

**REPORT OF PROCEEDINGS BEFORE**

**STANDING COMMITTEE ON NATURAL  
RESOURCE MANAGEMENT**

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**At Sydney on Wednesday, 8 June 2005**

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**The Committee met at 11.00 a.m.**

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**PRESENT**

The Hon. Pam Allan (Chair)

The Hon. R. Amery MP  
Mr G. J. Aplin  
The Hon. I. Armstrong MP  
Mr P. Draper MP  
Mr G. F. Martin

**WENDY CRAIK**, Chief Executive Officer, Murray Darling Basin Commission, GPO Box 409, Canberra, ACT, affirmed and examined:

**CHAIR:** I have been advised that you have been issued with a copy of the Committee's terms of reference and also a copy of the Legislative Assembly's Standing Orders 332 to 334, is that correct?

**Ms CRAIK:** Yes.

**CHAIR:** Before we start, would you like to say anything?

**Ms CRAIK:** Just a few brief words, if that is okay. I guess some of your Committee members will know, having served on the Ministerial Council for the Murray Darling Basin Commission, that fundamentally six governments have agreed over a fairly lengthy period of time, but fundamentally since 1987, to promote and co-ordinate effective, efficient and equitable management of the water, land and other environmental resources in the basin. The thing that drives what specific actions are undertaken is whether joint action is necessary to achieve an outcome or whether a particular action would benefit some of the shared resources of the basin. The fact that there are six governments makes it a particularly interesting beast.

Certainly, initially the focus of the Commission was all about delivery of water and regulation of water down the Murray River for, initially, navigation but of course more recently, for a much longer period of time, agricultural irrigation and delivering water to communities. In the last decade or so the Commission and council have taken some very significant decisions, and that is against the backdrop of national water reform through the National Competition Policy in 1994 and, again, the National Water Initiative last year. If you think about the major decisions, the cap that was agreed in 1995 on surface water diversions, which limited growth in surface water diversions, since that has been in place for the last five years we have had annual audits of the cap by an independent audit group. South Australia and Victoria have identified caps for all their valleys. New South Wales still has Barwon Darling to go and Border Rivers, Queensland still has to put forward a cap and the ACT still has to put forward a cap, but there is certainly significant progress in those directions.

The other major strategy that has been agreed by the Ministerial Council is the Basin Salinity Management Strategy, which was an update on a previously agreed salinity strategy, but the Basin Salinity Management Strategy is all about trying to hold the line on salt. There is an overall target of less than 800 ECs for 95 per cent of the time at Morgan, ECs being a unit of measurement of salt. Morgan is just over the border in South Australia. That target is intended to be achieved by two major actions. The first one is salt interception schemes, which are large engineering works, which to put it non-technically are a lot of holes in the ground out of which salt is pumped and then disposed of one way or another, although that is becoming an increasing issue. The other major strategy is land use change through catchment plans and end-of-valley targets.

The other major decision in recent years, of course, is the Living Murray, which was finally agreed in 2004. Governments agreed to put in \$500 million over a five year period to recover some 500 gegalitres of water to be applied at six specific sites to achieve very specific objectives at those specific sites. In addition, a previously approved \$150 million environmental works and measures program, which is all about putting in regulators and infrastructure to improve tidal flows, has also been tied to the Living Murray. The native fish strategy where it deals with the Murray, of course, is part of that and obviously is an important part of the Living Murray.

Other major areas where we have programs, it is probably worth mentioning that we have started a sustainable rivers audit, which is a basin-wide monitoring program, so we can actually have long-term monitoring of the basin over a period of time, and areas where we are currently working and developing activity, of course, include water trade and what the conditions are for interstate water trade - not intrastate but interstate water trade - in areas other than the Lower Murray. Another major area of investigation is risks to shared water resources. Given things like the drought, there has obviously been an increase in groundwater extraction, what effect does that have on surface water, and climate change, what effect is that going to have on surface water and things like farm dams,

reafforestation, return placement irrigation, and I think there is one more that I have just forgotten, but trying to find out both singly and in an integrated way what effect those things will have. The other thing that is probably worth mentioning briefly is that there is a fairly small effort at the moment preparing a scoping report on the Darling River and what the issues are in the Darling because there is a fair amount of community interest in trying to have a Darling initiative of some kind.

**CHAIR:** Thank you. We very much appreciate you spending the time to come to the Committee today. In fact, your predecessor came to the salinity committee a number of years ago and we have always enjoyed a good working relationship with MDBC. We have a number of questions and we have provided them to you. I would like to ask the first question, and we may not get to all of them, in which case we can talk about that as well.

We are certainly aware of recent comments by prominent members of the Wentworth Group. I heard an interview with Peter Cullen a couple of weeks ago where he made general comments about the impact of drought and sustainability issues. There are a number of allegations that some regional areas are "basket cases", with up to 10 per cent of farming land being unsustainable. Would you regard any land within the basin as being in that category and, if so, how can we be managing it?

**Ms CRAIK:** The Commission does not have a specific policy on this issue, but the Commission certainly has engaged in a number of activities, such as changing land use and trying to develop strategies that might lead to more appropriate farming practice for the particular area. One that was before my time, and Don may well have talked about it, and I will leave some documents with you today, is a project called Landmark, which was all about trying to come up with current recommended practice for agriculture in mainly dryland regions. It involves a series of workshops with a whole range of groups, and there is some information here about what is best current recommended practice for dryland agriculturalists, given the nature of the landscape, and that has led to a fairly significant report, a copy of which I will leave with you today. There is also a policy discussion paper, which I do not think represents any particular policy of the Commission, but it does raise a whole lot of issues and puts a number of areas up for discussion.

The big thing that has come out of that work and other work that is going on in the Commission is the Basin Salinity Management Strategy. Catchment plans for every catchment in the Murray Darling Basin, directed at maintaining or reducing salinity impacts of activities in the basin, are probably one of the prime areas directed at agricultural practice in particular. Victoria and South Australia have certainly gone down the track of specific zoning, and I am not sure whether New South Wales has, but they have gone down the track of specific zoning in the areas where they are concerned about salinity. For example, they have low impact and high impact zones and they encourage certain kinds of agriculture in different kinds of those zones.

**The Hon. RICHARD AMERY:** You have some other questions that we have tabled to you and I might come back to those, but in relation to a couple of your opening comments - by the way, congratulations on your appointment.

**Ms CRAIK:** Thank you.

**The Hon. RICHARD AMERY:** That issue about the audits sounds interesting. I think your assessment of the sort of animal that you are the CEO of, that is the six Government committee, is probably accurate. I always recall the different views between the different States. You have pointed out to the Committee that we have not got our cap in place in the Barwon Darling. What is your assessment of the Queensland cap? We always found that making decisions particularly on our north western river systems was always going to be difficult because we have virtually an unregulated situation with Queensland where they were affecting our water supply. They delayed and delayed implementing the cap. I understand they have a cap in place, but it is certainly nothing like a 1995 one.

**Ms CRAIK:** They have water sharing plans in place but they have not translated that into a cap.

**The Hon. RICHARD AMERY:** So they still do not have a cap?

**Ms CRAIK:** No.

**The Hon. RICHARD AMERY:** I thought they must have brought one in about 2004.

**Ms CRAIK:** No. The way the timing is at the moment, I think they are proposing to put one up next year. They expect to have all their water sharing plans finished next year. This is the timetable over the last year, to put something up next year.

**The Hon. RICHARD AMERY:** Which surely infuriates the water users in northern New South Wales.

**Ms CRAIK:** Having spoken to some of the Barwon Darling water users in relation to their cap, yes.

**The Hon. RICHARD AMERY:** The situation still applies, just for our information, that when you are doing the audits of the different States, and of course New South Wales having something like eight valleys, you still do an audit of every individual valley, even if the whole State is complying with the cap. On an average we always seem to pass the audit as far as the numbers are concerned, complying with the 1995 cap situation, but we often get pinned for a particular valley being over the cap for some reason. Is that situation to remain in place?

**Ms CRAIK:** Yes.

**The Hon. RICHARD AMERY:** I think New South Wales is often treated unfairly in those audits because of that situation where from time to time, because of climatic or other circumstances, one of our valleys might go over, but as a State as a whole we comply with the cap.

**Ms CRAIK:** Yes, you are certainly well within the cap. That situation continues. The last audit, 2003-2004, the initial audit found I believe that the Lachlan was over the cap, but in fact further work by the independent audit group has shown that it is not in fact over the cap. I think the audit group was unable to determine the Gwydir valley last year, if I remember rightly. They have just done the independent audit of the Barwon Darling valley and it certainly exceeded the cap last year, but all the other valleys that were done were within the cap and, yes, as a State New South Wales is certainly within the cap.

The Commission has just agreed that the audits will continue for another five years, if I remember correctly. The idea of that is so we can get Queensland and the ACT actually in the process, and the other point is that we really need to make sure we get all the models for the valleys accredited, and the Commission just accredited the model for the Namoi valley yesterday. So we are certainly moving but these things are always slower than you think.

**The Hon. RICHARD AMERY:** You always have the drawback of not having some sort of compliance mechanism to cane those.

**Ms CRAIK:** The only compliance mechanism is embarrassment of the jurisdictional Minister who has to front up to the Ministerial Council and say why and keep doing it at every meeting.

**The Hon. RICHARD AMERY:** Queensland is always shown to be very thick skinned in that category.

**Ms CRAIK:** I couldn't comment.

**Mr MARTIN:** Can I just ask a supplementary question about that?

**Ms CRAIK:** Yes.

**Mr MARTIN:** In regard to your comment about the fact that the audit committee sometimes could not make a determination whether a particular valley was over the cap or not, what would need to happen?

**Ms CRAIK:** My recollection, and if I am wrong I will correct it, I will have to go back and check, but my recollection is that the information just was not available, and I cannot remember why. It was not a suggestion - it is just that the information was not available for some reason.

**Mr APLIN:** Earlier this year some members of the Committee visited the Albury area, and the Murray Darling Freshwater Research Centre in Albury Wodonga has observed to Committee members that the Living Murray initiative is an excellent example of the adaptive management process to learn by doing. Can you explain more about the process and how such a process would improve environmental outcomes?

**Ms CRAIK:** Sure. The adaptive management approach we are taking is that - and just to give you a small example - we have been undertaking a number of watering trials of Red Gum areas alongside the Murray, Chowilla and Lindsay-Wallpolla, and so these trials are set up, embankments and pumps are put in and water is pumped from pipes into these wetlands to see if it will do something beneficial for the Red Gums there which are suffering. Basically, we are running these little trials and the idea is we know what we did setting them up, we see what the results of those are and we say next time we should do X, Y, Z. So it is a kind of a learning on the job thing I suppose and refining what you do with more experience.

The other example is that New South Wales and Victoria set aside some environmental water for watering the Red Gum forest in Barmah-Millewa, and certainly over a period of time that has very much been an adaptive management thing there. You do what you can and then you realise it would be better to have another regulator here or another embankment there to maximise either the wetting or the drying, whatever you might want. So that is the sort of thing we are talking about. Certainly when we are trying to co-ordinate water delivery to six particular sites along the Murray, there are going to be things we do not get right and we will learn over time what works better, and particularly if you are trying to do things sequentially. You get more than one bang for each gigalitre of water.

**The Hon. RICHARD AMERY:** Could you explain how your organisation interacts with other organisations within our own State, such as the CMAs, Landcare and State agencies such as DIPNR and DPI, to ensure a genuinely integrated service delivery approach?

**Ms CRAIK:** I think you would probably have to say it is not genuinely integrated through all those organisations. We certainly work closely with DIPNR and DPI. If we go to meetings with the irrigators or whatever, DIPNR always comes along. We make sure that they are always there so that they know what we are doing and they are involved and obviously they are making a major contribution.

We are feeling our way a bit with the CMAs, and again, it is pretty much up to our State partners as to how they want us to interact with the CMAs, which are the creatures of the States, so we try and assist where we can. Often we give them small grants to do things, help with information and those sorts of things, and certainly, now the community advisory committee to the Ministerial Council has a large number of chairs of CMAs on that committee. That is a really good avenue for us getting information to the community advisory committee so they can get it out to the CMAs. We do have more direct interaction, more direct arrangements, but I guess we are feeling our way a bit with CMAs, and Landcare groups are a bit spasmodic and one-off.

**The Hon. RICHARD AMERY:** Landcare has given presentations to the Murray Darling Basin Commission in the past.

**Ms CRAIK:** Yes.

**The Hon. RICHARD AMERY:** Those CMA chairs, there is not a formal linking, is there, so they do not actually come along and report to your organisation on their activities?

**Ms CRAIK:** No, they do not.

**The Hon. RICHARD AMERY:** And they do not formally take back a report from your initiative?

**Ms CRAIK:** No, that is right, except through the community advisory committee, but we do not actually have a direct form of relationship. If we did have a written form I imagine it would be through the States anyway.

**Mr MARTIN:** Just in relation to dryland salinity, the Basin Salinity Management Strategy for 2002/03 states that the National Action Plan for Salinity and Water Quality and the NHT Mark II, the NSW State Salinity Strategy and relevant catchment planning processes (including investment strategies) have contributed to the progress of achieving end-of-valley targets. Do you agree with that and could you give some specific examples?

**Ms CRAIK:** I think they have in a general sense. I do not think I could point to any specific valleys and say this has happened and that has led to X, Y, Z, but these actions are long-term and, obviously, putting all those arrangements in place has taken a bit of time itself anyway, in terms of the bilateral arrangements between the Commonwealth and the State. I imagine we will be seeing more activity in those areas as a result of the 2003/2004 salinity audits and the comments we got back in the recommendations that we needed to do more in those areas. We have had a meeting with all the jurisdictions about what work program do we need to put in place for the next few years to make sure that we do deliver these end-of-valley targets, to have the right mechanisms in place to deliver those end-of-valley targets and keep the activities going.

**Mr APLIN:** In April this year, both the New South Wales and Victorian Governments decided not to increase their contributions to funding for the Murray Darling Basin Commission above current levels. In fact, I believe it was to hold them at 2003/2004 level. What are the implications generally of this decision, and in particular will the funding shortfall affect continued delivery of works and measures under the Basin Strategy?

**Ms CRAIK:** The New South Wales contribution has been maintained at 2003/04 levels. The end result is we have a budget of \$99 million dollars for the coming year. I think it is probably fair to point out that the Commission has never actually spent their entire budget. The actual impact of next year on what will be delivered compared with what we felt we might be able to deliver is that things basically will be a bit delayed. The salt interception scheme will be a bit delayed and native fish strategy will be delayed. Basically, we will keep these things going. We will get the planning done so that when we get the models we can actually put them in place and some other programs will slow down, but I think delay rather than abandonment probably for the major program areas would be the result.

**The Hon. RICHARD AMERY:** So is that budget \$99 million?

**Ms CRAIK:** \$99 million, yes.

**The Hon. RICHARD AMERY:** One of the questions that we gave to you is in relation to drought. Do the Commission's initiatives and programs aim to develop approaches that better manage droughts? Supplementary to that, obviously with the drought continuing on in rural New South Wales, has there been any assessment on what cap management is required? Obviously, it puts a lot more pressure on a lot of users to get water from wherever possible.

**Ms CRAIK:** I think the effect of the drought has been an increase in groundwater extractions. We put out a report a couple of months ago on groundwater extractions for the year 2000, but they have continued to increase since then and so we are continuing work in that area. The other impact of the drought in terms of water has been a significant increase in water trade, and, interestingly, in the last couple of years we have had about 10 per cent of total diversions being traded, mostly temporary, not permanent, but it has been significant as people put in place their own strategies to sell their water or buy water and have enough to grow whatever they want to grow, but I think clearly there have been impacts in the dairy industry and the rice industry as generally allocations have been so low in New South Wales.

The prognosis at the moment for the coming year, with the drought for a consecutive four year period on record out of 110 years of inflow into the Murray River and the Murray system, we have got the driest four year period on record, and while we have had droughts like that before, we

have not had them at this level of water diversion. One of the things we are doing for the next Commission meeting is actually an assessment of our overall work program, like Living Murray and other things, how the drought is going to have an impact on that, and I guess it works both ways, how the drought is going to impact our work program and will our work program impact people because of the drought.

**Mr MARTIN:** We have an understanding of your broad overview strategies, but do you devolve down to the actual farmer himself, to individual farms, in terms of strategies to address the problem at that level?

**Ms CRAIK:** Mostly our work really is dealing with more States and regional areas. I think some of this Landmark project that I mentioned earlier did actually involved the individual farmers, but mostly we generally work at a catchment, at a regional, at a State level. For instance, even with water sharing, we deliver water to the States, and how it is actually divided between the irrigators and the range of entitlements is really up to the States.

**The Hon. RICHARD AMERY:** During times of droughts should things like environmental flows be suspended? The argument of many rural water users is should not the environment suffer the effects of the drought as much as water users.

**Ms CRAIK:** You would be aware that usually during a drought the environment does not get any water anyway. It is dry anyway, and given the increasing death of Red Gums that we are witnessing along the Murray, although we cannot prove cause and effect, effectively where we have put water to wetland some of them have come back to life as it were, and these are fairly small amounts that I am talking about. Even the environment needs a drink every now and then, otherwise we are going to probably have a massive death of Red Gums. But I think in terms of the programs that we are running, irrigators' diversions have not been reduced for environmental flows, and under the Living Murray certainly most of the initial work is all about infrastructure improvement, so it is putting in piping where there were open channels before, it is putting in regulators to wet and drylands in a better way. None of it has actually been about taking water away from irrigators for environmental flows. But, as you would be aware, mostly when there is a dry period, the environment has a dry period and that is part of the variability in these rivers. Of course, when you get to the Murray mouth, where they have had about 100 gigalitres of water for the last couple of years, whereas normally they get an average of about 5,000, we have had to dredge it to keep it open.

**The Hon. RICHARD AMERY:** I think the Committee would really appreciate, eventually, not today - we have had some reports on the work that you are doing there, like as you say tiling, covering drains, stopping evaporation and so on. A lot of money goes into those projects. Has there been any assessment made of how much water is saved by A project, B project, C project and what percentage terms? When audits are done on that, I think we would appreciate that sort of information to see what sort of impact we are getting for the dollar.

**Ms CRAIK:** Under the Living Murray program the water recovery projects, each of those water recovery projects, when it is implemented, has to be audited for the amount of water actually delivered and compared with what the promise was and the amount of money it cost them compared with what the promise was, and anything above plus or minus 10 per cent, I think it is, plus or minus five or 10 per cent on either of those the proposing jurisdiction has to wear. So there is a fair incentive to get it pretty right in the first place. We have not had to implement it yet, but that is the plan.

**Mr APLIN:** Following up on the question about funding and how that may affect projects, the Committee understands that one of the projects affected by the shortfall is the Waikerie salt interception scheme, which is part of the terrestrial biodiversity program. The first part: What is the program and what is its status and what effects may occur as a result of the funding shortfall? Secondly, when we were as a Committee visiting the Albury area we had a look at the salt interception scheme at Billabong Creek. That has been non-operational for the past 18 months and the reason given was that there was a lack of funding and they will be approaching the Murray Darling Basin Commission to fund that. What is the likelihood of funding being available for both these schemes, the Waikerie and the Billabong Creek?

**Ms CRAIK:** Firstly, the terrestrial biodiversity program does not exist in the Commission any longer. We do not have such a program any more and have not for several years, but the Waikerie salt interception scheme will actually be delayed for a period of time. It will still come in but will probably be delayed for about six to twelve months, but will still actually come into effect. I will have to take the Billabong Creek one on notice because I do not know the answer, but I will certainly get back to you on that one.

**Mr MARTIN:** In relation to the 2003-04 report on the independent audit on salinity there were concerns raised in relation to State catchment plan programs, such were the delays in implementing catchment reviews, lack of progress in establishing monitoring systems and lack of skills and experience in regional investment and decision-making. Have you any comment on those? Is that something you would agree with?

**Ms CRAIK:** One of the things as a result of those comments from the audit group is that we actually got all the jurisdictions together and put together a work program to try and address some of those issues. I think the issue of skills is actually a more general issue than is raised in the salinity one. In fact, it is a broad issue in terms of availability of technical skills right throughout the sort of work that we do. Even in our own area, River Murray water, we have been trying to employ a few hydrological modellers, and after about 12 months we have managed to get two or three, but they hang on, accepting the job to get a better offer, and often they do. We are even trying to get them out of university. And even engineers, how many engineers do we have who have actually had experience building a dam, if something goes wrong. Once the current crop of engineers retires, we are really going to - and it is not just us, it is consulting firms, it is all the organisations, and as another general comment, governments generally have been going for the more generalised managers than the technical experts and we have seen a fair amount of skill lost that way. It is a national problem. It is not just a localised issue.

**The Hon. I. M. ARMSTRONG:** I have a double barrel question. The report conducted by the Commission on flood plain stands of River Red Gums and Black Box in Victoria and South Australia was unable to draw a definite conclusion about the health of those trees. Since the report came out, have you gained any better idea of the cause of the problem? Secondly, the report noted that the survey methodology allows for future assessment and trend analysis. Will the funding shortfall impact on its attempts to carry out such assessments?

**Ms CRAIK:** Firstly, we are continuing to monitor. There will be a continued monitoring program of those Red Gums, and the funding shortfall will not impact on that. In terms of the cause and effect, I do not think we are any the wiser, but you would have to believe that the drought has had some impact on that, and of course salinity may have had some impact on that as well in some areas. I do not think we can be totally specific, but given the fact that we have had a very long drought and some of these trees have not had a drink for quite a while, and when you do put water into some of these areas at least the trees next to the area that is watered do seem to get another life as it were. You would have to wonder that there is not some connection there.

**The Hon. I. M. ARMSTRONG:** It has been argued over many years that the Lachlan does not contribute to the MDBC because it is only twice in 102 years that it has reached into the Darling. I take it because of its lack of flow at the moment that it is not really having any impact on the Murray and the Darling itself?

**Ms CRAIK:** As far as I am aware, but I would have to chase that up to be really certain and to answer your question totally, but I am pretty sure that is correct.

**The Hon. RICHARD AMERY:** I just referred to question 10 about the suspension of the environmental flows. I suppose it may have been answered. We would be happy to take that one on notice if you think you could answer that tabled question any more than you have already done so.

**Mr MARTIN:** Particularly in relation to the institutional arrangements.

**Ms CRAIK:** Sorry, where are you?



**The Hon. RICHARD AMERY:** Question 10. I think there is a follow-up on that issue. I think you answered it in relation to the suspension of the environmental flows argument during extreme droughts. There is another point there I did not mention.

**Ms CRAIK:** The institutional arrangements. The Commission has actually asked us very specifically to come back with a report on the impact of drought on our work program and vice versa, and of course under the Living Murray one of the issues that has come up for discussion is should we slow down what we are doing or should we speed it up and what impact that is likely to have. So in terms of the institutional arrangements, that would be the Commission agreeing whatever strategy they end up agreeing and that would put into effect whatever the decisions are.

**Mr MARTIN:** Have you got any closing comments that you would like to make?

**Ms CRAIK:** I do not think so. I think the only comment I would like to make is that there are a few copies of these reports that you might find useful which I will leave with you, and, of course, if you do want any other information we are more than happy to help provide it.

**(The witness withdrew)**

**(The Committee adjourned at 11.40 a.m.)**