of people coming together—is that happening now in the Lockyer Valley?

Mr Emmerson—The Water Users Forum meets monthly. In fact, a meeting was held last week. I think the Water Users Forum has surprised everybody in how well the people have been able to get together to put their issues on the table without thumping the table and having red faces during the discussions.

CHAIR—What percentage of your farmers turn up for the meetings?

Mr Emmerson—The Water Users Forum comprises two delegates from each of the 16 areas, therefore each of those areas comes to the meetings, and the rules we operate on are that they must take any proposals back to their own groups. So there are 14 geographical groups plus two scheme groups which sit on the forum and then go back. Our group meets roughly once every three months. We have a meeting either next week or the week after and there are certain issues we have to discuss. The Upper Lockyer Water Users represents about 200 farmers. Central represents about 230—is that right, Jeff, for your area and Gordon's combined?

Mr Logan—I think so.

Mr Emmerson—There is also the Lower Lockyer. How many are down there—about 130?

Mr Van Der Est—Yes, something like that.

Mr Emmerson—There are about 800 farmers in the Lockyer, and we represent 500 or more of those through that forum.

Mr ADAMS—Is there any acceptance that there might be changes, that some will go out?

Mr Emmerson—We have put in our submission that that is going to be inevitable. We know there is nothing more certain than taxes and change.

Mr ADAMS—And deaths.

Mr Emmerson—That is another one, yes, but that cannot be controlled by the politicians; the taxes and the changes can.

Mr ADAMS—I am interested in what Gordon said about small business and small operations. The battle we constantly have is to save the family farm or the individual. I have

looked in the museums of America and seen the stickers on the tractors, saying 'Save the family farm', from 30 years ago. It is a constant battle to try and maintain them, especially to get the prices when large-scale operations are knocking down costs and things like that.

Mr Van Der Est—The particular farmer you will be seeing grows on contract for a large processor. He will grow whatever the processor wants—beans, corn, anything. He has his price locked up right up front, so he does it very well. His competitive advantage is his financial situation plus he has his farm configured for a one-man operation. He would make six figures per year out of that, so it is very well run.

Mr ADAMS—What are the opportunities for other angles, for people growing organically or for the niche markets that are starting to emerge?

Mr Emmerson—The Lockyer has one of the widest, most versatile climates and crop types that you will come across anywhere. People are trying everything. I heard a fellow earlier today mention hemp. Some of the local lads tried growing that, but I do not think any farmers are growing it legally.

Mr ADAMS—I think that was a different hemp.

Mr Emmerson—There are flowers, fruit, all sorts of vegies—a great diversity of product. But most people concentrate on a small range of products, and try and do that properly, rather than growing a bit of everything like we used to do in the old days.

CHAIR—What percentage of your crops would be tied to contracts to the two big suppliers?

Mr Emmerson—We will ask him when we get there today. I do not know. It is certainly increasing.

CHAIR—Is that causing smaller farmers to go, or do these big contractors subcontract out to smaller farmers? When costs go up you cannot pass them on to the two big ones, so that would squeeze out a lot of the farmers.

Mr Emmerson—I do not grow for them personally. In terms of the people I do know, in the past year that prices were fixed through the winter, whether the farmer will now pay bonuses or something extra for the drought I do not know.

CHAIR—I took evidence in another committee about three years ago about farmers being tied up for five years contracting to Woolworths or Coles and then having things like water blow out of proportion in that five-year period. Is that still happening or are they down to 12 months now?

Mr Emmerson—I think most of the contracts in our area are still on the shake of the hand.

CHAIR—Still with the big ones?

Mr Emmerson—Yes.

Mr Van Der Est—By going to one of the big ones, as you call them, if you are a small farmer you get a lot of ancillary benefits. You get far better utilisation of capital. I know this for a fact with one of the big ones. If you grow for him you are essentially lending him your land and your water. You prepare the land, he does the seeding, you water it, he controls the fertilisers, subcontractors come and do the chemicals and they bring a subcontractor in and harvest it. So it is a total bundle offer, which I believe makes the small guys more viable. You get the buying power of being the processor. You have the capital justification to buy a $1 million machine because you are technically passing on that cost to the small guys. And the big guys are big enough to know that unless they look after them in that context they will not be there, so they will not have produce to supply the other big guys like Coles and Woolies.

CHAIR—So how does a farmer like yourself who is not tied to them compete with that sort of capital?

Mr Emmerson—You cannot.

CHAIR—Does that squeeze you out eventually?

Mr Emmerson—That is why we are milking and not growing vegies any more.

Mr ADAMS—So, when something changes, there is nothing left for the grower or the owner once you are locked into the cycle. Isn't that the experience?

Mr Emmerson—That depends.

Mr Van Der Est—I do not want to generalise but, if you are getting bigger and bigger and you are getting into the vicious financial circle where that needle is caught in your arm, you technically do not have a choice other than to keep getting bigger—but you will reach a point where you explode. You only need a downturn, an interest rate change or something like that and you are in deep trouble. Whereas, if you look at the other potential model of the small guy who does not have any of those variables—he can weather a storm, he has savings, he can survive a year—it is all about balance. You can argue that it is the big guy who is creating all the employment, not the little guy but they are all individual little economies in their own right.

Mr Emmerson—If you look at why it is happening and you ask how you compete, it is because you have your big supermarkets that have to be supplied and they are demanding a consistent product 12 months of the year. The little bloke cannot offer a consistent product 12 months of the year. He will have a niche market, and probably a much better product, but it is only going to be there for a short period of time and therefore the big blokes, like the retail shops and the chains, are not interested in them. But the bigger processors have farms from Bundaberg to central New South Wales growing their beans and peas, cabbages and corn. They are growing all year round to provide a constant supply to the chains day in, day out. They do not want to miss a day having their product on the shelf. The little bloke cannot compete with that, but he cannot do it either. So the marketing system has your hands tied.

Mr Van Der Est—The big guy then takes the role of the manager of a cooperative, for want of a better word, because those principles come into play and all the little guys get together, and all of a sudden they are viable. You have volume to supply the big guy and you have an interface to handle the marketing.

CHAIR—How did your dairy farmers fare with deregulation? Did the ones that were small and that did not have high overdrafts and debt survive? Or are the ones that are left the ones that were in debt and could not take the—

Mr Emmerson—In our area, on our creek, there were seven dairy farms and there still are, although I think one is shutting down this month. We are in a unique situation in having the irrigation and water supply systems that we use. Our farm used to grow a lot of silage and feed a lot of grain. With deregulation, there is no silage; it is gone because it is uneconomic to use silage. At first we halved the grain that we fed and now we do not feed any grain to our cows at all. We just produce straight off pastures. We have survived; our profit line is about the same, our production has reduced from about 600,000 litres to 380,000 and our income is down from $¼ million down to about $120,000 but we are making the same profit.

Ms LEY—So what you were doing before was buying your production.

Mr Emmerson—We were basically buying our production. We bought corn silage and we bought grain from anybody and everybody. Our suppliers are the people who have missed out because we have had to cut our costs. We are not buying goods from whoever we were buying them from before. We had to survive.

Ms LEY—If your profit is now the same as it was then, how do you feel about that? Do you have more time? Do you have a better lifestyle?

Mr Emmerson—No, I go to a job.

Mr ADAMS—How many cows are there on average on the seven dairies?

Mr Emmerson—Around our area, the biggest now would be milking around 230 to 240, and the smallest, 60 or 70.

CHAIR—Would the one who has 60 have a second job?

Mr Emmerson—No, they actually survive off it; they live off it—no costs.

Mr SECKER—It is a very interesting submission. It is quite different from a lot of the others so it is very useful in that way. Perhaps there has been a scattergun approach here in that somebody has got up at one of your 32-member meetings and said, 'We should raise these,' so you have raised them. I need to go through some of the things that you have raised because some of them do not seem to gel, although you may be able to convince me otherwise. One point you raise is that water allocations should remain with the land—and there are all sorts of arguments about that with underground water and with water that comes down—but the argument that was used today was that the value goes down if you trade or sell off your water allocation. I can only use the figures for my own area where an irrigated area is about $3,000 a hectare and an unirrigated one is about $1,000 a hectare. What is the difference between someone selling that irrigation in a tradeable, sustainable way for the difference—$2,000 a hectare—and somebody else getting the value out of it? What is the problem with that?

Mr Van Der Est—I will deal first of all with the point you raised about trading. The majority of the Lockyer is actually irrigated through ground water. We are no relation to the 16 groups but we—Central Lockyer Water Users—are broken into roughly 16 zones. If I want to trade water I can only trade in my zone. I am in what is called area 3A. That means that, unless my neighbour wants to take the water, I have no-one to trade with. Jeff could be down on the other side of the Warrego Highway and want my water but, because he is in a different zone, I cannot actually deliver it to him. So the transfer of the allocation to different areas does not exist and so your sphere to operate and trade in is literally your neighbour.

Mr SECKER—Are you saying you want to stop that?

Mr Van Der Est—I am saying, on the issue of tradeable water, that the benefits that it is going to produce in our situation are completely blown out and exaggerated for the very reason I have given you. The other issue that concerns me about divesting the water from the land is that under these allocations when a plan comes in it is going to have a 10-year life and at the end of the 10 years I will have no guarantee that my licence will be renewed.

Mr SECKER—Is this before or after you have sold or bought an allocation?

Mr Van Der Est—Say tomorrow we get allocated. I will be allocated for a 10-year period; I have access for a 10-year period. When that 10-year period is up, I have no guarantee that allocation is going to be renewed, yet I have $100,000 worth of irrigation infrastructure that I could have a loan on. I am going to go out the back door. I know for a fact that the department has briefed banks. The banks that are carrying the loans are very concerned about the value of what they are lending against, as over the long term they have no guarantee that, for example, if a farmer defaults and they have to sell, there is actually going to be water to sell. What appears to be coming into this is that you get a licence renewal and over the period of the 10 years the value of your property actually reduces back to whatever it is in the tenth year and then, if you get a renewal, it goes up.

Mr SECKER—I understand all of that, but what has that got to do with trading and selling that licence? I understand what you are saying but what I am asking about is this: why are you against this idea that you sell your water value to your next door neighbour?

Mr Van Der Est—When the Pioneer guy was here, the particular example was about, I assume, irrigators drawing from a river where a guy 50 kilometres downstream can do it. But when you can only do it with guys within your area—typically, there might be half a dozen in an area—your choice is very limited as to whom you can trade with.

Mr ADAMS—Are you saying the infrastructure isn't there?

Mr Van Der Est—Yes, although the water is just under the ground.

Mr SECKER—I understand all that and I understand there is a difference in trading along a river, but what is the problem? You seem to be anti this trading.

Mr Van der Est—I am not anti it; I am just trying to put it into perspective in terms of what this perceived benefit is. Everyone is talking about water trading as almost some type of saviour or some huge great thing.

Mr SECKER—But that is not what you said earlier.

Mr Van der Est—In an allocated ground water example like the Lockyer, it is not that great a benefit.

Mr SECKER—I asked the question because, in your explanation earlier, you talked about how it was going to be horrible that the land value went down when you sold your licence to someone else. Of course it would; you would not have that ability any more. But that is completely different from what you are saying now.

Mr Van der Est—The licence may not be renewed.

Mr SECKER—Yes; it may not be.

CHAIR—It devalues as it is.

Mr Van der Est—It evaporates, just like that.

Mr SECKER—That is an argument for land rights, which I agree with.

Mr Logan—I would like to add to your point about water tradability, that 'farmers' does not mean anything to us. As Gordon was saying, it is being held up as, 'You're being allocated, so you've got less water than you used to have. We're charging you for your water but, hey, you have tradable water rights!' That means nothing to us. I have no spare water; I want more water. He has no spare water—

Mr SECKER—You could go and buy off your neighbours.

Mr Logan—No, I cannot. He wants some water. There is not a farmer in the Lockyer Valley who has sufficient water. Nobody would even think about trading me water.

Mr SECKER—So, if you have not got sufficient water it is underallocated or overallocated?

Mr Emmerson—With the underground system of water, your water moves downstream very slowly. It does not flow like a creek or a river.

Mr SECKER—I understand that.

Mr Emmerson—So, it is under the ground and there is very slow movement. To trade your water to someone else would mean they could not get ready access to it.

Mr SECKER—What is the condition of the Lockyer aquifer?

Mr Emmerson—Now?

Mr SECKER—Yes.

Mr Emmerson—It is pretty low. It depends where you are.

Mr SECKER—I think we had a submission from the Brisbane City Council saying that it is being pumped out at twice the sustainable rate.

Mr Emmerson—It depends what you call sustainable. We are still pumping at home and running one and half irrigators instead of two. Our bore, which we measured two weeks ago at 12.65 metres, in 1995 was 15 metres to water. So, it is not as bad as it was in 1995.

Mr SECKER—The Brisbane City Council is saying that it sounds like it is pretty right.

Mr Emmerson—It depends where they are talking about. Again, in the Lockyer, it depends on whom you are talking to and where they are. In some parts of the Lockyer, if you go into the Crowley Vale area, they do not get a recharge unless they get a flood. In our area, if the creek were to run now, by tomorrow morning my bores would be half full because we would just get a quick recharge.

Mr Logan—I think is generally accepted that aquifers everywhere are overused.

Mr SECKER—How many of the bores are metered?

Mr Logan—Just those in our area—the central Lockyer.

Mr Van der Est—About 175 farmers have their bores metered, but that could relate to anything from one bore to one farmer having 10 bores. So, about 175.

Mr SECKER—Have they started charging you for the water yet?

Mr Van der Est—Yes.

Mr SECKER—Per litre?

Mr Van der Est—Yes; per megalitre it has gone from $13.25 to $16 in one hit.

Mr Logan—That is our own bore water under our farm.

Mr SECKER—How long have they been charging for it?

Mr Van der Est—Since we became benefited.

Mr SECKER—Benefited?

Mr Logan—Since they built this dam that does not work.

Mr Emmerson—They built a dam and said, 'Seeing as we will, theoretically, get water out of the dam, you will get a benefit from the dam, so from now on you will pay for your water.'

Mr SECKER—But you do not get it?

Mr Emmerson—Nothing has come out of the dam, yet.

Mr SECKER—And they are charging you for the water?

Mr Emmerson—That is correct.

Mr Logan—There has been some water coming out of the dam, but we think we can—

Mr SECKER—It is $16.25 a megalitre. This is after you have paid all the infrastructure costs of putting the bore down, putting the pump down and putting in your own infrastructure to use it, like a diesel pump or an electric pump. It is probably costing you $200 a megalitre amortised over 10 years and they are now charging you with these meters. I am interested in this: on what basis did they bring in the meters?

Mr Logan—It was because you are in a benefited area.

Mr Emmerson—There was an agreement to put the dam there. The area it was deemed to benefit would have the meters put on. If one did not agree to put the meters on and to be allocated and pay for the water one did not get the dam.

Mr SECKER—That sounds like blackmail.

Mr Emmerson—I cannot say that.

Mr Logan—You have to look at the dam. We are saying that the dam does not work; perhaps the department might tell you that the dam does work. But we can probably give the figures.

Mr SECKER—It has not been full yet, has it?

Mr Emmerson—Once.

Mr Van der Est—No. Clarendon has not been full.

Mr Logan—You will see the dam and how it works later on. There are arguments on both sides. We are not going to sit here and say, 'It's an absolute total failure,' but we think it is sufficiently a failure—it is, in anyone's terms.

Mr SECKER—It is interesting that they have used that base. How long ago did this happen, by the way?

Mr Logan—They started charging in 1992.

Mr SECKER—They are trying to make bore meters in South Australia compulsory by 2005, and their basis is that they want to know that we are not overusing the aquifer.

Mr Logan—They have a lookout.

Mr SECKER—Exactly.

Mr Van Der Est—You are paying before you can blink.

Mr SECKER—Exactly.

Mr Logan—You have to see the other side of the story, too. With the metering of the bores, all the department is trying to do is to say, 'We don't want you taking any more out of the aquifer than is sustainable with what's going in,' and we appreciate that. But the whole basis of the start of the thing was a proclamation based on this benefit. We have done our side of the bargain. The allocations are coming in, the charges are in, some water is up and running—they are doing okay, thanks very much—but we are still waiting for our side of the story. You cannot really argue with it, although these gentlemen would like to argue with it and I think a lot of farmers would, but a lot of us probably do not argue with all of the science. We can understand that, if we keep pumping water out of that aquifer, our grandchildren might not have a farm to farm because we have used all the water. We understand that. Lots of us do have quite a bit of faith and understand a lot of the science. The department has put a huge amount of energy into the allocation process, examining the figures and how all the bores work. You cannot argue with a lot of it, but we still want the benefit to come with the process, and that is what we are still waiting for.

Mr SECKER—Some of the evidence you gave us earlier was that a lot of these meters are not working properly. What sort of meters do you have? Are they the impeller ones, the electromagnetic ones or a mixture?

Mr Van Der Est—They are a little cone turbine.

Mr SECKER—Like an impeller. The water goes through and, if anybody wants some, they just get a rod and stick it up the pipe and clamp it on over the pipe.

Mr Emmerson—Nobody does that.

Mr SECKER—Of course, nobody does that. The other query I have is about something that seems a bit strange to me. You said that you have concerns about the increased use of renewed water—grey water, I presume, or black water or a mixture; whatever you want to talk about—because of a clean, green image. But we have had evidence today that dairy farmers, quite rightly—we do the same thing—irrigate with the effluent from the dairy run-off. It seems a bit incongruous to say that we should not use renewed water.

Mr Emmerson—There is a big difference between cow effluent and human effluent, for one thing. The second thing—

Mr SECKER—Yes, the bacteria.

Mr Logan—There is also a bit of a problem in our area with the renewed water. That is a whole new ballgame that would require a different inquiry et cetera. It cannot go into the aquifer. It is not much good for riparian irrigators because it is deemed unsuitable.

Mr Van Der Est—The specific issue we raised was the high cost of it. Some numbers have been bandied around and we are really concerned with the financial viability for a lot of farmers. We have said that we have paid $16 a megalitre, straight up to $150. You can put the power and infrastructure on top of that. It would be between at least $225 and $250 a megalitre.

On a bale of lucerne, that will add a cost of, say, $1.25 or $1.50, and you know how that market goes. That is the concern.

CHAIR—Thank you very much. I am sorry we have to stop it here, but we will have further discussions, no doubt, on our travels and on site. I ask that a member move that we accept the supplementary submission as an exhibit.

Mr ADAMS—I will move that.

Resolved (on motion by **Mr Secker**):

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

Committee adjourned at 12.04 p.m.