

**SUBCOMMITTEE OF THE STANDING COMMITTEE ON
PUBLIC ADMINISTRATION AND FINANCE**

WATER SERVICES INQUIRY

**TRANSCRIPT OF EVIDENCE TAKEN
AT BUNBURY
THURSDAY, 29 JULY 2004**

SESSION 6

Members

**Hon Barry House (Convenor)
Hon John Fischer
Hon Dee Margetts
Hon Norman Moore (Participating Member)
Hon Ken Travers**

[2.20 pm]

SHERVINGTON, MS HELEN
Member, Southern Yarragadee Committee,
c/- Shire of Augusta-Margaret River,
Townview Tce,
Margaret River, examined:

Hon BARRY HOUSE: On behalf of the subcommittee I welcome you to the meeting. You will have signed a document entitled "Information for Witnesses". Have you read and understood that document?

Ms Shervington: I have.

Hon BARRY HOUSE: These proceedings are being recorded by Hansard. A transcript of your evidence will be provided to you. To assist the subcommittee and Hansard, please quote the full title of any document you refer to during the course of this hearing. Please be aware of the microphones, which are recording.

I remind you that your transcript will become a matter for the public record. If for some reason you wish to make a confidential statement during today's proceedings, you should request that the evidence be taken in closed session. If the subcommittee grants your request, any public and media in attendance will be excluded from the hearing.

Please note that until such time as the transcript of your public evidence is finalised it should not be made public. I advise you that premature publication or disclosure of public evidence may constitute contempt of Parliament and may mean that the material published or disclosed is not subject to parliamentary privilege. Welcome to the hearing. Would you like to make an opening statement?

Ms Shervington: I would, thank you. The South West Combined Shires Yarragadee Committee is a subcommittee of the South West Local Government Association, made up of the Shires of Bunbury, Augusta-Margaret River, Busselton, Capel and Nannup. It was formed in February 2003 following the Water Corporation's application to the Water and Rivers Commission to draw 45 gegalitres of water annually from the south west Yarragadee aquifer. I will make a few points on the present and future sustainable water sources for the south west and the current issue of the Yarragadee as a source of water for the metropolitan area. Although today's announcement to develop a desalination plant perhaps puts back a final decision on the Yarragadee, I believe that consideration of extraction from it is probably still on the cards. However, it is an issue that we can now look at a little more thoroughly, with better research and investigation. It might help the subcommittee to know what the combined shires committee is about and its key concerns on the Yarragadee. Firstly, it is concerned that the Yarragadee will be harvested before there is a clear understanding of the impacts of that on the south west, particularly the medium and long-term impacts. Secondly, it is concerned that the current and future water needs of the south west will not be properly considered. It is particularly concerned that extraction does not negatively affect the economic potential of the south west region. I am aware that people in the water industry have made statements to the effect that the Yarragadee is such a large aquifer that the extraction of 45 gegalitres from it will have little or no impact. I believe this is very simplistic and quite a frightening response. We have all seen enough environmental disasters in our State to date to be wary of this position. What is not so widely stated is that although talk is about extraction of 45 gegalitres, the current pumping from the Yarragadee in our region is approximately 65 gegalitres.

The existing reserves that have been set aside for use by the south west over the next 20 years - that is, for our whole region - are apparently 145 ggalitres. That is the Water and Rivers Commission allocation up to 2020. Some preliminary work has been done by the South West Development Commission on the future needs for the south west water supply. It estimates, based on low to medium-growth projections at this point, that by 2020 we will need 190 ggalitres. Given that growth in the region in the past few years has been consistently higher than the growth projections made by planning departments, our committee feels that, in fact, these projections of even 190 ggalitres for the south west region are still too low and that we need to be looking at well over 200 ggalitres a year being used by the south west region prior to or about 2020.

If we add the 45 ggalitres for the Water Corporation's application, we could reasonably expect the draw from the Yarragadee to be in the range of 220 to 250 ggalitres by 2020. What is not yet clear about the southern Yarragadee is whether it is dependent on recharge or whether it is a relatively confined historic aquifer. It appears from the current investigation that it naturally discharges 63 ggalitres a year into the Blackwood River, the Southern Ocean south of Augusta and Geographe Bay near Bunbury. With this information, the recharge rate required into the aquifer to become sustainable is getting closer to 300 ggalitres a year. This, of course, is in a period of declining rainfall. The committee believes that for the aquifer to be sustainable, it is reasonable that a recharge rate of at least 300 ggalitres a year must be irrefutably established. This would need to be done before the Yarragadee could be identified as a possible future water source for the metropolitan area.

The southern Yarragadee is a formation that, for the most part, sits under the Leederville aquifer formation. Apparently only a relatively small area near the Blackwood River, which is close to the surface, can recharge directly. It is in this area that the initial pump testing was carried out last year by the Water Corporation. My understanding is that the information gathered from this was fed into a computer model, together with rule of thumb information on recharge rates from experience with the Gngangara mound or the northern Yarragadee. We believe that, following this, the Water and Rivers Commission developed a set of criteria to determine the acceptable degradation of the south west environment as a result of extraction. I have here a Water and Rivers Commission document published in January. This concluded that an acceptable degradation is increased salinity of up to 10 per cent of the Blackwood and its tributaries, the reduction of water levels in the internationally significant Busselton wetlands of up to one metre and the reduction of ground water levels of up to one metre. That is an issue over which committee members' phones began to run hot. As you will be aware, the extensive horticulture and viticulture in our area is dependent on ground water. In the south west, dairy farmers are becoming increasingly dependent on high-protein summer crops watered by irrigation. Those farmers have invested in extensive infrastructure to access their water. A reduction in ground water levels can mean replacing bores and installing new pumps. Many farmers raised their fear that the pressure between the Leederville and Yarragadee aquifers is what keeps a positive head in many parts of the Leederville aquifer from which they draw their water and that the reduction in ground water levels could seriously affect their livelihood. An impact on the pressure in the aquifer, particularly the Leederville aquifer, will also affect their ability to expand their operations in anyway.

Following this initial investigation and after the initial modelling on the bore field in the Blackwood ground water zone, the Water Corporation moved some of its investigation into the Busselton-Capel ground water zone, where the Yarragadee is covered entirely by the Leederville aquifer. It is unclear whether it is undertaking the same level of testing as occurred in the Blackwood area. Our committee does not believe it is and the relationship between the two aquifers is not being examined closely enough. Our committee urges that no extraction from the Yarragadee occur until there is a very clear understanding of the relationship between the Leederville and the Yarragadee aquifers in the Busselton-Capel ground water zone.

[2.30 pm]

The other key economic point to make is that the region is undoubtedly the premier tourist destination in Western Australia. Its attraction is the natural environment - its streams, forests, wetlands and lake caves. Water extraction without a clear understanding of the environmental consequences has already occurred on the Gnangara mound and at Jandakot, leading to some level of damage. If significant environmental damage were caused in our region because of water extraction, our tourism industry would be seriously affected. The combined shires' Yarragadee standing committee believes that the existing Western Australian water strategy produced by the State Government is too Perth-centric and does not take account of regional needs. The application to take water from the Yarragadee highlighted this point because the focus was consistently on Perth's water needs, not the water needs of the south west. It is hoped that this parliamentary committee will not make that same mistake.

Following lobbying by our committee, the South West Development Commission commenced the process of developing a long-term water strategy for the south west region. Although preliminary work on this was reported to our committee in January this year, it is my understanding that the commission does not have the funding to further this work. We have had no updates since that time. Yet, we feel this information is very important and would be necessary for your subcommittee, too, to properly address the terms of reference relating to the future water needs of the State.

In summary, the combined shires Yarragadee committee has a current stance that if water is to be taken from the Yarragadee for use outside the south west region, it must be proved to be a genuinely sustainable yield and to not have a negative impact upon the region's economic and environment, which is really saying the same thing. It is hoped that this committee will take this into account when looking at the future of the Yarragadee as a future water source for the State.

Hon BARRY HOUSE: Have the south west zone shires ever formed a standing committee before on any other issue to address matters as you have done with this issue?

Ms Shervington: I cannot answer that question. I have not been involved in local government long enough to know. I cannot answer.

Hon BARRY HOUSE: I am just not aware of one.

Ms Shervington: I have never heard of one, but I have an idea something was done with waste management at some stage. Yes, there was one.

Hon KEN TRAVERS: It was a very successful waste management and recycling process. In fact, the person who organised it won an award as a young entrepreneur, if I remember correctly. It was a couple of years ago involving a number of south west councils.

Hon BARRY HOUSE: You have published a report or you have put together some correspondence. Is the subcommittee able to get copies of that correspondence?

Ms Shervington: I could certainly arrange for the subcommittee to get that correspondence.

Hon BARRY HOUSE: That would help give a full picture of what you have been doing.

We heard earlier today from the Department of Environment that its best-guess estimate of the southern Yarragadee recharge was 200 gegalitres per annum, or maybe less. In light of what you have said to us, with an annual need estimate of about 300 gegalitres, the figures do not add up. Is that the major basis for your conclusion?

Ms Shervington: It is indeed. In fact, it is about the south west's needs. We feel the Yarragadee will be a reasonable source for the south west's projected needs for the next 10 to 15 years, but the south west itself must look for further water resources if it continues to grow at its current rate. That is exactly what we are saying.

Hon NORMAN MOORE: Have you contemplated where you might get 100 gegalitres from?

Ms Shervington: I was interested in what Roger had to say. We get a lot of rain!

Hon NORMAN MOORE: It is an interesting issue. I would like to see how you estimate 300 gegalitres to be the requirement for the south west in 2020.

Ms Shervington: I think 63 or 64 gegalitres of that is the natural discharge rate. Of course, I understand that if the pressure were reduced in the Yarragadee, the discharge rate would drop. Regarding what is currently going into the Blackwood, I think the modelling showed that the Blackwood could fall by seven metres over the summer, when it has significant discharge from the Yarragadee into the Blackwood. However, we are talking about modelling again.

Hon NORMAN MOORE: You were saying that by 2020 the south west's needs would be about 300 gegalitres. Can you provide that -

Ms Shervington: No, I said about 200 gegalitres, but there is that further natural discharge of the Yarragadee, which means that we need to look at a recharge rate of about 300 gegalitres overall - not a recharge rate of 200 - to make it a sustainable removal of 200 gegalitres.

Hon NORMAN MOORE: It is very complicated. You have a potential problem, like other places, in not having enough water. People talk about shifting it around in Western Australia; that has been a feature of water management in this State for a long time. It is not necessarily successfully, but that is what we do. I think that if such figures will be brought forward as the projected requirement, you may have to take more water from the south west Yarragadee for your own purposes. I wonder what people will think about that, as opposed to giving it to somebody else.

Ms Shervington: I think that has been the position of our committee all the time: although we currently take 60-odd gegalitres out, our projected needs are up to about 200 gegalitres. If 45 gegalitres of that water is already going to Perth, it will put the south west under stress within a five to 10-year period, as opposed to a 15 to 20-year period. I think that is the basis of the argument.

Hon KEN TRAVERS: You made mention that you were concerned about the Busselton-Capel interchange between the Leederville and the Yarragadee aquifers. Maybe the easiest thing would be for you to look at the transcript of evidence of the Water and Rivers Commission people who spoke to the subcommittee this morning. I am intrigued to know whether it is the same area. The hydrologist this morning mentioned that from his own work he felt the aquifers were interconnected; in fact, there was no separation between them. I do not know whether we are talking about different areas. You made a comment that you did not think enough work was being done on that aspect. I am not sure whether we are talking about the same area or whether they have now done the work since the -

Hon DEE MARGETTS: He said that he thought they were separate in some areas, and more likely to be -

Hon KEN TRAVERS: He made mention - I thought it was around the Capel area - that the two aquifers were clearly interconnected, and that there was no separation between them. I cannot remember the exact wording. Maybe you could look at that section of the transcript when it becomes available and see whether they were talking about the same area, and whether that allays your fears or concerns.

Ms Shervington: I do not know that it will allay our fears, but I certainly will look at it.

Hon KEN TRAVERS: Maybe you could outline your fears, because he clearly indicated that he was aware of those facts and the connection between the two aquifers. I am not sure. I thought your fear was that there was not enough knowledge about the two aquifers.

Ms Shervington: I am relieved to hear that because six months ago they were saying that there was very little connection between the pressure in the Leederville and the Yarragadee. In fact, it was a downward-driving pressure, not an upward-driving pressure. The anecdotal evidence-

information provided to us by farmers and the shires relating to their own bores was that it was quite different and there was a much closer relationship than indicated in the reports that were coming through on the Yarragadee investigations. I am very glad to hear that they are now saying that there is a much stronger connection.

[2.40 pm]

Hon DEE MARGETTS: I presume a lot of the extra water use will be taken up with increased irrigation for agriculture. You might explain what portion of that projection your committee thinks will be as a result of urbanised population and what proportion might be as a result of increased irrigation agriculture.

Ms Shervington: I cannot answer that. That was based on very preliminary work done by the South West Development Commission. We had asked that a long-term water strategy be developed for the south west and this was the response to that request. The South West Development Commission was asked to commence the development of a water strategy and these were the initial figures and projections it brought to us, but they were clearly still pretty rubbery and needed much more work. On following it through, we have been told that the South West Development Commission does not have the funding to continue to develop an effective water strategy for the south west. A real concern of the committee is that we do not have a fairly clear idea of what is occurring and what our water needs are. That is the other concern about the Yarragadee. The projections are still a bit fuzzy because the research has not been done.

Hon BARRY HOUSE: I think you will find that some of that information has been fed into the community feedback program headed up by Fionnuala Hannon, which we heard a bit about this morning. We have not gone right through the documents but has some of that projection work in all areas been fed into that process?

Ms Shervington: Yes; it was preliminary work and my committee was not entirely happy with the work done by the Water and Rivers Commission. The preliminary work done by the South West Development Commission came up with different answers.

Hon DEE MARGETTS: A common theme, if you like, from many of the witnesses today, and I guess on some of the other occasions, is the desire to have better, more accurate information about not just the water situation at a point of time, but also the changes that are likely to occur in the processes. Has your committee discussed where the funding for that ongoing water management should come from? There is the issue of water areas within the Water Corporation's catchment and those outside it but within the areas of your interest as well. Does your committee have any view about where the funding for reviews, monitoring and research should properly come from?

Ms Shervington: I suppose when you say "the Water Corporation's catchment" you are talking about the areas that are already being utilised by the Water Corporation.

Hon DEE MARGETTS: The Water Corporation does not do the catchment management. It is theoretically done by the Water and Rivers Commission, but it does not have specific funding to fully cover that. We have the dilemma of how to fund all the water management that people say needs to happen within the corporation's bailiwick and even those areas outside the corporation's bailiwick that are privately sourced water, etc.

Ms Shervington: Two water management zones were being investigated - namely, the Blackwood and Busselton-Capel zones - as part of this investigation into the Yarragadee, although most of the work was done on the Blackwood. I think our position was that a proper long-term strategy needs to be developed for those two ground water zones, which is roughly cape to cape - take a line across to Bunbury. The attitude at the time was that if the Water Corporation wanted to harvest the Yarragadee, it should pay for it. We considered that it should be part of the investigation into the harvesting of the Yarragadee.

Hon DEE MARGETTS: Thank you. Finally, does your group have a view of what use should be made of strategies for reuse, conservation and efficiency within your region to make more water available?

Ms Shervington: That is the sort of information we hoped would come out of an investigation into an overall water strategy. Are you talking about something like the Perth water strategy or the state water strategy?

Hon DEE MARGETTS: One of the presentations we heard today had a proposal for, I guess, saving a certain amount of useable water that would otherwise not be useable. I guess your group of shires would be supportive of clear strategies for water conservation reuse and recycling.

Ms Shervington: Absolutely. Our committee was formed as a result of the application to take 45 gegalitres from the Yarragadee aquifer. Its focus was very much on just that particular issue. Its two clear objectives were that information about the Yarragadee be complete and full prior to the extraction of 45 gegalitres and that a long term-water strategy be developed in the south west area so that we had a better understanding of our water resources and where we were going with it. We have not had an opportunity to expand beyond those relatively narrow objectives for which the committee was formed.

Hon DEE MARGETTS: You said that the Water Corporation has a responsibility to undertake proper, quality research so that the community can understand the water processes and so on. Where do you think the funding for the longer-term south west water strategy should come from?

Ms Shervington: It could not come from local government; it is very poor. The State owns the water; it has responsibility. It is part of our overall responsibility, I think.

Hon DEE MARGETTS: Do you see a role for some of the major private water users? Some of those sources are actually controlled privately rather than by the State.

Ms Shervington: That is moving into the difficult area of licensing and water management. I feel I would be going way beyond my committee's brief if I commented on water licensing.

Hon DEE MARGETTS: I was not talking about water licensing. We are talking about state responsibility at the moment. This has been in the private market regime since the 1995 COAG water reforms. Some of the area might theoretically be part of the State, but it is owned and controlled by private interests now. Would your committee consider in the future looking at whether major private water users need to contribute to the overall management of that resource?

Ms Shervington: I find it a difficult question to answer because it is not an issue we have addressed in any way, shape or form. The Whicher committee has been set up to deal with those issues. We have been aware all along that in taking up the Yarragadee issue we have been treading on the toes of the Whicher committee somewhat. I suppose we have not moved too far down that track because it is seen as the role of the local water resource management advisory group. We have not wanted to take over its role. I guess we have moved away from that. I have difficulty answering that question.

Hon DEE MARGETTS: Fair enough. I guess it is one of the difficult questions we will all have to answer in the future. Thank you for that.

Hon BARRY HOUSE: Is the work of the South West Development Commission to which you referred publicly available or was it done for only your committee?

Ms Shervington: No; my understanding is that it was to become a document that would be released by the South West Development Commission and go through a consultation process. The commission has reported to us on its progress once. We asked it back, but it has said it has done no more work.

Hon BARRY HOUSE: Perhaps we can follow up through the subcommittee if anything to which you have referred is available. Is there anything you want to say in closing?

Ms Shervington: That is all. Thank you very much for listening to our position.

Hon BARRY HOUSE: Thank you very much; we appreciate it. Thanks officially to everybody involved in putting today's program together: Kelly Campbell, Jan Paniperis and particularly the Hansard reporters.

Committee adjourned at 2.50 pm