# STANDING COMMITTEE ON PUBLIC ADMINISTRATION

## GOVERNANCE OF WESTERN AUSTRALIA'S WATER RESOURCES

# TRANSCRIPT OF EVIDENCE TAKEN AT PERTH WEDNESDAY, 30 MAY 2007

### **Members**

Hon Barry House (Chairman)
Hon Ed Dermer (Deputy Chairman)
Hon Matthew Benson-Lidholm
Hon Vincent Catania
Hon Helen Morton

### Hearing commenced at 11.20 am

#### **CAMKIN, MR JEFF, examined:**

**The CHAIRMAN**: On behalf of the committee, I would like to welcome you. You have signed a document entitled "Information for Witnesses". Have you read and understood that document.

Mr Camkin: Yes.

The CHAIRMAN: These proceedings are being recorded by Hansard. A transcript of your evidence will be provided to you. To assist the committee and Hansard, please quote the full title of any document you refer to during the course of this hearing for the record. Please be aware of the microphones and try to speak into them. They are for recording purposes, not amplification. 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 committee 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 your public evidence may constitute a contempt of Parliament and may mean that the material published or disclosed is not subject to parliamentary privilege.

Would you like to make an opening statement?

**Mr Camkin**: Thank you for the opportunity. In 2003 I was awarded a Churchill Fellowship to look at water management in places around the world and I chose to look at South Africa, the United States and Brazil. I looked at strategic approaches to water management, legislation, national planning, state planning and policy environments - the overall governance of water.

I made a commitment to the Churchill Memorial Trust that I would take the opportunity to disseminate the information that I gained from that visit. I prepared a fairly significant report, which was posted on the Internet on the memorial trust website in 2004. I summarised my report and provided it to the committee as my submission to this inquiry because I felt that some of the things that I had learnt overseas may be relevant to what the committee might be looking at. It follows on from my commitment to disseminate my findings as part of that Churchill Fellowship commitment.

**The CHAIRMAN**: Thank you. As you are aware the committee put together a terms of reference into water governance some time ago and your submission was one of several submissions we received. For the record, can you explain the positions you held at the time and how your interest and expertise came about in this area?

Mr Camkin: I have held a range of positions in natural resource management from about 1992, first in fisheries and more lately moving into water management in 1997. I am appearing before this committee in a personal capacity. I currently work as a sustainability specialist with the Commonwealth Scientific and Industrial Research Organisation. I am working on what is called the Northern Australia Irrigation Futures project. It is a collaboration between the Western Australian, Queensland, Northern Territory and Australian governments and various other players research organisations etc. Prior to that position, I held a range of positions with what is now the Department of Water and its predecessor organisations, the Department of Environment and the Water and Rivers Commission. At several times in that period I was on secondment to other organisations. At the time of my Churchill Fellowship I was on placement to the Minister for the Environment's office; the minister at that time was Judy Edwards. Subsequent to that I had short stints back with the department and then I was on secondment to the Department of the Premier and Cabinet for a short time as part of a team that undertook a review of water governance and provided

a report to government. That report is a cabinet document; therefore, I am not able to go into the details of it.

**The CHAIRMAN**: For the committee's benefit, your Churchill Fellowship report contains 23 recommendations which, I understand, have come to fruition.

**Mr Camkin**: Yes, many of them have; that is correct.

**The CHAIRMAN**: Can you summarise for the committee the broad thrust of your report's recommendations and the responses to those recommendations?

Mr Camkin: I will continue to bring my commentary back to what I saw overseas. My Churchill Fellowship study followed on from a previous international study in 2002 to Argentina, Chile, Peru, Mexico, the United States and Paris. Probably the key findings out of those two study tours was the importance of water governance, the importance of getting the governance right and getting a strategic framework in place that provided the guidance to those who were operating at the more operational level and the day-to-day capacity. I identified the need to have in place clear responsibilities for government agencies and a clear water policy that supports the fundamental principles for water management, flowing down to very clear water legislation, policy and planning environments and putting that into place. It really struck me that unless you have that clarity at the top end of the governance, you may well struggle.

Since then, if you have seen the recommendations - I was reflecting on them last night - the first five, which are the key recommendations in the report and are at the top because I felt that they were the most important, have now been implemented in Western Australia.

The CHAIRMAN: Would you repeat that last part again, please?

**Mr Camkin**: The first five recommendations and others, but the first five in particular, have now been implemented in Western Australia.

**The CHAIRMAN**: I note times have moved on, even since this committee set up its terms of reference. Can you explain in what way those five principal recommendations have been met in WA?

Mr Camkin: I will refer back to them again. The first recommendation was to develop a new strategic water framework comprising a state water policy, a water resources act and a state water plan. Recommendation 2 refers specifically to a state water policy. Recommendation 3 refers to the preparation of a comprehensive state water resources bill. Recommendation 4 refers to the preparation of a state water plan. I will make a correction: it is the first four recommendations that have been implemented to date. Whilst they have not been fully completed, the proposed water act is still going through the process of development. It is the intent of government to introduce a new comprehensive piece of water legislation. A state water policy framework is being prepared. Just a few weeks ago the first WA state water plan was released. From what I saw overseas and the recommendations I drew from the discussions that I had in the places I visited, those three things are a very good step forward to putting in place the governance arrangements that are needed. [11.30 am]

**The CHAIRMAN**: Of the three countries that you visited, which most closely resembles, or approximates, the weather and arid conditions in Western Australia?

Mr Camkin: There are places in each country that resemble the circumstances in Western Australia and that we can draw direct analogies from. There are other places that we can draw indirect guidance from in terms of what we might do in Western Australia. One place that struck me as having a direct analogy with the situation in Perth is the Cape Town area of South Africa. That area has a rapidly growing population. It uses a multilayered aquifer system, similar in some ways to the Gnangara situation. The challenge for them is in trying to manage the competing and increasing demands on the use of that resource, and in understanding the complexities of managing

such a multifaceted aquifer system and multifaceted-use environment near a major city. That is one example. South Africa in the post-apartheid period has undertaken a major policy reform agenda in water. That commenced with some amendments to the constitution, and then the development of a set of key principles for water management in the state. They then developed a water act based on those key principles, and a national water resource strategy that aimed to then implement the water act. They then went through the process of establishing their lower-level governance arrangements, and their catchment management agencies etc, to implement that legislation. While that breath of change came from different fundamental needs in South Africa, and while a lot of it was about redressing some of the inequities that have resulted from the apartheid period, there are many lessons that I think we can learn from the way they went about that change, and the way they undertook to engage with key stakeholders in the community through that very complicated and long process. Also, another very clear message from them was the need to ensure that the capacity to implement the policy and the governance arrangements is being delivered and built as we are going through that process. They are facing very significant challenges in implementing their policy, because of the human resource capacity limitations that they have. For me, that was an extremely strong message for Australia, not only Western Australia.

**The CHAIRMAN**: What about the other two places that you visited - Brazil and the United States? Can you explain their similarities or differences compared with the situation in Western Australia?

**Mr Camkin**: I visited western US states, where the water management is typically based on a fundamental principle of prior appropriation. That means that essentially whoever claims and starts using the water first has a senior entitlement to those who come later, so the water is allocated down the list of seniority. That is fundamentally a very different policy principle to what we have in Western Australia and Australia. If you add that together with the nature of US society being quite a litigious society, it puts a lot of pressure on their water policy, their technical capacity and their human resources. That means that they have to come out with a very strong policy that can stand up under rigorous attention through their judicial systems. I was very impressed with the capabilities of the people operating in the water environment in the United States. I guess the key point for me was that despite the differences in the core policy approach, there was a lot that we could learn just from looking at the strength of the policy environment that they have created because of that pressure from the court system. In terms of the physical environment, there are numerous examples of significant water transfer systems, particularly in California, to move water around the state. I heard stories one way or another as to whether that is in the best interests of the state. That was done for similar reasons as we have seen some water transfers in Australia in the past.

Brazil holds something like 10 per cent of the world's freshwater resources. Despite that, there are areas of Brazil that are significantly dry and lack water. There have been numerous proposals to move or transfer water to those areas over the years. In those areas, they going through similar questions to what we are going through in Western Australia about the implications of transferring water from one place to another, and about how to manage an increasing population in areas where there is no increase in water resources. I came across an example of a change in water flows in one of the river systems in Brazil that almost mirrored the decrease in our stream flows in the south west of Western Australia, except that in their case it had increased in a similar way.

**The CHAIRMAN**: What were your observations about the different layers of government involvement in water governance, administration and management at federal, state and local levels?

**Mr Camkin**: They all differ. In South Africa, a fundamental principle is that water is both a social and economic good, and the policies are framed around that. Their governance structure aims to provide a core direction of decisions. Some decisions are made at the national level, in the best interests of the nation. Other decisions are then delegated down to the catchment management

authorities. Their national water resources plan makes the sorts of bulk allocations at the catchment level; that is, that the catchment has so many gigalitres of water, based on reviews of expected demands, and availability of water etc. Once those bulk allocations are made, the catchments themselves take responsibility for managing that. So, while that system is very different to the system in Australia, and certainly Western Australia, there are some analogies if you take that down to the state level, so you replace the position of their central agencies with the state agencies in Western Australia. There are some questions about where we are going in the long-term with the role of the community in that sort of water management. Western Australia has a very centralised approach to water management as compared with South Africa, and also as compared with Brazil. The Brazilian arrangements are very, very similar to the South African arrangements. They are both very new, and they are both sort of fundamentally based on core decisions being made by the national body based on what is in the best interests of the nation, and then being clear about what decisions will be made there and what decisions will be delegated down further. There seemed to be some benefits in having that clarity in the decision-making responsibility.

[11.40 am]

**The CHAIRMAN**: Do you think we have moved in the right direction in recent years to address some of those issues?

Mr Camkin: I do, absolutely. I think we have made some very good steps forward in the last few years. As I said before, I do think getting in place some clearer philosophy about where we are going with water management in the state has been a very good thing, and the state water plan is a very good step forward. It will take some time to iterate on the state water plan. I expect that it will become increasingly sophisticated over time. California probably has the most sophisticated state water plans that I have come across, and I looked at this issue in quite some detail when I was overseas. I think in 2006 - I might need to check that - they finished their last update of the California state water plan, and just last week they started the next update process that is due for completion in 2009. But they have been doing that since about 1953, so they have some experience of the iterations and their understanding of the communities that come along, and stakeholders are able to contribute significantly to the process.

**Hon ED DERMER**: Could I go back a little bit? Earlier you talked about your experience in South Africa. I understand, I think correctly, that you were saying the lack of appropriate human resources is a restraint on progress. I wonder if you could tell us a bit more about that.

Mr Camkin: The demands and challenges coming for water management into the future around the world is actually an issue that I have seen everywhere I have been - in Western Australia, Australia, nationally and every place I have seen overseas and everything I have read. A lot of the current expertise in water is close to retirement. In South Africa they have also had a significant immigration of people out of the country and some of that expertise has gone with that immigration. They are obviously training and developing new people in that environment, but it appeared to me, and certainly many people commented to me, that their biggest challenge was to have the human resources and the skills needed to implement what is a very forward-thinking policy environment, but one that needs quite a breadth of skills.

**Hon ED DERMER**: Are we talking about engineers or economists?

**Mr Camkin**: Water management increasingly requires a large range of skill sets. Whereas engineers and hydrogeologists were probably the core of water management 20 years ago, now we are looking at a much greater range of things like biological expertise; ecosystem management; modelling skills, which are really critical and in critical short supply, it appears; economics - people who are able to bring all of these together to understand the full ecologically sustainable development issues relevant to potential water developments or irrigation proposals. So we need more skills in each of those areas and more skills in integrating.

**Hon ED DERMER**: So it is a multidisciplinary package?

**Mr Camkin**: Very much so.

**Hon ED DERMER**: Of those various types of expertise, where is the shortage most acute in Western Australia, in your view?

Mr Camkin: That is a very good, topical and difficult question. I am also president of the Australian Water Association in Western Australia, and we have identified this as a significant issue for the state, as it is nationally. The Australian Water Association has also identified this as a significant national issue. Nationally, the AWA is part of a program called the Water Industry Capacity Development program, which as a first step is trying to identify what the current courses are that are available in Australia that are delivering skills into water management generally. What they are intending to do also is undertake an audit of skills available now and what is necessary into the future. Within Western Australia we have started to bring together leaders in water in WA to talk about this issue and to investigate the interest in a more collaborative approach to try to develop the skill sets we need; being able, for example, to give guidance to the universities of exactly the sorts of skills we are going to need into the future. Why it is a difficult question at the moment is that we have not yet done the detailed analysis of what we need. We are intending to do that, and I have a meeting this afternoon to work on that; but some of the things that are coming up already are hydrogeology skills, particularly in Western Australia with our heavy emphasis on groundwater use. A lot of the resources and skills in Western Australia have been taken out of water directly and into mining companies etc with the current resources environment; so, that is a bit of a drain on the situation for those more closely involved in water. What we are talking about is trying to develop a whole set of skills. Sometimes they might be working in the mining sector, sometimes they might be working in water management agencies, but it is a skill set that is available to the whole environment. Modelling skills is another one that has been identified, and the one I mentioned before about being able to integrate these things across ESD. I think the other key area is in the social sciences and putting more capability and understanding into the social impacts of options.

**Hon ED DERMER**: Impacts on local communities and that kind of thing?

Mr Camkin: Yes.

**Hon ED DERMER**: You referred to an analysis of the skills requirements. I am just wondering, and again I imagine this might be a difficult question to answer, that we perhaps may be able to receive some information from that analysis.

**Mr Camkin**: Yes. In the national process, there is a proposal for funding through the National Water Commission. Within the state, AWA is talking with the Chamber of Commerce and Industry, and I have a meeting with them this afternoon to develop the methodology for this audit. So we are a little way away from it, but if we get the information within the timeframe of the committee, I am happy to provide it.

Hon VINCENT CATANIA: I have a question following from what Hon Ed Dermer was saying in regard to the skills shortage that we have to do with water. Which of the three countries that you visited are heading down that path and trying to work out ways where they can have that expertise for the future; identifying also, I suppose, having a relationship and identifying what are the possible water sources for the future and trying to develop those skills to go with those water sources? From the three countries that you visited is there one that we can model ourselves on, or that you think is heading in a direction that we should be heading in?

**Mr Camkin**: None of them stands out. They all have the same problem, the same challenge and initiatives that I came across in various places. I remember being told by one person I interviewed in Brasilia that they had a very high focus on raising the proportion of staff that held PhDs, for example, and I think they were providing some sort of support to get them to that. There are others that I am still talking to in the United States that are interested in running exchange programs with

people in Australia to share expertise. Those sorts of opportunities are available. That is an area that we could look at further. In terms of developing university courses that will deliver the skills, I really did not come across any clear programs that were delivering skills but it was not a focus that I was looking at. It is more that this is a big issue and there is need for a capacity to implement all these grand policy ideas that various places are coming up with.

[11.50 am]

Hon HELEN MORTON: As a committee we took ages to try to understand the governance structure and the government agencies involved, how decisions were made, who gave approval for what and things such as that. I am not sure that I fully understand it now, even in WA. Is it unnecessarily complex in WA or is what happens in WA ideal or suitable? Is our structure equivalent to other countries or is there something that would be better from what you have seen? In your opinion, what changes should we be looking for?

**Mr Camkin**: I saw some pretty complex places overseas. California has about 3 500 water organisations of some sort or another. It is mind-bogglingly complex.

**Hon HELEN MORTON**: Was this the most advanced place you visited in terms of water management?

Mr Camkin: That was the point of my whole trip. Everywhere I went I saw something that we could learn from. I would not like to say that one place is the best and another place is the worst. People are interested in learning lots of things from Western Australia as well. We are doing some really good stuff here too. Another core learning for me was that there is no right or wrong way of going about this and no right or wrong governance model or management system. It is really about tailoring something that is right for the community of Western Australia. Are we complex in Western Australia? I do not think Western Australia is complex, not in an institutional sense. There are not that many players. Over time it will get more complex. If we reflect on the past five years, the number of people and organisations that have realised that they have an interest in water and need to understand it better is increasing very rapidly. As that continues to increase, we may see the establishment of bodies such as water users associations that start playing a stronger role. There have been a few attempts to set them up in the past. They may play a stronger role in helping to establish policy.

There is a reference in my report to Kansas and some changes that it went through in the 1980s. I put a two-paragraph quote in there because it is directly analogous to what we were going through in the early years of this decade. They followed a similar path to us in establishing a ministerial subcommittee for water and starting to bring together all those various players at ministerial level who have some responsibility. Water is more and more being seen as something that influences many aspects of our lives and therefore many portfolios within the governance structure. That sort of system seems to have some benefit of making sure that portfolios right at the very top level are coming together because water brings them together. We have only one major water service provider in Western Australia. We have several other small ones. That in itself is a very simple arrangement as compared to just about everywhere. They do a good job.

**Hon ED DERMER**: You mentioned Kansas. Presumably, by looking at your report, we can track down the original Kansas documentation to examine that further?

**Mr Camkin**: I have hot links to reports that summarise that period of change.

**Hon ED DERMER**: I imagine you chose the three countries that you visited with an expectation that there would be important things to learn from each. Given what you might have learnt subsequently, are there any other international jurisdictions that may be more instructive than others?

**Mr Camkin**: I deliberately chose South Africa, and Brazil in particular, because it had a reputation as a world leader in the area that I wanted to look at - governance and national policy and therefore,

by extension, policies at state level. That is why I focused on Brazil. I focused on the US because I visited there two years earlier and felt that we could learn more by looking at the other states. Like many people, I have spent a bit of time reading about what is happening in other countries. I have not visited them, apart from the Latin American countries. I could not give you clear answers as to what stands out best to look at next. Certainly, there are aspects of water management in France, for example, that are held in high regard. Spain is another. I saw some things in Argentina in terms of the relationship between government and the community and how decisions are made at the local level that I thought were really clever that had been in place for hundreds of years. Water management is not a new thing; it has been around for a long time.

**Hon ED DERMER**: I have heard that there are parallels between the climate in Spain and Australia.

**Mr Camkin**: Spain is spending a lot of time and energy on desalination. A fair few people from Western Australia have visited Spain and looked at that aspect of water management. Some of the legislation in Argentina was based on the original Spanish arrangements.

**Hon ED DERMER**: If we go back enough hundreds of years, it would be a Spanish colony.

Hon VINCENT CATANIA: From your knowledge of other countries, do you see us travelling in the right direction compared to the rest of the world? Are we on the right track? How would you rank us in looking towards the future? More importantly, from where we are at the moment, how would you rank us if you could give us a ranking from one to 10 compared to the places you have seen and researched?

Mr Camkin: It is really difficult to give a ranking, and I do not think I should. The period from 2001-02 when we hit that dry couple of years really channelled the community and the government's focus on water in Western Australia. The learning and the understanding of what water management is about in all areas has really skyrocketed. That sets us up with a pretty good platform for progressing. The reform agenda that has happened over the past few years - you saw my recommendations and the agenda has been largely consistent with that to date - puts us on the right track. It is not a case of the job is done, let us brush our hands and move on to something else. We still need to do a lot to take advantage of the relatively good position we are still in. That was a driver for my international study tour - the view that we are pretty well off in WA in water management. People who have come before us have been cautious and have done a pretty good job. The situation is changing very quickly because of climate change and the rapidly escalating demand and the significant need for more skills etc. If we do not get on top of it, we could end up in the same place.

[12.00 pm]

**Hon VINCENT CATANIA**: Do you see us as leading the water agenda nationally?

**Mr Camkin**: In some ways we are, and Malcolm Turnbull has reflected that in his comments. The holistic approach to water in Western Australia has been a step forward that other places have not taken. The security through diversity concept has taken us a few steps forward, and added with our governance arrangements, they have been good. The biggest challenge is still going to be our human resource capacity.

**The CHAIRMAN**: You mentioned water users groups. I am familiar with some that have been around for quite a while in places like Manjimup and Carnarvon. They have had a mix of advisory and management roles. How do you see their future? Is there a perfect model? Will they have a role just as advisory bodies or in the management of the resource?

**Mr Camkin**: That is a really good question and one that I looked at a lot when I was overseas. The Manjimup water advisory committee was established and supported by the agency to some extent. There have also been attempts to establish water user groups. I think there was a south west water coalition, for example. They are more independent organisations. Both of those types of

bodies are in place in just about everywhere I have been. The independent water users build their capacity to influence policy over time and there are various forms of committees that inform the governments directly about how to make sure that government policy is practical at the local level. I have mentioned South Africa and Brazil. A fundamental core to their governance arrangements is the establishment of catchment management authorities or agencies - the name varies - that have decision making responsibilities. For example, in Brazil they are responsible for determining whether a fee applies to water licences and, if so, what that fee should be and what it should be used for. That responsibility is contained within clear legislative guidelines. My personal view is that this issue is a big policy question for Western Australia for the future. We currently have a fairly centralised way of managing water. Although we have advisory committees and local regional officers of departments that do a great job linking with the local community, the big question is where to go in the end with the responsibilities for decision making as opposed to just advisory roles. That is probably one of the long-term policy issues that is not all that clear in Western Australia yet.

**The CHAIRMAN**: You mentioned that you are the president of the Western Australian chapter of the Australian Water Association. Can you tell us a little bit about what it is, where its members are drawn from and what is its broad role?

Mr Camkin: Certainly. The Australian Water Association is a national organisation that has been around for - I should know this - about 40 years. Its head office is based in Sydney and it has branches in each state that are headed by the president, of which I am the president of Western Australia. It is a membership-based organisation of around 4 000 members nationally and 400 in Western Australia. Our objective is to support the sustainable management of water resources. We largely do that by helping the transfer of knowledge of people involved in the water sector; helping people outside those directly involved understand water better through publications, public events, major conferences and those sorts of things; and providing a network for people within the sector to make contact and share knowledge with each other. In Western Australia we have a particular focus on putting on technical events and social events. For example, on Monday this week we held a two-hour event with four speakers who gave a range of presentations on reuse issues. We held another event two weeks ago on another aspect. One of our major events each year is to hold a lunch with a major figure, typically in government. Next week John Kobelke, the Minister for Water Resources, will be at the lunch. About 150 people will attend that event next week to hear about the government's intentions regarding water in the state. We put on those types of events to help the process of water management in Western Australia.

**Hon HELEN MORTON**: I am interested to know whether Western Australia can do it on its own or whether the commonwealth government must be involved. If it must be, what does Western Australia need the federal government to do to be involved in water governance?

**Mr Camkin**: I reiterate that I am talking on a personal level on this.

**Hon HELEN MORTON**: I understand that. I have written down that it is your personal view.

Mr Camkin: Could Western Australia go it alone? Probably. Should we? No.

**Hon HELEN MORTON**: That is what I want to know. Why?

Mr Camkin: Water must involve a partnership at a number of levels between the federal government and state government, between state government and local government, and between community groups and industry groups. The importance of managing water well is all pervading in our society. It is important at all those levels. There are things that the federal government could do to help water management in Western Australia. It could build the national capacity for water management, for example, and help whatever activities are happening in the state to be done. Whether the federal government should have responsibilities for water management is something I do not have a view on. My general philosophy is to have clear decision making responsibilities so

that it is very clear who has what responsibilities, all the way down to the local level and then let people get on with it and make decisions.

**Hon VINCENT CATANIA**: I am going to ask you for your own personal view. Is the federal government dragging its feet on this very important issue and leaving it up to the states, particularly here in Western Australia, to come up with a lot of the solutions for the future planning for water resources and for trying to get the necessary skills? Do you believe that the federal government is dragging its feet on this very important issue? I realise this is your personal view.

**Mr Camkin**: I would not say that it is dragging its feet. It is a challenge for everyone to deal with this issue. It is not a matter of who is or is not dragging their feet; a collaborative approach is needed. It should be a real team effort to deal with it. As I said, apart from drought and climate change, water management capacity is a big issue. That is why, through my role in the Australian Water Association, we are helping to bring people together to look for that collaborative approach. Rather than each organisation just trying to deal with their own needs, maybe we can develop a stronger network and a stronger set of skills if we work together.

[12.10 pm]

**The CHAIRMAN**: The major focus in terms of federal-state stuff seems to be the Murray-Darling Basin. Do you have a comment on what is happening there in terms of governance?

**Mr Camkin**: I think the only comment I would make is that there are countries I have seen in the study that have gone through that process and have put in what I consider very clear policy and governance environments that, if Australia wants to go down this path, we should have a good look at and learn from what they went through and see whether it is applicable here. I am not suggesting that you can take a model from anywhere else and directly apply it in Australia or Western Australia, but I think there are opportunities to learn from the experiences of these places that are seen as world leaders.

Hon ED DERMER: What countries do you have in mind when you say that?

**Mr Camkin**: South Africa and Brazil, in particular. There may be others that I am not as well aware of. I am sure there are.

**Hon HELEN MORTON**: I am very interested in the view whether the sustainability of sufficient water resource in the southern part of Australia is dependent on water from the northern part of Australia. I know that you are part of that project at the moment. I am really interested whether you see that there is a link between the water availability in the northern part of Australia and the water requirements for the southern part of Australia.

**Mr Camkin**: Just to clarify the project I am involved in through the CSIRO, it is the northern Australia irrigation futures project. It is a research project trying to answer the question of: if we are going to have irrigation in northern Australia, how might we do it so that it is sustainable? It does not make any claims about answering the question of whether or not we should do it or deal with issues such as transfers of water from the Kimberley to Perth or wherever. I am sorry; could you repeat the question?

**Hon HELEN MORTON**: I want to know what your opinion is about whether the sustainability or sufficient water resource in the southern parts of Australia are in some way dependent on anything to do with water in the northern parts of Australia.

Mr Camkin: I mentioned the national water resource strategy of South Africa and how it makes the determination at a wholly jurisdictional level. It looks at the water resources of the jurisdiction; it looks at what are the future demand projections in each of the catchments and makes decisions about the allocation of resources between catchments and also where there will be transfers or are likely to be transfers in the future between catchments. So, in effect, that process deals with the question you are asking: should there be in the future a water transfer from the catchment in the

north to the catchment in the south? That sort of thinking is done within the planning process of the national water resource strategy of South Africa rather than in response to a proposal for a particular development.

Whether WA's southern parts will rely on bringing water from the north; again, it could be done and there have been enough studies to show that it could be done. The question is whether it should be done. It is not really for me to answer that question. My study was, in some ways, about how you handle those sorts of questions. My view is that you should be trying to deal with that question in a jurisdiction-wide planning process rather than in response to a proposal to move this bit of water from here to here. Where does it end and how do you give comfort and confidence to people who are in some of these areas that have water resources that the water will or will not be taken out of the region? That is why I think there are some benefits, from what I have seen, of building those questions into a plan.

**Hon HELEN MORTON**: When you speak of jurisdiction-wide planning, are you talking about the whole of Australia or jurisdiction as in Western Australia?

**Mr Camkin**: In South Africa it was the whole of the nation but I think that you can transplant that concept to the whole of WA. It is who has the administrative responsibility for water. In Australia it is currently Western Australia.

**The CHAIRMAN**: I am interested in your view on innovative technologies like wave technology and biotechnological solutions in relation to desalination. Surely if we can perfect the technology associated with that and the energy inputs, that can go 99 per cent of the way to solving all of our problems. Is there enough attention being paid to those areas?

**Mr Camkin**: I am not really across that area well enough to make any informed comment. One thing I have been suggesting to people lately is that California recently undertook an audit of the energy-water relationship through the whole water cycle - all different forms of water use, water transport etc - to try to understand that relationship better. When you move water around, you use a lot of energy. Maybe that is something we could look at, but in terms of the details of the technology I am not across that.

**The CHAIRMAN**: I am not necessarily asking you about the detail; I am asking you about the processes that we have got in place to at least encourage and give those areas an opportunity to prove themselves.

**Mr Camkin**: Yes. Again, I am aware that there are some processes that encourage people to look at different technology but I am probably not across it enough to comment.

**Hon HELEN MORTON**: I have a simple question. Of all the things you have seen in your study and since, what is the most innovative thing that, if only we had made it happen in WA, we would really have progressed things significantly?

**Hon ED DERMER**: It is a big question that is saved for last!

The CHAIRMAN: The magic bullet!

**Mr Camkin**: I might take another question and think about that one in the background!

**Hon ED DERMER**: I am sure that if you had two or three answers of that description Helen would not mind.

**Mr Camkin**: The one most innovative thing that, if we did it, we would be miles ahead? I cannot think of one let alone three off the top of my head.

Hon VINCENT CATANIA: Make it rain!

**Mr Camkin**: Yes, that is probably it. There have been some pretty innovative things done in Western Australia as well. I think the three-day Premier's water symposium was a really significant step forward.

**Hon ED DERMER**: I heard a radio report about a fellow who had invented a machine that used wind power to draw gaseous water out of the air, basically condensing it. It had a very small capacity and you would need many of them to provide a local solution to water needs. My question is twofold: have you heard of it and do you have any comment on it?

[12.20 pm]

**Mr Camkin**: I read an article about it, a newspaper article I think it was, a few months ago. That is all I know about it. I have no comment on it. My answer to your question, Helen, is there is no single solution. If we wait for a single solution, that would be problematic. What people have been doing in the places I have seen is building their capacity to deal with the complexity of managing water. It is a complex game and it is getting more complex as more and more people understand their need to be involved and as we understand more about the factors that need to be considered in these decisions. As water becomes less available, it gets more complex. I think the answer is breakthroughs in how to deal with complexities; that is the challenge.

**The CHAIRMAN**: Our committee has broad terms of reference. Do you have any advice for us on how we can be most productive or useful in focusing on an area of need or an outstanding area in terms of governance, management and administration?

**Mr Camkin**: The feedback from the presentations I have seen and the things I have read suggests there is an intent, for example, to review the state water plan after a period of time. I think it is really critical that we do not stop; that we continue reforming and finetuning the way we are managing water. We should be encouraging people to take opportunities to look elsewhere and learn from their experiences in Australia and internationally outside water. Some of the things I am looking at in my current project actually come from fisheries management, but have, I believe, direct application in water. I have some background in fisheries management that helps me make that transfer.

Hon ED DERMER: It is a pretty obvious connection.

**Mr Camkin**: It is. It is those things - keep going; the need to continue to review where we are heading; thinking more about where we are going with some of the long-term policy options. I mean, where might we like to end up with some of these questions in 30 years' time? Some work was done in South Africa called "An Assessment of Water Policy Process in South Africa, 1993-2004". I do not have the authors' details but I can provide a hot-link to that document. They reviewed what happened in South Africa during that period. I think they did that study in about 2004 or 2005. I found that incredibly informative. They reviewed the process and interviewed the key players from that period and drew from it a lot of that experience and documented it. We have just gone through 10 years of water reform in Western Australia and maybe that is something we should be doing in Western Australia - putting it down, adding it to the body of knowledge of what has been tried and worked and what has not worked. That document was developed by an organisation in South Africa called the Water Research Commission. South Africa and every state in the US has a body that is responsible for helping to coordinate water research. There seem to be some benefits in that. In South Africa and every state in the US it is guided by a board or committee of some sort that has government water agencies, stakeholders and research organisations all helping to guide what water research should be done. Maybe that is something we really could look at in Western Australia. Of course there is the water legislation that is in process at the moment. Again, from what I have seen, getting the legislation right is critical. Having clear and less complicated legislation is critical. Getting back to the earlier question about complexity, the numerous pieces of water legislation that we have in Western Australia were and probably still are complex. It is difficult to find a way through and there is an opportunity to rationalise that and at the same time also build into new legislation some policy principles that have been coming up through the documents recently.

**The CHAIRMAN**: I think we have covered a fair bit of ground. If there are no more questions, would you like to make any final comments?

**Mr Camkin**: I just want to thank you for this opportunity. As I said right at the beginning, these are personal views and based on what I saw during my Churchill Fellowship. It helps meet the intent and commitment of doing Churchill Fellowships. It was a fantastic opportunity, supported not only by the Churchill Fellowship Trust but my own agency at the time, and numerous other players and people have listened since to what I brought back. Hopefully it has had some influence. Thank you very much.

The CHAIRMAN: Thank you.

Hearing concluded at 12.26 pm