

## GENERAL PURPOSE STANDING COMMITTEE No. 5

Monday 22 October 2007

Examination of proposed expenditure for the portfolio area

### CLIMATE CHANGE, ENVIRONMENT, WATER

The Committee met at 9.00 a.m.

#### MEMBERS

The Hon. I. Cohen (Chair)

The Hon. R. L. Brown  
The Hon. R. H. Colless  
The Hon. M. A. Ficarra

The Hon. E. M. Obeid  
The Hon. M. S. Veitch  
The Hon. H. M. Westwood

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#### PRESENT

**The Hon. P. C. Koperberg**, *Minister for Climate Change, Environment and Water*

**The Hon. V. H. Firth**, *Minister Assisting the Minister for Climate Change, Environment and Water*  
(*Environment*)

**Department of Water and Energy**

**Mr M. M. Duffy**, *Director General*

**Mr D. A. Harriss**, *Deputy Director General (Water Management)*

**Sydney Catchment Authority**

**Mr I. Tanner**, *Acting Chief Executive Officer*

**Department of Environment and Climate Change**

**Dr R. Sheldrake**, *Acting Director General*

**Ms R. McKeown**, *Executive Director, Corporate Services Division*

**Dr T. Fleming**, *Deputy Director General, Parks and Wildlife Group*

**Mr S. Smith**, *Deputy Director General, Climate Change and Environment Protection Group*

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CORRECTED

**CORRECTIONS TO TRANSCRIPT OF COMMITTEE PROCEEDINGS**

**Corrections should be marked on a photocopy of the proof and forwarded to:**

**Budget Estimates secretariat  
Room 812  
Parliament House  
Macquarie Street  
SYDNEY NSW 2000**

**CHAIR:** Minister, I thank you and your accompanying officials for your presence at this hearing. At this hearing the Committee will examine the proposed expenditure for the portfolio areas of Climate Change, Environment and Water. Before questions commence, some procedural matters need to be dealt with. With respect to the broadcasting of proceedings, in accordance with the Legislative Council guidelines only Committee members and witnesses may be filmed or recorded. People in the public gallery should not be the primary focus of any filming or photos. In reporting the proceedings of this Committee you must take responsibility for what you publish or what interpretation is placed on anything that is said before the Committee.

The guidelines for the broadcast of proceedings are available on the table by the door. Any messages from attendees in the public gallery should be delivered through the chamber and support staff or the Committee clerks. Minister, you and the officers accompanying are reminded that you are free to pass notes and refer directly to your advisers at the table. The Committee has agreed to spend approximately two hours, in accordance with your request, Minister, on examining the portfolio area of Water first, and then Environment and Climate Change in the following two hours. There will be a short break to enable you to get Minister Firth down to join you. Do you anticipate that will pose any difficulties?

**Mr PHILIP KOPERBERG:** Not at all.

**CHAIR:** I advise that the Committee has resolved to request that answers to questions on notice raised at this hearing be provided within 21 calendar days from today and questions raised later will be the normal 35 days. All witnesses from departments, statutory bodies or corporations will be sworn in prior to giving evidence. You, Minister do not need to be sworn in as you have already sworn an oath to your office as a member of Parliament.

**MARK MARTIN DUFFY**, Director General, Department of Water and Energy, and

**DAVID ANDREW HARRISS**, Deputy Director General, Department of Water and Energy, affirmed and examined, and

**IAN TANNER**, Acting Chief Executive Officer, Sydney Catchment Authority, sworn and examined:

**CHAIR:** I declare the proposed expenditure for the portfolio areas of Climate Change, Environment and Water open for examination. We will start with the portfolio of Water. Minister, do you wish to make a brief opening statement?

**Mr PHILIP KOPERBERG:** I would like the opportunity of making an opening statement. I do not know about the brevity of it, but I will do my best and thank you for the opportunity. In 1994 the Council of Australian Governments [COAG] embarked upon a major process of water reform of the water industry across Australia. This was generally known as the national water initiative. Under the COAG agreement, and more recently the National Water Initiative, the States have been required to demonstrate progress in a number of areas of water reform.

New South Wales, I am pleased to say, has led the way in water reform through its comprehensive water reform program that commenced in 1995. This has included allocating water for the environment, providing more secure rights to licence holders, water trading including trading across State boundaries, and pricing of water which is more reflective of its value. New South Wales has met all of the requirements of the national water initiative amongst which was the landmark legislation, the Water Management Act 2000, which was passed in the year 2000 to provide the statutory base to carry out the reforms and was the first legislation in Australia that specifically provides water for the environment.

Ninety per cent of water use in New South Wales is now managed through statutory water sharing plans. Through the water sharing rules an additional 200 billion litres of water has been recovered for the environment in the regulated rivers. This is over and above the New South Wales commitment to the Living Murray and will ensure consumptive use in New South Wales is below that required under the Murray-Darling Basin cap.

Entitlements in five major inland alluvial aquifers systems have been reduced to ensure the long-term sustainability of these important groundwater sources. In these systems the long-term storage components and in most cases the proportion of the annual recharge has been protected for the sake of the environment. New South Wales has committed some \$55 million to the \$135 million Achieving Sustainable Groundwater Entitlements Program to provide assistance to licence holders and the community to adjust to these lower entitlements. License holders in New South Wales have perpetual leases or licences that provide a right to a share of the available water resource. Licence holders can trade their licensed water entitlements on a permanent basis or lease it to someone else for a short period of time, as well as trading their annual water allocations. This includes trading across borders.

I said earlier that New South Wales had achieved all that was required of it under the National Water Initiative. Despite that the Australian Government had for some time seen fit to withhold some \$26.3 million in National Competition Policy payments owing to New South Wales between 2004-05 and 2005-06 because of what it perceived to be a lack of progress in the area of water planning and water trading. A further assessment was undertaken by the Commission, which then found that New South Wales had indeed met all of its obligations under the agreements and, as a consequence, finally and belatedly the \$26.3 million has begun to be paid.

Much has been said about the national plan for the Murray-Darling Basin and it is clear that despite the New South Wales Premier being the very first Australian Premier or first Minister to have agreed to what the Howard Government proposed so far as the management of the Murray-Darling Basin system is concerned, here, almost 12 months later, we are little further advanced. The Prime Minister has consistently failed to persuade one or more other jurisdictions to sign up to the plan, which would involve constitutional referral of some of the operational authority in the wider national interest, a wider national interest that Morris Iemma has subscribed to since the proposal was first mooted.

The Prime Minister has also—despite, as I am advised, one or more requests from the New South Wales Premier—agreed not to honour an undertaking that any liabilities which might attach to the deduction of water entitlements—in other words, the resumption of water entitlements if you like—might impose upon the State. So despite, as I am advised, the earlier undertaking that part of the national plan would involve compensation payments for current and future liabilities, this still has not come to pass. As a consequence of that, what was considered across the board as being a critical initiative in terms of safeguarding the resources constituted by the Murray-Darling Basin at a time when irrigators and other users, including local government and communities along those systems, are facing an unprecedented challenge in terms of water shortage, all these months later we are no closer to fully realising the purpose of the plan than we were then.

The Commonwealth, having failed to secure universal agreement to the plan, has introduced legislation, which, if anything, will confuse matters further. There will be, under the provisions of the hastily introduced legislation, a Murray-Darling Basin Authority, and somehow this is expected to work in concert with or parallel to the Murray-Darling Basin Commission. It will present a significant challenge to not only our water managers but also water managers across all the jurisdictions.

In conclusion, under the Achieving Sustainable Groundwater Entitlements scheme [ASGE], the scheme was devised to ensure that irrigators and others who were, because of a revised level of entitlement, entitled to some structural adjustment assistance to the value of some \$135 million as I understand it. This has been delayed for an incredibly long time because, believe it or believe it not, following a class ruling in by the Australian Taxation Office it emerged that it appeared that the users who were to be compensated for the loss of their water would in fact have to pay capital gains tax, the net worth of which was some \$30 million more than the value of the water they had acquired and were to sacrifice, if you like. As a consequence of that, as I understand it, there were significant delays causing significant hardship to irrigators along these river systems, but the Commonwealth has now compensated for that, somewhat belatedly, and New South Wales is in the process of making those payments to the irrigators which are entitled to the ASGE assistance payments.

The way in which New South Wales is managing and continues to manage water, in probably the most critical of times, is commensurate with what is expected of us. We have made several difficult decisions, not the least being our refusal to release water for a number of environmental

flows, flushing flows, and so forth, so that we might preserve that water for the irrigators along the systems who are doing it very tough. We have made a number of compromises along the way. Some of these obviously affected the environment. We have worked closely with commerce and industry, particularly critical industry along the Murray River—places like the paper mill at Albury, feedlots, piggeries and so on—and we have been able to ensure them ongoing supply until the end of the current water year.

As a consequence of some minor inflows as a result of early snowfall resulting in some water in the Murrumbidgee, we have been able to restore some of those entitlements along the river system to the users, but things remain critical in terms of the Murray. It is particularly pleasing that we have had very good cooperation from utilities, councils along the Murray, in terms of imposing quite necessary water restrictions. We continue to work with all those councils to ensure that there is equity in the distribution of what is becoming an increasingly scarce and precious commodity. I have taken the opportunity to visit the area, if my memory serves me correctly, on no less than four or five occasions, visiting places like Deniliquin and others.

I have met with irrigator councils, I have met with irrigators, and I have met with growers across the spectrum, to hear and see first hand the extent of their plight, with which I have enormous sympathy. We have what I believe to be a good rapport, and we have all agreed that some tough decisions would need to be made from time to time, but we are attempting to achieve the middle-ground to ensure that these people along the systems will survive. They will not all survive, Mr Chairman—such is the critical nature and the parlous state of water in some of those valley systems. Unless there is unexpected rain—and if it rains, it will be unexpected because none of the meteorologists or climatologists is able to offer any degree of optimism at all—it will be a very hard year for all concerned. On that note I will conclude my opening statement.

**The Hon. MARIE FICARRA:** Minister, I note that this segment is on water management but I will start off with your office, from which you conduct water management, so I think it is appropriate. Can you confirm that the cost of refurbishing your office was \$0.5 million?

**Mr PHILIP KOPERBERG:** The relevance completely escapes me, Mr Chairman. In any event, no, I cannot confirm the cost of it. The style and nature of the office is not something determined by the Minister in this case. These things are centrally co-ordinated through the Premier's Department. There has been widespread speculation on what the cost might be. Leaving my office to move to Governor Macquarie Tower is consistent with a practice that has prevailed for many, many years, in the interests of the efficiency of government. In fact, if my memory serves me correctly, that trend was commenced during the Greiner-Fahey Government, although that is so long ago I can barely remember. But it was the fact that during that Government Ministers were moved—I do not know how many—into Governor Macquarie Tower. My office is situated at the southern end of the central business district. An enormous amount of time is spent travelling to and from the central agencies, but by and large—

**The Hon. MARIE FICARRA:** Point of order: My question related purely to the cost. I am not interested in your travelling times.

**The Hon. EDDIE OBEID:** The Minister will answer the question in whichever way he wants.

**CHAIR:** The Minister is entitled to answer the question as he sees fit.

**Mr PHILIP KOPERBERG:** What I am trying to do, for the edification of the Committee, is to not only provide some detail in relation to the question asked but also the rationale for it. Neither my office nor I have any control over the cost. These things, as I said, are centrally coordinated and I would ask that the matter be referred to the Premier.

**The Hon. MARIE FICARRA:** If you do not know the cost of your whose refurbishment—which, as a Minister, I would have expected you would—do you know how many square metres this refurbishment entailed, and thus the cost per square metre of the refurbishment?

**Mr PHILIP KOPERBERG:** Again, this is a matter from which we stay at arm's length. We are not making any special requests in terms of the accommodation. One assumes, with some justification, that there is a standard for ministerial offices. We have not asked that these standards be exceeded; we have not asked for anything unusual or, indeed, unprecedented. Whatever they give us is fine with us. The way in which the tenders are let is a matter for the Premier's Department; as is the case with the square meterage that might ultimately be made available to us.

**The Hon. MARIE FICARRA:** As the responsible Minister can you tell me what Green Star rating your refurbishment entailed? You are the responsible Minister for such issues.

**Mr PHILIP KOPERBERG:** Yes, indeed I am. The office is to be located in a high-rise building that has been standing for some time. In fact it was built during an era when climate change was rarely found in the vocabulary and had not as yet made its way to the Oxford Dictionary. Nevertheless, the Government has committed to reducing its carbon footprint across the board and it is a matter that, no doubt, will be the subject of some questioning during the climate change part of this hearing. If I may take on notice the question as to the details I will be happy to advise the Committee.

**The Hon. MARIE FICARRA:** Given that the cost of refurbishment—I go back to this because it interests the taxpayers of New South Wales, as well as the Members of both Houses. It is estimated that commercial refurbishments are \$1,200 per square metre and green refurbishments \$2,000 per square metre. At this rate your office should be taking up several homes. Can you tell us why the cost of refurbishment of the 35th floor is so much higher than a normal commercial refurbishment? What special attributes do you have to your office that makes it so expensive?

**Mr PHILIP KOPERBERG:** I am not aware of any special attributes. In fact in having visited countless Ministerial offices in the past 21 years or so in my previous vocation I do not expect that there is going to be anything different except, I would hope, more energy-efficient lighting and things like that. As I understand it, one of the reasons that there may be higher than normal construction costs is because of the nature of the building. The necessity for contractors to work at night, which is part of I suspect the lease obligation that we have to the owners of the building and so on. Again, I would not expect the Committee would expect me to be aware of these sort of details.

**CHAIR:** You have every right to take this on notice.

**The Hon. MARIE FICARRA:** Minister, do you smoke? Where do you smoke?

**The Hon. HELEN WESTWOOD:** What is the relevance of that?

**The Hon. MARIE FICARRA:** Where do you smoke in your office? You are a smoker, where do you actually smoke in your office? Is there any special provision in your office?

**Mr PHILIP KOPERBERG:** I can assure you, Mr Chairman, that the issue of whether I smoke or not, or whether I drink or not, or whether I shave in the mornings or not, would not be the subject of any special consideration of any description under any circumstances in the provision of an office for me in Governor Macquarie Tower.

**The Hon. HELEN WESTWOOD:** Point of order: Section 4.10 of our guidelines actually relates to questions about matters of privacy of a witness. This is clearly outside the terms of reference and is certainly leaning toward the witness's private life. It has nothing to do with the work of this Committee. Could I have a ruling please.

**CHAIR:** To the point of order: I think it is reasonable in terms of privacy. May we revisit the question of smoking in general inside a Government office, if you could refer to it in that manner. Minister, if you would answer in that manner also?

**The Hon. MARIE FICARRA:** That is the point I am getting to.

**The Hon. HELEN WESTWOOD:** What is its relevance to water, which is what we are referring to?

**The Hon. MARIE FICARRA:** Relevance to the office of the Minister.

**CHAIR:** Questioning is often about the cost of office refurbishment. It is an office of the Minister and, yes, it is a tenuous connection but I am allowing these questions from the point of view that the Minister is quite capable of dealing with them. Minister, if you would look at the issue of any special refurbishment dealing with smoking in the office, if it is an issue.

**Mr PHILIP KOPERBERG:** I have actually answered the question. I have said that no provision of any description whatsoever has been incorporated in my office to meet any of my particular habits, needs or anything else, and that includes smoking or anything else. It would be ludicrous, with all due respect, to suggest that I would make a request as part of office accommodation to meet personal needs. It is just outlandish.

**CHAIR:** Thank you, Minister. I think it is a noted response to the question.

**The Hon. MARIE FICARRA:** Is there a balcony? Where are you going to smoke?

**The Hon. HELEN WESTWOOD:** Point of order: What is the relevance?

**Mr PHILIP KOPERBERG:** There is no provision made whatsoever for any of my personal requirements.

**CHAIR:** I think that is an adequate answer.

**Mr PHILIP KOPERBERG:** The Governor Macquarie Tower, as anyone who is vaguely familiar with that part of the city knows, does not have balconies. It is up and down.

**CHAIR:** Could we get back to the subject? I think it has been clearly indicated and the Minister has answered quite clearly your question.

**The Hon. MARIE FICARRA:** There is no balcony and the Minister is a smoker so we do not know where he goes to smoke.

**CHAIR:** I do think that is relevant.

**The Hon. MARIE FICARRA:** As Minister for Climate Change, Environment and Water, and given that New South Wales Government agencies use 38,000 million litres of water per year and 8 million gigajoules of energy per year, with respect to your office can you advise what measures you have taken and what input you have had into the design and fit out to ensure that it is environmentally sound?

**Mr PHILIP KOPERBERG:** Mr Chairman, this is not a freestanding office. This is an office in a multi-storey building. The building is under lease to the Government. There are many, many requirements. We are just one small component of what probably constitute, perhaps, 200 offices I really do not know. There are no special requirements provided for me. The way in which the office is managed will be the most cost-effective, energy effective and carbon effective within the circumstances that we find ourselves in. Given the fact that we urge communities across the spectrum to exercise restraint in the use of water and electricity, something that I myself do in my own home, it is incumbent upon Government departments to do the same. That does not mean to say you redesign one office in a multi-storey block that would probably add tens and tens of thousands of dollars to the cost and would completely negate any impact so far as energy and water usage is concerned. As I have tried to explain, obviously clumsily, this is a matter for the Premiers Department and I would ask that the honourable member refer it to the Premier.

**The Hon. MARIE FICARRA:** As Minister for Climate Change, Environment and Water, can you advise whether you will commit to ensure all Ministerial offices, including yours, are carbon neutral and Green Star—the Australian building green house policy standards? Will you ensure that? Will you guarantee that?

**Mr PHILIP KOPERBERG:** Mr Chair, I will, of course, commit to making every endeavour. Government departments, I might say, are bound to report on energy use and water use and, in fact, are required to make savings, significant savings across the board. As technologies improve, as the wherewithal provides itself to intensify these efforts, they will be employed. It goes without saying, I think, that I will remain a strong advocate of those sorts of efficiency savings and carbon neutrality objectives to prevail within government departments in a Government that leads Australia in terms of those particular objectives.

**The Hon. MARIE FICARRA:** Through you, Mr Chair, Minister, have you received a briefing on the environmental impact of the New South Wales ministerial offices? Do you currently know what their ratings are?

**Mr PHILIP KOPERBERG:** No, I do not, Mr Chair. But I am happy to take it on notice.

**CHAIR:** Thank you.

**The Hon. MARIE FICARRA:** My last question—

**The Hon. HELEN WESTWOOD:** Is it about water?

**The Hon. MARIE FICARRA:** Yes, it is, if he sits in his office and manages water for New South Wales.

**CHAIR:** Would you ask the question?

**The Hon. MARIE FICARRA:** As the Minister for Climate Change, could you advise what percentage of materials used in the construction and fit-out of your new office are recycled or eco-friendly, such as reused workstations or the use of plantation and low emission composite timber?

**The Hon. EDDIE OBEID:** You do not even understand it.

**The Hon. MARIE FICARRA:** I do. I have some.

**Mr PHILIP KOPERBERG:** I have already answered the question. I have explained that we do not have the oversight of the construction and design of this office. We have made our basic requirements known—meeting rooms, accommodation to fit x number of people and so forth and so on. I have already explained that the Government is obliged to comply with all manner of conditions that are inherent within the leasing arrangements. But if the Committee desires it, I will certainly inquire as to the exact response required for the honourable member and take it on notice.

**CHAIR:** Thank you, Minister.

**The Hon. MARIE FICARRA:** I think as the responsible Minister you should know these things about your own offices.

**Mr PHILIP KOPERBERG:** I am sure that once we are there I will, Mr Chair.

**The Hon. RICK COLLESS:** Minister, can you advise the Committee of the financial relationship between the Department of Water and Energy and the water corporations, the irrigation corporations, such as Murray Irrigation?

**Mr PHILIP KOPERBERG:** With the Chair's consent I will refer that to David Harriss.

**Mr HARRISS:** The irrigation corporations were privatised in 1995. So they operate under the Corporations Law. The bulk water charges—which are paid by the irrigation corporations; they are not just paid by individual water users—are determined by the Independent Pricing and Regulatory Tribunal [IPART].

**The Hon. RICK COLLESS:** Can you advise the Committee if the Government receives the dividend from those water corporations each year?



**Mr HARRISS:** I am unaware of any dividend. I might have to take that question on notice.

**The Hon. RICK COLLESS:** Are there any charges of any sort that are paid to the Government by those water corporations?

**Mr HARRISS:** No, my understanding is that the only charges paid to the Government are through the bulk water charges, which are determined by IPART.

**The Hon. RICK COLLESS:** Are they paid on an annual basis irrespective of whether or not the irrigators actually get their water?

**Mr HARRISS:** The charges are two-tiered. There is a fixed charge, which is levied by State Water as the asset manager and operator, and a separate natural resource management charge issued by the Department of Water and Energy. Both are fixed charges, which effectively in the case of State Water are for the maintenance and operations of the infrastructure. That work has to go on irrespective of how much water is available. There is also a variable charge based on water use. So if there is very little water available, of course, that variable charge is reduced. Similarly, the charges levied by the Department of Water and Energy, which are again determined by IPART, are a two-tiered charge: a fixed charge for operations that must go on irrespective of whether the water is available, such as, water planning, compliance and licensing; and a component which is a variable charge based on water use. Again, if there is no water available that use is very low. So there is no charge based on the use.

**The Hon. RICK COLLESS:** In terms of the fixed water charges, given that there is a very serious shortage of water at the current time in most irrigation areas, those fixed water charges are still required to be paid by the irrigators, despite the fact they have no access to water?

**Mr HARRISS:** Fixed water charges are required to be paid. They are effectively fixed components of water management and infrastructure management that must go on irrespective of the volume of water.

**The Hon. RICK COLLESS:** Are you aware, and I am sure you are, of the quantum that some irrigators are facing in fixed water charges in periods of virtually nil income?

**Mr HARRISS:** Certainly it is incredibly variable across the State because the entitlements owned by private companies versus individuals versus authorities vary considerably. Murray Irrigation, for example, has an entitlement of about 1,500 gigalitres. So the fixed component is quite substantial. They levy their individual shareholders as a private entity.

**The Hon. RICK COLLESS:** Are those fixed water charges collected by Murray Irrigation?

**Mr HARRISS:** Yes, the bills would be sent to Murray Irrigation as if they were one licensed water user.

**The Hon. RICK COLLESS:** What I am trying to establish is that the bill for the fixed water charges go from Murray Irrigation to the irrigator but you also bill Murray Irrigation for your component of those water charges?

**Mr HARRISS:** State Water would bill Murray Irrigation for their bulk water charges relating to infrastructure management through state water. We would bill Murray Irrigation for natural resource management and then they would pass those charges on to their shareholders.

**The Hon. RICK COLLESS:** Minister, you might be interested in this too. I know of some irrigators down there who have accounts this year for fixed water charges in excess of \$100,000. They have virtually no irrigation allocation and they have no opportunity to make any money for the next couple of years, more than likely. Yet they are still faced with accounts for fixed water charges for over \$100,000. Do you think that is a reasonable situation for business people to find themselves in?

**Mr PHILIP KOPERBERG:** It is, in fact, a very unfortunate situation that these people find themselves in. I have a great deal of empathy with them. Mr Chair, you and Mr Colless know that for

the last 20 years I have spent a lot of time in the bush. I know how the rural sector works. I would like to think I am able to empathise with them at a time of great critical need. However, the reality is that the infrastructure has to be maintained. If it is not maintained, even in the absence of normal water supply, normal water flows, it is invariably the case, as I understand it, that it will cost more to maintain in those circumstances than were water to be flowing freely. The Government has a great deal of sympathy. Morris Iemma has said on numerous occasions that New South Wales will stand by its irrigators. It was the case in the Lachlan Valley that fixed water charges were, in fact, deferred to help users along that system to cope with the dire circumstances they found themselves in.

Deferred billing, whilst impacting on the budget cash receipts, would not result in a loss of revenue in the Department of Water and Energy over the medium term. On the other hand, the waiving of charges could reduce revenue by up to \$16 million, in fact \$19 million for the current year. What we are intending to do is to work with the irrigators to enter into arrangements that will lessen the burden on them. There are extensive drought relief packages available. The details of these I am happy to provide on notice but they are extensive. In the meantime, we will keep working with water users to try to mitigate as best we can the hardships that they are experiencing. As I said, the Government is making available a wide range of relief measures and I am happy to provide detail of those on notice.

**CHAIR:** Thank you, Minister.

**The Hon. ROBERT BROWN:** My question to you is on the rainwater tank rebate scheme. Can you provide the Committee with some sort of an idea of the total installed capacity that has been subject to rebates under that scheme? The second part of the question is, do you have the figures or would you be able to obtain the figures to find out what additional capacity has been built that is outside the eligibility of the scheme? For example, those water storages built under the Building Sustainability Index requirement for new homes and major renovations?

**Mr PHILIP KOPERBERG:** In both cases I would be happy to provide the Committee with the details in terms of the uptake of rebates—and those rebates, of course, are up to \$1,500 now, depending on the particular plumbing configuration. It is also noteworthy that people throughout New South Wales are eligible for those rebates, which has been a major boon to assist people to conserve water and what have you. Under BASIX, of course, new homes are required as part of their design plan to incorporate water storage capacities. The exact uptake on both and the total quantity of water potentially stored, subject to rainfall, under BASIX and the uptake of subsidies I would be happy to provide on notice.

**The Hon. ROBERT BROWN:** I have no further questions at this point in time.

**CHAIR:** In terms of the installation of rainwater tanks and suchlike, there has been quite a bit of debate in regard to the cost and efficiency of resolving the problem that way, and opposed to that, of course, is there have been people in my camp saying we need more of them. When your department assesses the amount of water potential how are they measuring it? Is it the size of the tank or are they actually making a measurement of the potential throughput? For example, you might have a 5,000-litre rainwater tank but, if properly managed, it can harvest a great deal more. Could you indicate what way that is assessed in terms of efficiency of that type of campaign?

**Mr PHILIP KOPERBERG:** As I understand it, the measuring, whilst it is not perfect it is certainly based on more than guesswork, because the recipient has to sign off that they have had the work done and plumbers then have to certify the installation. Part of that certification process, as I understand it, goes to the issue of how the tank is plumbed, what size it is, what its catchment is in terms of roof area, and what have you. So it is, in fact, possible to reasonably accurately surmise the amount of water captured and thus saved from the direct supply. As to detail, I am happy to provide it on notice.

**CHAIR:** On the other side of the equation, grey water and reuse, which is often very much held up by health department regulations, have you had any breakthrough on that in terms of liberalising the opportunity to capture and reuse grey water?

**Mr PHILIP KOPERBERG:** As much as I would like to attempt to provide you with an answer, I am advised that this is a matter for my colleague the Hon. Nathan Rees, who has responsibility for Water Utilities. I might ask that the question be referred to him.

**CHAIR:** I was referring to on-site similar to rainwater tanks, but you are saying it is to do with Nathan Rees?

**Mr PHILIP KOPERBERG:** As I am advised.

**CHAIR:** Moving to the Tilligra Dam issue that you would be aware of in the lower Hunter, this is a significant construction, an expensive construction, and also it will have significant environmental impacts. I have visited the area, and I am sure you are well aware of that area. The storages are at some 97 per cent capacity. Would it not be reasonable to look at a conservation strategy there rather than the building of a new dam that is going to have quite a significant impact on both the social amenity and environmental amenity of that area?

**Mr PHILIP KOPERBERG:** Yes, and were we able to say with any certainty that the level of supply within that dam would be maintained at that level within future years, having just experienced a wide variety of climatic conditions which sees parts of the coast and the Hunter faring very, very well with water—and that is evidenced by the fact that the total level of supply throughout the Sydney metropolitan area is at 58 to 60 per cent, or thereabouts, as I am advised, and some of the storages in the Hunter are considerably higher than that—we would assume there would be no need for a new dam in those sorts of areas, or extension of the current dams or what have you. But we have just been taught the salient lesson about the impacts of climate change and how that might manifest itself in rainfall distribution and drought, as clearly can be evidenced in the vast majority of the State, and all the options have to be considered. Having said that as a rationale for the proposal, I am conscious of the fact that this is a Hunter Water proposal and Hunter Water is a utility that, again, falls within the purview of my colleague Nathan Rees.

**CHAIR:** So you have no say in the matter of, for example, justifying a levy on lower Hunter ratepayers to pay for the extension of the dam when there is no water shortage in the area, as Minister for Water and Climate Change?

**Mr PHILIP KOPERBERG:** In that respect, no, on the proposed dam itself, the environmental impacts and what have you. Clearly I will continue to advocate for the lowest level of impact there is, obviously in collaboration between my colleague and I, but it is a levy imposed, as I understand it, by Hunter Water. Hunter Water is a utility, which is caught within the ministerial responsibility of my colleague Nathan Rees. Therefore, I am probably not competent to answer your question.

**CHAIR:** I appreciate the division there but might you not agree that you would have an overall responsibility for, or at least an overall interest in, these sorts of issues and given that we have got 97 per cent capacity at the moment, and I think it relates back to some of Sydney's water woes, the debate between desalination plants and general education awareness and perhaps putting the community on a greater level of water efficiency, that that would be money far better spent by this Government rather than going into a project like that at this point in time? Would you not agree that if water supplies in that area can be protected through education and some level of water restrictions, even when the dam levels are high, that would in itself create a demand management scenario that would mean that we do not need to build such an expensive piece of infrastructure?

**Mr PHILIP KOPERBERG:** I cannot disagree that demand management is a critical component of the suite of measures that the Government has adopted to conserve water, to recycle water, to capture stormwater and so forth, but we live in uncertain times. The State's Water Plan attempts to arrive at a situation where much of New South Wales in terms of urban population is drought proofed. We have seen in the Hunter the storage reduce from 100 per cent to somewhere in the order of 40 per cent in a relatively short space of time—some 18 months. It is not inconceivable at all that we return along the coastal areas to a regime of critical drought. There is no more certainty in this day and age about rainfall patterns and rainfall yield in our storage areas. We are already seeing, once again, a lowering of available water in Warragamba. It is miniscule, I will concede, but it is going down; it is not going up.

We are heading into what is suggested will be a warmer than usual summer. It will be the third such summer in a row. Last summer and the summer before we saw record-breaking temperatures. That has a significant effect on water evaporation and usage. Of course, as you perfectly correctly say, water management and demand management are key components of this. However, in the longer term, we must have a suite of measures. Given the outlook and the projected population growth in the Hunter, the dam is one component of a far larger suite of measures. Obviously, when the dam is built, the environmental impact will constitute a major component of the process. I will continue to be a strong advocate of both demand management and environmental impact being minimised.

**CHAIR:** I appreciate the ministerial demarcations. However, do you have a purview of the macro water-sharing plan, for example, for the Williams River?

**Mr PHILIP KOPERBERG:** The short answer is yes I do.

**CHAIR:** Can you provide information about the impact of the Tillegra Dam on the macro water-sharing plan for the Williams River in the Hunter Valley? Perhaps you could inform the Committee when the plan for the Williams River will be release for public exhibition.

**Mr PHILIP KOPERBERG:** I take the opportunity to refer this to David Harriss, who has the detailed answer at his fingertips.

**Mr HARRISS:** I do not know when the macro water-sharing plan for the Williams River is due to be released. However, we are obliged under the National Water Initiative to complete the plans by 2009. We have a schedule of the completion of those plans. You are correct in saying that this department does have input into issues such as Tillegra Dam with the water-sharing plan and we are establishing water-sharing plans to ensure reliability for 10 years. What must be considered is how the dam will operate—whether it is operated simply to increase reliability or to increase yield. That is where this department's responsibility comes in. As the Minister has pointed out, with the vagaries of climate we are looking at providing reliability rather than increased water. That is the sort of thing we are looking at from our organisation's perspective.

**CHAIR:** Are you saying that the Tillegra Dam construction and utilisation could be undertaken without impacting on the macro water-sharing plans for the Williams River and that we will not see associated impacts? You are doing this study.

**Mr HARRISS:** There will always be impacts, but the level of those impacts will be determined by the operation of the infrastructure, the size of the operation and from where it draws its water. We are not in a position at this stage to say that if we build a dam it will harvest all the water and that that will offset how it will be used in the future. An example would be one of the proposals being considered in Canberra to increase the capacity of the Cotter Dam to the west of the city. The impact of that would be simply to reduce reliability because of evaporation and there would be a first catch of the water required to fill it. However, the operations have yet to be decided, and that will determine the long-term impact on downstream users.

**CHAIR:** Will current downstream water users be compensated if the Tillegra Dam impacts on their ability to draw from the system?

**Mr HARRISS:** The Water Management Act provides for compensation should the reliability of water rights be diminished during the course of the water-sharing plan. The quantum of that compensation would be determined by the level of impact and that is determined by how the dam is operated.

**CHAIR:** Where in the pecking order would environmental flows sit between dam use in urban areas and other water users, including agricultural users?

**Mr PHILIP KOPERBERG:** Very high in my estimation. Clearly, human needs will always prevail; that goes without saying. The other point worth mentioning in respect of the Tillegra Dam is

that it will be a source of water not only for the Hunter but also for the Central Coast, which has one of the highest population growth rates, and that is expected to continue.

**CHAIR:** There is a lot of concern about that. I have been to places on the Central Coast where whole communities are saying that the concept of transferring water across catchments is very clumsy. I know that has been the attitude of this Government and the Wran Government. However, people are saying that we should be self-sufficient and therefore there should be a lot more emphasis on localised water catchment, tanks and so on. As Environment Minister should you not be pushing that barrow harder?

**Mr PHILIP KOPERBERG:** We do so consistently. One would have difficulty finding issue with what you are saying, but the reality of life is that if we could with a degree of accuracy forecast inflows and future rainfall patterns, quality of rain and so on then we would be able to say with some clarity that one measure within a suite of measures will serve a range of purposes, such as demand management. Demand management will always be a feature of the way water is managed in the future, particularly in urban communities. Unfortunately we do not know what is around the corner in 10 years as a consequence of climate change. It is more likely than not that that will be the case.

Again, there is significant change in the distribution of rain across the landmass of New South Wales. We must prepare for that, and do so taking environmental aspects into consideration. They are not mutually exclusive. At the end of the day it is probably no different from the way in which we are attempting to manage water in the Murray-Darling, the Lachlan, the Barwon and in any other number of systems.

We are trying to find a balance. The livelihood of people depending on those systems is obviously a priority. The environment is the second priority and so it goes on. I do not see that philosophy being subject to any change in the Hunter, on the Central Coast or anywhere else. As I alluded to in my opening statement, the National Water Initiative, to which New South Wales is a subscriber, and the fact that 90 per cent of water distribution now falls within the realms of water-sharing plans both provide a greater level of guarantee in terms of water for the environment than would otherwise have been the case. We expect that trend to continue.

**CHAIR:** Are you saying that water for the irrigation industry has a definitely higher priority than water for the environment and that that is a consistent Government position?

**Mr PHILIP KOPERBERG:** We must ensure the viability of primary industry, not only for the sake of primary producers but also for the way in which you and I live. We expect to go to supermarkets and obtain produce. Primary industry needs to remain viable. The difficult decision-making comes in when we face the choice of our unequivocal obligation to protect the environment—and we can do so in concert—and no food because there is no-one to produce it and people's capacity to earn a living being completely denuded. As we become more innovative with the capture of stormwater and thus reduce the urban reliance on catchment areas as recycling technology continues to improve and urban communities become less reliant again on rainfall and as our demand management improves, so will all these consequences fare better.

In the past, again as I alluded to in my opening statement, we have had to make some hard decisions. In an ideal world I as responsible Minister would say there will always be enough water for environmental purposes. I wish that was so but we have already seen a dramatic change in the way rainfall is distributed, in the amount of rainfall, and so on. We have to find some middle road when things are as dire as they are now. When things are plentiful, it does not become an issue. When things are what we perceive as normal it does not become an issue. But things are far from normal—very abnormal.

We continue to strive to ensure—and we have demonstrated, I suspect—that our focus on environmental flows and water for the environment generally has been of a very high order but from time to time we have to make a decision and we had to suspend this environmental water because if we do not the irrigators along this system or the paper mill along that system or the feedlot along another systems or the piggery along another system—people who produce the things we expect to find to sustain ourselves on the supermarket shelves—they may not be available and then we would

have to import them. Then we could become a net importer of produce as opposed to a net exporter of produce. That is certainly not the way we want to go either.

**Mr HARRISS:** Can I add to that, chair? Getting back to your original point about where the environment fits into things, under the Water Management Act we develop water-sharing plans that have been based on history of inflows and a history of climate in many cases over 110 years of history. We have developed a process that articulates the environmental share as a priority. When we get into what is called a critical water shortage, where we know we might have difficulty meeting the town water supply, there is provision under the Water Management Act to suspend the water-sharing plans. When we go back to the legislation, it says the priority then is the domestic component of towns and the domestic component of stock and domestic users, followed by the environment and followed by other users and the priority of generally high security followed by general security.

What we find now, when we suspend the plans, as we have done in about five valleys throughout New South Wales because we have to have extraordinary arrangements to meet town water supplies, we have met the domestic component and then we have reviewed the immediate environmental needs. They are done on a catchment-by-catchment level. For example, in the Murray we realised that many of the critical environmental needs will be met simply by getting end of system flows down to the bottom of South Australia. In the Murrumbidgee we are looking and saying how much water do you need to make a substantial decision, because we have returned an increased end of system flows that we have going. So, we still maintain the environment as an absolute high priority but what is variable is the amount of water that needs to be set aside and used to get an environmental outcome. What we focus on then is, if you do not have a substantial volume you are not going to get the environmental outcomes over and above what you have through end of system flows. Then you have to look at maintaining critical industries and the critical communities and the communities that depend on those.

**The Hon. EDDIE OBEID:** Minister, can you provide an update on the Government's management of recent water quality incidents in Sydney's catchment area?

**Mr PHILIP KOPERBERG:** Yes. I am happy to advise the Committee that despite periodic events such as turbidity, the turbidity being a disturbance of the water within a body of water constituting a storage area or whatever, resulting invariably in murky water—if you like, it is no different from what you see close to a cliff edge with a lot of turbulence—

**CHAIR:** Ocean outfalls?

**Mr PHILIP KOPERBERG:** I was trying to studiously avoid that—and the presence of low levels of cryptosporidium, Sydney's drinking water continues to be amongst the highest quality in the world. I am advised that it is a factor of 10 better than it has to be under national and State standards. So, it continues to be, as I said, amongst the best, if not the best, drinking water in the world. In recent times, as a consequence of the very rigorous testing regime conducted by the Sydney Catchment Authority and others some 21 oocysts of cryptosporidium were found in the upper canal. The upper canal is that open structure that sends water from the southern dams—the Cordeaux, Nepean, Avon Cataract, and so on—off to the Prospect treatment works, the filtration plant. Together, those dams, using the canal as a conduit to get it from point A to point B, provide about 20 per cent of Sydney's drinking water.

These are very low levels—and I think I said there were 21 oocysts detected in the water in the upper canal, and this was in the raw water, not in the treated water. Cryptosporidium, like so many things, are naturally occurring pathogens in the water. When you consider the extent of our catchment areas, if you consider the scope of the Lake Burragorang Catchment Area, for argument sake, it is literally thousands of square kilometres. Fortunately, it is populated by all manner of native fauna—kangaroos live and breed and thrive there, as do wallabies and possums, and other things. So you have this vast open catchment area, which is one of the best in the world, having seen many of them throughout the world. So, when you have a major water event such as we had a few months ago, which resulted in the dam levels rising, it is not unexpected that some of this would wash into the water supply, it is a perfectly naturally occurring event. So it is with the upper canal.

From time to time—indeed, not infrequently—this occurs. What is important here, though, is that we recognise that, like a river, it is an open system and therefore is subject from time to time to things entering into it. What is important is the amount of money spent on things like the Prospect treatment plant, which is a world standard plant and produces water at the outfall end, which, as I said, is amongst the best in the world, if not the best in the world. It is a heady claim to make but it would not be far off the mark. So, we continue to frequently monitor the water in Warragamba and the water in all of our other supply systems, the upper canal, which is the structure that transfers water from the dams to Prospect, and it is an equally rigorous regime of testing at the outflow end.

So, with the recent events, the turbidity within Lake Burragorang, particularly close to the dam wall; now the algal bloom, which extends some considerable way along Lake Burragorang—in excess of 20 or 30 kilometres—and again the algal bloom is a naturally occurring event given rise to by excessive nutrients washing from this vast catchment area into the stored water; and an onset earlier than otherwise would have been anticipated of warmer than usual weather, are all factors that give rise to blue green algae. Despite these three events—the cryptosporidium in the upper canal, the presence of turbid water in Lake Burragorang close to the dam wall and the blue green algae, what comes out of our taps is still, as a consequence of massive investment by this Government on treatment processes and filtration plants and what have you—in this particular case at Prospect—we have world standard drinking water.

We are never going to avoid the possibility of things washing into our water supply. We cannot cover it or build a huge glass tank and hope it will rain sufficiently to supply the trillions of litres of water consumed every year. I am firmly of the view, and it is evidenced by the testing regime at the outflow end of the treatment works, that a combination of Sydney Water, the Sydney Catchment Authority and NSW Health are managing very well the quality of our water. I was a little surprised, although I should not have been, that the member for Terrigal alluded during a recent radio interview, as I understand it, to the fact that we were trying to cover something up, which I find rather strange because we have been out there every two or three days advising the media precisely of what the circumstances in relation to our water was.

We detected 21 oocysts of cryptosporidium in the upper canal and we go out there and we tell the world. We tell why it is there, how it is going to affect them, how we are treating it and the state of the drinking water that we supply to them. If blue-green algae forms on Lake Burragorang, we call the media together, I will make a statement to the House and we tell the world precisely what is there. It is there for all to see, and it comes with scientific, medical and other advice. If we see some turbidity occur due to a massive influx of water, we tell the whole world that this is happening; it is there for all to see. So this hardly constitutes some attempt on the Government's part to cover-up what is happening with our water. Quite the contrary is the case.

**The Hon. HELEN WESTWOOD:** Can the Minister advise the Committee of the Government's investment in the infrastructure that supports Warragamba Dam?

**Mr PHILIP KOPERBERG:** The Government has been implementing programs over the last decade to ensure a safe and secure water supply for Sydney well into the future. The Iemma Government, through the Sydney Catchment Authority, has embarked upon a major program of work through the upgrade of Warragamba Dam. In all, the Iemma Government is investing some \$240 million at Warragamba in addition to the \$56 million spent to build the Prospect Raw Water Pumping Station as recommended by the McClelland report following the Sydney Water inquiry of 1998.

Last week I announced \$23 million to completely overhaul the electrical wiring system at Warragamba Dam. These works had been undertaken to ensure that the dam and the pipeline continues to operate reliably and efficiently. Upgrades have also included building the auxiliary spillway to withstand floods—we should be so lucky as to never have to put that to the test—and these works were completed in 2002 at a cost of \$111 million—and the construction of deepwater pumping stations at Warragamba Dam in 2005-06. The Committee might recall that when things looked particularly grim in terms of Lake Burragorang and Warragamba Dam capacity, water was sourced at considerable depth—water that had not been previously sourced—and the pumping station to access that water was built and, as a consequence, we got over that hurdle, a sign of some innovative application of technology at a cost of a further \$62 million.

That pumping station is now fully commissioned and can provide an alternative water supply for Sydney for at least three weeks. This refers of course to Prospect, combined with the deepwater access. The Prospect rural water pumping station was turned on in June and, as I hope I have just demonstrated when talking about the quality of Sydney's water, is working precisely as it was designed to do. These immediate and longer-term plans provide a clear and safe water supply for Sydney. I have no doubt, having said all that, that as soon as this hearing is over Ian Tanner will tell me that we have new cryptosporidium or a new blue-green algae, but thank you.

**The Hon. HELEN WESTWOOD:** Can the Minister provide an update on measures that the Government is taking to secure Sydney's water supply?

**Mr PHILIP KOPERBERG:** The Metropolitan Water Plan outlines the mix of measures that the Government is implementing to ensure that there is water available to meet Sydney's water needs, both in response to drought and to meet the longer term needs of a growing population and a potentially changing climate. As I suggested earlier, the Lemna Government is committed not just to a single measure but to a suite of measures to assure the availability of high-quality water to Sydney for as far as we can see into the future. The various components of that suite of measures have already been outlined.

Implementation of the plan is actively monitored, with annual progress reports regularly prepared to confirm the plan's underpinning analysis remain valid. In addition, the plan is subject to a major review every four years. The Government will soon commence the first of these reviews to incorporate the very latest information on climate change and other matters. The 2007 progress report on the Metropolitan Water Plan was released on 27 September, which shows that implementation of the plan is on track; 32 key plan actions have now been completed; 43 actions are on track and all major new infrastructure projects are on schedule. The progress report notes that only a small number of actions—two to be precise—are behind schedule. These actions have been prioritised for completion in early 2008.

Given this, the Government is confident that Sydney's Water supply has been secured against the current drought and expected population increases until at least 2015. Of course, as some of these other measures come on line, that will extend out well beyond 2015. The major milestones in the implementation of the Metropolitan Water Plan include constructive access to deepwater at Warragamba Dam, as I have just explained, and Nepean Dam, at a cost of \$119 million to make a further 40 billion litres of water available. We have signed a contract for a \$1.83 billion 250 million litre a day desalination plant and associated pipe works. I am a great supporter of that, by the way, just in case anyone on the other side thinks that I am being critical.

It just seems to me that here we live in the twenty-first century and we have access to this technology, and we should use it. To be 100 per cent credited green power renewable energy; and a \$250 million contract to build infrastructure that will produce a further 18 billion litres a year of recycled water that will be used to substitute for current releases from Warragamba Dam and over 430 households or at least one in four homes in Sydney have participated in Sydney's water fix program and now use water efficient shower heads and other water saving devices. This is the equivalent of almost every home in Adelaide choosing to switch over to water-saving devices and so forth.

**The Hon. MICHAEL VEITCH:** Minister, can you provide an update on the water situation in the Murray Valley and the National Water Plan?

**Mr PHILIP KOPERBERG:** The Murray Valley is still in the grip of the worst drought in recorded history, and I have alluded to that several times during the course of this hearing. The inflows for 2006-07 were by far the lowest ever recorded, being only about 60 per cent of the previous record drought. Similar conditions were experienced by the Snowy scheme, and the resources servicing the Murray Valley reached their lowest recorded level.

The drought forced New South Wales to reduce the water that was already in the licence accounts, in order to provide some certainty to licence holders for the remainder of the year. In October 2006 access to 20 per cent of the water licence account was suspended, and this was followed by a further suspension of 32 per cent of the remaining water in November when the drought



intensified. Access to unused water in licence accounts at the end of 2006-07 was also, by necessity, suspended.

At the commencement of the 2007-08 year there was insufficient water for anything other than basic human needs. This was only available because the normal water sharing rules of the Murray Darling Basin Agreement were set aside to provide an equitable sharing of the resources available. This interim agreement has provided New South Wales with 195 gigalitres of basic human needs, such as town and water supply, stock and domestic requirements, and limited consumption. The Department of Water and Energy has implemented a critical water advisory group of stakeholders to advise on water allocation options. The group includes local government, irrigators and industry representatives, with input from the Department of Primary Industries, the State Water Corporation, the Department of Environment and Climate Change, and so on. This group meets approximately every fortnight to discuss the current situation and consider water availability.

Current water availability in the Murray is as follows: town water supply, 50 per cent of allocations are restricted to level 4 restrictions; domestic and stock, at 50 per cent, which is available to licence holders on the Murray and Edward rivers but water is not currently available to many landholders on effluent streams; high security and general security, 35 per cent of the volume of water suspended in 2006; water carried over from 2006-07 is now available for use; water distributed to high-security licence holders to aid in the survival of permanent plantings has also been made available.

**The Hon. RICK COLLESS:** Minister, do you think it is appropriate that the staff members behind you are feeding questions to the Government members on this Committee to ask you?

**Mr PHILIP KOPERBERG:** I would expect that if a Government member were seeking some clarity in terms of a particular issue—

**CHAIR:** I am sorry, Minister. According to the rules, as long as the advisers pass the question to the member through the attendant there is no problem.

**The Hon. RICK COLLESS:** Does it not turn this whole hearing into a bit of a farce, though, if we have the Minister's staff—

**CHAIR:** There is plenty of opportunity for members to ask questions.

**The Hon. RICK COLLESS:** Mr Chair, I am concerned that it impacts on the validity of this process if we have the Minister's staff sitting behind him handing questions to the Government members to ask the Minister. It defeats the whole purpose of what we are trying to achieve here. This is about asking questions about various issues in the Minister's portfolio—

**CHAIR:** I understand your concern. I do not think it is an issue. The Government will feed questions to the Government representatives. You have about 18 minutes left for questions, so I ask you to make good use of your time.

**The Hon. MARIE FICARRA:** In 2002 the then Minister for Land and Water Conservation, John Aquilina, set a joint project between his department and the University of New South Wales that the School of Microbiology and Immunology would examine the toxicity of blue green algae present in the State's waterways at that time. He said the information learned could be vital for managing future algal blooms. What did the Government learn from this project, and how have you implemented any of its recommendations?

**Mr PHILIP KOPERBERG:** What we do know is that the blue green algae—for which I am sure there is a more technical, botanic term, with which I am not familiar—generally, in a particularly placid state, does not give rise to the release of toxicity. What we also know is that there are some circumstances—and I might defer in a moment to Mr Tanner, who is far more knowledgeable about this than I, as you would expect him to be—in which a disturbance is occasioned to the blue green algae in various forms. You might recall that when this sort of formation occurs in rivers, little estuaries and so on, people are advised not to go swimming in it. That is because the blue green algae is disturbed, and in that disturbed state, if I understand correctly, toxicity can in fact occur.

**The Hon. MARIE FICARRA:** My question related to the recommendations from the university report back in 2002. In 2007, five years later, what recommendations have been implemented?

**Mr PHILIP KOPERBERG:** I am advising what we do know about the nature of blue green algae and the sorts of things that would give rise to concern or not give rise to concern, as the case may be. I think I also said that in a moment I would refer the matter to Ian Tanner, who has access to a far greater level of detail than I have.

We are also working with science across not only New South Wales but Australia to discover whether or not there is a way to chemically induce or otherwise disperse blue green algae during the early stages. At the moment the answer to that is very uncertain. Yes, there are obviously algaecides that can be used, but we have not used them because there is by no means a finite conclusion on whether it would be safe to do so. It has been suggested in some cases, but there is no scientific foundation for the suggestion that—

**The Hon. MARIE FICARRA:** Minister, you have just taken five minutes and you are nowhere near the answer—

**Mr PHILIP KOPERBERG:** I am trying to provide you with an answer.

**CHAIR:** The Minister may answer as he sees fit.

**Mr PHILIP KOPERBERG:** I would have thought that the honourable member would have been interested in knowing what the Government is doing about securing the quality of Sydney's water supply through measures into the future. As I said, we are examining whatever options are available to prevent the occurrence of blue green algae into the future, and we are working closely with the scientific and other communities to ascertain that. I will ask Mr Tanner—

**The Hon. RICK COLLESS:** Before you hand over to Mr Tanner—and perhaps Mr Tanner may be able to clarify this as well—with regard to the algaecides you referred to, what class of chemicals are they?

**Mr PHILIP KOPERBERG:** You would not expect me to know that?

**The Hon. RICK COLLESS:** No, and that is why I suggested that Mr Tanner may be able to assist.

**Mr PHILIP KOPERBERG:** If Mr Tanner is not able to do so, I am happy to take the question on notice.

**Mr TANNER:** There are many, many species of algae. This blue green algae, which is called cyanobacteria—it is not actually an algae, but we will not go into the science behind it—the species we have in Warragamba Dam is called microcystis. They are generally a very small species and they have been around for literally millions of years. They can move up and down—they are full of gas vacuoles—chasing the sunlight. As the Minister said, the algal bloom is over the majority of the lake, concentrated in the top 10 or 12 metres of water, and that is why we are taking water from 48 metres below the surface.

We are taking water that has not been impacted whatsoever by this algal bloom. We are working with the scientific community. In particular, we are working with Professor Brett Neilan of the University of New South Wales who has a process where he does some genetic testing. Some of these algae do and some do not have the gene that allows them to produce toxins. What we have found is that over 99 per cent of the cells within the lake do not have this gene. Even if they do have the gene it does not necessarily mean they can produce toxins. The toxins are held within the cell itself and unless there is some sort of natural occurring event, such as a very large inflow or a flood, then the toxins remain inside those cells until such time as they die off and then they release—

**The Hon. MARIE FICARRA:** Point of order: I am really interested in the scientific dissertation because I am a scientist but that can come second and you can give that on notice, if you like. I asked about the recommendations from a report back in 2002 from the very same university you are now recommending, congratulating and cooperating with. Can you tell me what your department has done since 2002 to put in place the recommendations that your Government commissioned back then to control blue green algae?

**Mr TANNER:** I will have to take that question on notice.

**The Hon. MARIE FICARRA:** My next question is in the 2002 outbreak, the Department of Land and Water Conservation warned farmers that livestock and domestic animals were in danger from this contaminated water. The Health Department warned rural residents to avoid drinking untreated water. Why have not similar warnings been issued this year when in 2003 the general manager of Bulk Water, Sydney Catchment Authority, said:

If the toxicity of the bloom is significant the water becomes unusable for either drinking or other direct contact.

Why have we not had similar health warnings, Minister?

**Mr PHILIP KOPERBERG:** Because the circumstances do not apply. I would have thought, with all due respect, that would have been obvious. The blue-green algae exist within Lake Burragorang; it is a regulated catchment. There are not herds of cattle wandering down to the water's edge and drinking from it. There are not communities of children wandering down to the water's edge and swimming in it. It is a finite water storage area, a dedicated catchment. As to being un-safe to drink the untreated water, surely the point here is that the water is being treated. Despite the presence of blue green algae and despite the presence of turbidity, both reasons for those events I have already alluded to, and despite the presence of cryptosporidium, the integrity of the treatment system is such that notwithstanding those events the water coming out the other end is world-class water. Obviously we would not recommend that people dive headlong into the upper canal but they do not. This is a regulated flow. This is a protected flow. You cannot actually drive down to Lake Burragorang and have a picnic. Access to water affected by any of those three things is not something that the general public, farmers, graziers or irrigators have so there is no need for that sort of alarmist warning regime.

**The Hon. MARIE FICARRA:** Through you, Mr Chair, can the Minister guarantee the farmers that they, their livestock and domestic animals are under no current health risk? You can guarantee this?

**Mr PHILIP KOPERBERG:** May I ask through you, Mr Chair, which farmers?

**The Hon. MARIE FICARRA:** Any farmers along any of the catchments. Livestock, domestic animals you can guarantee there are no current health risks?

**Mr PHILIP KOPERBERG:** Are we referring to the blue algae?

**The Hon. MARIE FICARRA:** From the blue algae.

**Mr PHILIP KOPERBERG:** On Lake Burragorang?

**The Hon. MARIE FICARRA:** On any of the waterways?

**Mr HARRISS:** In rural New South Wales since 1991 when we had the outbreak along the Darling River, we established what is called regional algae coordinating committees. We set department politics aside and got in people cross-border and interstate and we worked with different research organisations to work out the best ways to manage it, knowing that it is extremely difficult to manage it in those broad areas where there are hundreds of thousands of kilometres of rivers. What we do during the warmer months, when blue green algae is more likely to occur, is to increase our monitoring and assessment of that process. When we discover blue green algae we issue appropriate warnings, which are based on different levels. So where there is a minor level, which is less than 2000 cells per millilitre, we would put a minor alert.

If it gets above 15,000 cells per millilitre we recognise it is not appropriate for recreation so we put out appropriate warnings in the regional press to avoid contact. When any blue green algae is present we put out normal warnings to suggest that land owners avoid areas that are obviously discoloured or have a musty smell, things which are typical of cyanobacterial blooms. When we do we do monitoring, we take out and do toxicology tests. Unfortunately, as Mr Tanner would understand, it cannot be determined whether it is toxic at the time you have tested it or whether it has developed toxicity or has in fact lost its toxicity. What you have to do is make an assumption that it is always toxic and issue warnings appropriately. Then you have to look at different ways of managing the flows. If there are flows that can disperse blooms in remote areas we can do that. Unfortunately in the last five years there has been no water. We can make releases for water quality but we do have a comprehensive system of monitoring and reporting and making public advice to rural landowners for blue green algae every summer.

**The Hon. MARIE FICARRA:** Are you currently agitating the water to dispel the bloom? Is that one of the mechanisms that you use?

**Mr HARRISS:** That is one of the mechanisms to actually disperse but if you have a really thick bloom and, as Mr Tanner has pointed out, as the cells have toxins in them once you disperse the bloom you can no longer sample for the cells and you do not know what has happened to the toxins. That is quite an incredibly expensive test then and a bit of hit and miss. Of course it is very difficult in the river systems where there is not much water available in the middle of a drought to provide releases to disperse the blooms.

**The Hon. RICK COLLESS:** Minister, just following on from that. Do you have an incident management plan in place for these outbreaks?

**Mr PHILIP KOPERBERG:** The short answer is, yes.

**The Hon. RICK COLLESS:** Would you be able to provide a copy of that to the Committee?

**Mr PHILIP KOPERBERG:** Yes. They will vary, of course. The Sydney Catchment Area has one for its particular responsibility and I am sure the same prevails elsewhere. We will provide it. I will take it on notice.

**The Hon. MARIE FICARRA:** I want to move on to the Parramatta River Catchment Trust. The State Government has wound up the Upper Parramatta River Catchment Trust and absorbed it into the Sydney Metropolitan Catchment Authority. The trust received funding of approximately \$380,000 per annum for services and was responsible for the flood mitigation in the upper Parramatta catchment. The four councils in the area, being Blacktown, Holroyd, Baulkham Hills and Parramatta, currently fear that the responsibility for flood mitigation will be transferred to them without any additional funding. Now they proposed an alternate funding source, a levy on waterfront properties, to the Premier and the Minister for Natural Resources in 2006, 18 months ago, but no response or even an acknowledgement has been received. My question is, what does the Government intend to do about the provision of flood mitigation services in the upper Parramatta and why has there been no response to these four councils 16 months after the original correspondence?

**Mr PHILIP KOPERBERG:** I thank the Member for her question. It would appear from the way in which the Member posed the question it may have fallen to the relevant Minister responsible for the Department of Primary Industry. In any event, I will take that the question on notice and either through the other Minister or whoever I will get a response to you.

**The Hon. MARIE FICARRA:** I would appreciate that. The general managers and mayors of each of the four councils have jointly have written to you.

**Mr PHILIP KOPERBERG:** If it is a question that has to be referred to another Minister, we will undertake to do so. If it is within our purview I will report back to the Committee within the 21-day prescribed period.

**The Hon. RICK COLLESS:** Minister, I turn to the management of Menindee Lakes and the considerable concerns that have existed in that part of the world about the management of the lakes over the last six or seven years at least. What is the situation with the upgrade of the Menindee Lakes? Is that work going to proceed? I suggest it should proceed sooner rather than later, given that now is the time you can get in there and actually do this work.

**Mr PHILIP KOPERBERG:** I will defer in a moment to David Harriss. If I could make a couple of key points, the Menindee Lakes and Darling River study was designed to deliver a 20-year strategic plan for sustainable water savings based on an integrated approach of structural works, river storage, operations strategies and water market activities. The first stage of the study, involving preliminary investigations, was completed by Maunsell Australia Pty Limited. The part A report, which was delivered on 19 April 2007, identified six promising strategies that could yield significant water savings in the Darling system and the Menindee Lakes. The contract for the part B investigations will be awarded by the end of September 2007. Part B of the project will involve more detailed investigation of the six strategies, including water efficiency measures in the river system upstream of Menindee Lakes. Part B will identify the best way or the best strategy to inform the basis of the next 20 years strategic plans. Through the Menindee Lakes and Darling River study the State Government is well advanced in the process of developing a plan that will deliver a secure water supply for Broken Hill, reduce the evaporative losses of Menindee lakes, increase the reliability of water for irrigators and deliver water for the environment. The consultancy costs thus far have been \$385,000. The National Water Commission pays half.

**The Hon. RICK COLLESS:** I am aware of all of that. Where is the project up to now? You mentioned the end of September. That date has been and gone a month ago.

**Mr PHILIP KOPERBERG:** I will defer to David Harriss for the detail.

**The Hon. MICHAEL VEITCH:** Is that your question or did you just get that handed to you?

**The Hon. RICK COLLESS:** Not by departmental people sitting behind the Minister.

**The Hon. MARIE FICARRA:** It was done appropriately.

**The Hon. MICHAEL VEITCH:** So was mine, via the attendant.

**Mr HARRISS:** The history of the Menindee Lakes and the Great Anabranch goes back 25 years. We have just completed as part of the Living Murray pipelining at a cost of about \$54 million.

**The Hon. RICK COLLESS:** To save how much water?

**Mr HARRISS:** That is to save about 47,000 megalitres on average. It would be different for different years. It could be reduced if there were to be some kind of provisions made for the Anabranch. Notwithstanding that, moving on, we have since 1996 completed a management plan. We have recommended a couple of specific options. They were investigated but that was a time when the lakes were full. So we had to wait until they were drawn down. They were to generate something like 10 gegalitres at an estimated cost of about \$33 million, which was outside the cost effectiveness agreed by the Living Murray. We took a step back and we did stage A that the Minister has alluded to of a broader water savings plan following further investigations. That has identified six major potential options. We now have to progress onto stage B, which is to investigate the six major options. That is about to commence but it is only subject to being agreed that that could be put on the developmental register of the Living Murray, making it effectively a project under the Living Murray whereby the water savings that are recovered can be returned to the Living Murray and accepted as such.

**The Hon. RICK COLLESS:** When will the work start?

**CHAIR:** Your time has expired.

**Mr HARRISS:** I can answer that. As soon as I am confident with the funding, we will talk to the Minister soon and put contracts out. It has already been determined who should undertake the work and we will make that available within the next few weeks.

**CHAIR:** Mr Brown?

**The Hon. ROBERT BROWN:** Minister, from an answer to a previous question it was determined that your department ends up with the funds that are paid from the fixed component of the water charges and that that money is used for maintenance of infrastructure. Does your department have carriage of the actual undertaking of the maintenance of the infrastructure or does another department do that work? In other words, what happens to the money from the fixed charges? How is it put back onto the ground?

**Mr PHILIP KOPERBERG:** It is the responsibility of State Water to facilitate that maintenance and to look after the infrastructure and all the other processes that are attached.

**The Hon. ROBERT BROWN:** State Water would let the contracts for maintenance of the systems?

**Mr PHILIP KOPERBERG:** That is our understanding.

**Mr HARRISS:** State Water would either undertake the work by themselves, if they have got the resources at that particular site, or contract out under normal processes. Similarly, we pay money from the resources contributed from New South Wales into the Murray-Darling Basin. It is a condition for River Murray Water to undertake those on behalf of the State where it is the Murray and Menindee Lakes—which is what you are talking about—which is the shared resources under the Murray-Darling Basin agreement.

**CHAIR:** Minister, how much new money has been allocated to resource officers to audit, assess and investigate the range of flood plain developments and harvesting activities in the State? How much additional money and staff have been allocated to the water compliance and enforcement team regarding potential environmental water theft?

**Mr PHILIP KOPERBERG:** Can I take the question on notice, please, Mr Chair?

**CHAIR:** Yes. Would you also be able to furnish information in terms of the previous budget and previous number of water compliance officers?

**Mr PHILIP KOPERBERG:** I will include that in the response.

**CHAIR:** Minister, will you commit to upholding the legal status of security of environmental water entitlements and ensuring that water allocations for the environment are able to be used as required? I know we had this discussion earlier. I am somewhat concerned given that often at the most critical time the environmental water allocation is at its most important. Understanding the conflicting issues, it is not just a good times relationship.

**Mr PHILIP KOPERBERG:** I know that. The short answer to your question is subject to its availability, yes. I expect you do not want me to reiterate everything I said before?

**CHAIR:** No, but I do have concerns. I understand your Government's sensitivities to other uses and demands. But you are the Minister for Climate Change, Environment and Water and you are the Minister that directly represents on environmental water issues. It is your job to go in to bat on that side of the equation, would you agree?

**Mr PHILIP KOPERBERG:** Yes, of course I agree, and I will continue to do so. Of course I will. However, I may well mislead you were I to say that I do not have to taken into account the total social context when making decisions on water. I have to do that in as much as water is the lifeblood of thousands of people and, by extension, all of us sitting around the table. The critical nature of environmental water will, of course, always permeate my thinking.

**CHAIR:** What is a little disturbing to me is that you do not take into account what may be the unsustainable nature of particular agricultural or irrigation pursuits. That is something that needs

to be addressed in terms of the new regime of more stringent water allocation. That does concern me because, by the argument you put before, you can often be propping up unsustainable practices.

**Mr PHILIP KOPERBERG:** I agree with you completely. Quite the contrary is the case. We are considering the lack of sustainability, if you like, in a range of practices that relate to primary industry. The provision of compensation payments in a range of areas—and the Federal Government is making a contribution to this as well—to enable unsustainable primary industry practices to cease what they are doing and walk away with some monetary compensation is very much to the forefront of our thinking. And the processes of managing all of these and doing so in conjunction with water users, irrigators and various types of industry along the valley systems, does take very strong account of unsustainable practices and, obviously, the less unsustainable practices there are the more it will aid the environment. So that is very much in the mix of our thinking.

**CHAIR:** On that point, can you reassure the Committee that your department is not giving any priority to unsustainable agricultural irrigation practices above the need for environmental water flows?

**Mr PHILIP KOPERBERG:** Unsustainable practices might well be a subjective term, of course. It depends on who is conducting the practice; it depends upon the social impact on a town—

**CHAIR:** Environmentally unsustainable?

**Mr PHILIP KOPERBERG:** These are in our mix of considerations.

**CHAIR:** What arrangements are in place for repaying the environmental water appropriated for other uses in the Murrumbidgee? Will it be repaid before any further increases in irrigation allocations are made?

**Mr HARRISS:** We are currently looking at what timing to repay the environmental water allocations, and particularly in the Murrumbidgee, which was set aside to offset town water supplies at the end of last year. The issue to be considered is that, first up, the regional committee that the Minister alluded to has recommended that if we are to have some tributary flows in the first instance, that those should be used to meet the environmental needs, particularly in the lower reaches of the river, which is around Yanga Station where all the pressure is on. But there is a substantial discussion about how much water coming into storage should be set aside for environmental purposes, given that we can only just at the moment guarantee town water supply and critical human needs from the minimum inflows that we exceeded in the last year, if they were to continue into next year.

It has not been resolved, but all I can say to you is the priority will be to deliver environmental flows from the tributaries downstream of the storages, but if we were to have a good turnaround and get a couple of years then at what stage you retrigger the allocation of water into those accounts is really something you have got to do as you are going along, depending on the circumstances. There is not much point, say, putting aside 50 mega litres for the Murrumbidgee, then trying to get it 2,500 kilometres down the river to deliver an outcome.

So, there is not much point setting it aside; you have really got to work out what quantum, what season you are in and when it is appropriate to start setting it aside. But the priority has been, and agreed by the committee, that if we were to have substantial tributary inflows from downstream of the storages, then they should go to meet some of the environmental needs, because we expect that many areas of the floodplain, particularly in the lower reaches of the river, are suffering substantially.

**CHAIR:** I guess we are obviously involved in the big dry, the drought, but, nevertheless, do we not have a problem in this department when we are looking at potential adaptation to climate change extreme events, that in terms of floodplain planning there is perhaps an argument saying that by allowing excessive development on a floodplain the Government is leaving the community open to economic loss from floods due to being in vulnerable places on the floodplain and there could be impacts of excessive development downstream. Have you looked at that issue?

**Mr PHILIP KOPERBERG:** We do take account, especially in this era of extremes as far as rainfall distribution and what have you are concerned, at the downstream impact of the whole range of

decisions, whether they be planning or primary industry or secondary industry, whatever the case may be. It is now, I am pleased to say, in conjunction with the environmental requirements, the subject of some detailed evaluation to ensure that—we will not always be successful, of course, but we strive to be successful—whatever occurs down the track is sustainable in terms of social needs and production needs and environmental needs. So it is most definitely in the suite, as it were.

**CHAIR:** What resource support is there for Aboriginal people from the catchment management authorities, and is it consistent across New South Wales?

**Mr PHILIP KOPERBERG:** Support from?

**CHAIR:** For Aboriginal people from the catchment management authorities?

**Mr PHILIP KOPERBERG:** What I have asked to be done is that liaison capacity be established. In fact, during a recent visit to the catchment management authority in the south I met with the representative of the Aboriginal community, who I was very pleased to meet because he was very insightful in a number of areas and we had what I hope are very meaningful discussions on a whole range of issues. He made the observation to me that there were some concerns about the lack of interaction. I have since directed that that catchment management authority, as I expect all catchment management authorities to do, ensures that there is a consultative process, an interaction process, with indigenous Australians to ensure that the water sharing arrangements for a start and some of the innovative use that they bring to the table on the way water is managed are taken account of by the catchment management authorities. So it is something which I have a particular and strong interest in and, I might add, in terms of the budgeting for it—

**CHAIR:** It is Estimates after all, is it not?

**Mr PHILIP KOPERBERG:** Yes, it is. I will refer to that, if I may, in the Climate Change segment of this inquiry. I say that in the context of the budgetary component of the catchment management authorities is handled by the Department of Environment and Climate Change.

**CHAIR:** Is it consistent across the State in terms of Aboriginal input?

**Mr PHILIP KOPERBERG:** No, it is not. It is of a high order, as I understand it. I have to concede to not having been here long enough to have intimate knowledge of it, but I propose to make it my business to ensure that there is a generic emphasis on this across the catchment management authorities, depending on where they are, because they do not all interact necessarily.

**The Hon. Michael Veitch:** You could always take it on notice.

**Mr PHILIP KOPERBERG:** But I feel obliged to tell the Committee what my thinking is on this.

**CHAIR:** On that, are we looking at all catchment management authorities having specific funding for indigenous programs?

**Mr PHILIP KOPERBERG:** That I will take on notice.

**CHAIR:** I hope I am wrong but in summertime we see significant sub-linear outbreaks, particularly on the Hawkesbury Nepean in the recent past. I am wondering whether your department have any pre-emptive game plan for dealing with that? There has been quite a bit of concern raised about the chemical resolve to the matter. Does your department have any plans in terms of mechanical harvesting and using it as a compost gardening resource?

**Mr PHILIP KOPERBERG:** A deal of mechanical harvesting is certainly taking place on the Nepean already with varying degrees of success. As to the balance of the question, I will take it on notice and advise you as soon as possible, but within 21 days.

**CHAIR:** Are you aware of a presentation by a local landowner in the far north of New South Wales offering the Government a significant amount of land fronting Coopers Creek—this is in my



area in the north of New South Wales—promoting the idea of an aquatic reserve in New South Wales? It would be the first aquatic reserve between Goonengerry and the Nightcap National Park and it is on Coopers Creek. Would you support it being protected in a legally binding property agreement and have the stream in Coopers Creek gazetted as a freshwater aquatic reserve? Do you have a position on that?

**Mr PHILIP KOPERBERG:** First, that falls within the purview of our next session dealing with the Environment portfolio.

**CHAIR:** It is water.

**Mr PHILIP KOPERBERG:** We know it has water in it.

**CHAIR:** I understand what you are saying, but is it little different from the normal terrestrial or even marine national parks. It is looking at preserving an untouched area and also an aquatic resource.

**Mr PHILIP KOPERBERG:** I know; I am familiar with the instance. Marine park aquatic reserves are one of the functions of the Minister assisting me, the Hon. Verity Firth. We will collaborate on that. You might be content to deal with that in the Environment portfolio hearing.

**CHAIR:** As you wish.

**The Hon. MICHAEL VEITCH:** Government members are happy to forgo our 20 minutes for questions in this area to get the Committee back to the timetable.

**CHAIR:** We appreciate that.

**(The witnesses withdrew)**

**RICHARD SHELDRAKE**, Acting Director General, sworn,

**SIMON SMITH**, Deputy Director General, Climate Change and Environment Protection, affirmed,

**TONY FLEMING**, Deputy Director General, Parks and Wildlife Group, affirmed, and

**ROBYN McKEOWN**, Executive Director, Corporate Services Division, sworn and examined:

**CHAIR:** Before we commence questions, would either Minister like to make an opening statement?

**Mr PHILIP KOPERBERG:** Mr Chair, you would be both surprised and disappointed were I not to avail myself of the opportunity to make an opening statement. Thank you for the opportunity. The science of climate change has never been clearer. The Intergovernmental Panel on Climate Change assessment indicates that global atmospheric concentration of greenhouse gas has increased markedly as a result of human activity since the industrial age. The evidence of warming presented is unequivocal, with rising ocean temperatures, melting of snow and ice and rising sea levels. Most committee members would be aware of the most recent pronouncements by the CSIRO. While acknowledging that sea levels rose by a centimetre in the past 100 years, it is now talking about a rise of 100 centimetres in the next 100 years.

This means, effectively, over the next 100 years there is the potential, in a worst-case scenario, of sea levels rising by a metre. The consequences and effects of that would be horrendous. The Government accepts the conclusions of the Intergovernmental Panel on Climate Change [IPCC] as authoritative. The combination of the world's top scientists, complete transparency and the thoroughness of the review process make the IPCC a powerful model, which was recognised recently with the award of the Nobel Prize. Now, the CSIRO and the Bureau of Meteorology Australian climate change projections have critically advanced our undertaking to meet this phase on a domestic level, and I have already alluded to that. The most comprehensive climate projections ever produced

tell us that temperatures will rise by about one degree by 2030—in a mere 23 years—and, if we can keep emissions low, by 1.8 degrees by 2070. In a higher emissions scenario the best estimate is for warming of 3.8 degrees with an upper range of five degrees, the point at which, according to the Stern review, humankind would enter unknown territory to changes that would transform the physical geography of the world.

I would just like to make these observations. Climate change is already beginning to materially affect our environment. The adaptation framework prepared by the New South Wales Government and which I was very happy to launch only on Saturday at the annual conference of the Nature Conservation Council provides us with a pathway, not so much to tackle problems of climate change per se—that is a separate stream—but accepting that climate change is inevitable and if we are lucky we will slow down its pace, we will still need an adaptation framework. The adaptation framework tells us to consider things such as ecological corridors. My predecessor, Bob Debus, worked in concert with other jurisdictions to create the embryonic beginnings of one such ecological corridor dubbed the Alps to Atherton, of many thousands of kilometres, because what will be needed, looking at it from the environmental point of view, not to exclude the impact on human beings, is the capacity for species to migrate.

We are seeing ever decreasing—or increasing, depending on how you want to put it—snow lines, which means that those species dependent on snow and very cold temperatures to hibernate in have been deprived of that. We are, of course, seeing the impact of the drought and there is more than a modicum of suggestion that the significant change in rainfall distribution is as a consequence of climate change, and we are seeing a variety of species now under attack from prey which did not previously permeate the high altitudes. In other words, if you look at the Alps as one example, you will find birds are migrating ever and ever higher and exposing those species to predators with which in the past they have not had to deal. Therefore the manifestation of climate change is very evident.

The Iemma Government took an early and decisive leadership role in addressing climate change. There are many examples that will, I suspect, come to light during the course of this hearing, but pre-eminent amongst them is the establishment of some very important targets in all categories. New South Wales has a target to cut greenhouse gas emissions 60 per cent by 2050 and return to 2000 levels by 2025. What I find fascinating, listening in part to the debate between the Prime Minister and the Leader of the Opposition yesterday, was the enunciation by the Prime Minister that he would establish a climate change fund by 2011, which means he would have to be re-elected this time and then another time before we finally saw something emerge.

The New South Wales Government in 2007, being cognisant of the need not to procrastinate on the issue of climate change, established the Climate Change Fund, a \$340 million Climate Change Fund, which would assist industry, communities, schools and everyone else to take steps that would help them in managing their demand in terms of energy. It would provide rebates for solar hot water. In fact, the program was put forward. It was due to commence in January of next year but we brought it forward to October of this year and we have done that because of the enormous amount of interest being generated by both industry and by consumers, who want to take advantage of these climate change initiatives so that they can make a contribution towards combating the pace of climate change.

That is also the case with home installation where subsidies are available for householders to do that. Whilst on the one hand I am gratified that the Prime Minister has copied the New South Wales proposal to grant a climate change fund, I am staggered, given the demand, science and economic imperative that, for some reason that eludes me, he has decided to delay its introduction until 2011.

Other targets are to increase water recycling in Sydney and regional centres by 65 billion litres by 2011, 70 billion litres by 2015, and the list goes on. The rebates from the Climate Change Fund, which apply from 1 July, are up to \$500 to install a residential water tank. I alluded to the fact that that is now \$1,500. From 1 October, \$300 is available to install energy efficient home installation and from 1 January to convert from electric to an approved solar hot water system—and we have brought that forward, as I have said. There is a whole range of initiatives.

These were not introduced yesterday or today or even at a time when every news story carried at least one reference to climate change; these were done as a consequence of some vision and

an understanding of what the IPCC and scientists generally were saying and a recognition of the need to be proactive. If there is one staggering example of vision it is the Greenhouse Gas Abatement Scheme [GGAS], which was introduced in 2003. It preceded anything else that happened in the world. It was a means by which energy retailers would have to compensate for their emissions regime by procuring compliance certificates, which would be generated and made available to a range of innovators in terms of renewable energy and a means by which energy and water could be saved. It has been a remarkable success and it is the forerunner to a national scheme.

Again we wonder when we are going to see something finite, pragmatic and realistic from the Federal Government. We have heard now that there is to be a national emissions trading scheme by 2012. Whilst we are encouraged to some degree by that, we are anxiously awaiting detail, which is conspicuous by its absence. What that lack of detail has done and what a lack of detail about transitional methodology has done is to create an enormous amount of uncertainty in the market.

I can say to the Committee that on a very regular basis I am visited by various parts of the industry anxious to invest millions of dollars in renewable energy and so forth. They are very innovative, technologically advanced and committed to sustainable outcomes in terms of their particular technological initiatives and they are floundering, by and large, because they do not know what is going to happen. The majority acknowledge that the leadership provided by New South Wales has enabled GGAS to work as best as it could.

It was always going to be a scheme that would be subsumed by a national scheme in the fullness of time. It has largely run its course, albeit that its provisions have been extended for a few more years, but without a clear indication from the Commonwealth as to the two things—three things actually if you include a realistic price on carbon in that equation and, secondly, what the transitional arrangements might be. They are really critical to the industry because they are sitting around with a lot of money to spend on these sorts of things and more than one of them have said to me during meetings that they are frustrated and unless there was a clear indication within the foreseeable future, they would take their money and invest it offshore within communities who are able to project into the future.

I am glad to say that New South Wales maintains its lead in that regard, as it has done with a whole range of climate change issues, as it has done with a whole range of environmentally-related issues. It is of enormous satisfaction to me as the responsible Minister that in 2007 we can now look at the reserve position in New South Wales and acknowledge that some 8.3 per cent of the State is under the reserve system, enabling us to put land away for future generations for our children, our grandchildren and our great-grandchildren to take advantage of. Quite apart from the amenity aspect, the contribution of that sort of reserve system to climate change and carbon sequestration is also a major component in that regard.

We have in recent times, as my colleague the Hon. Verity Firth will no doubt allude to, created world-class marine parks. During the course of the hearing in the next two hours I am sure that as a consequence of some astute questioning by the Committee some of these things will come to the fore. I thank you, Mr Chairman, for the opportunity of providing an opening statement. You may be aware that in concert with my colleague Verity Firth, it has been agreed between us that she would have specific responsibility, given her interest, capacity and skill in these particular areas and given the size of the portfolio, for the areas of Aboriginal cultural heritage, marine parks, biodiversity, pollution, contaminated lands, and the co-management of national parks. If the Committee sees fit questions in those specific areas of the portfolio responsibility might be referred to my colleague Verity Firth.

**CHAIR:** Do you have an opening statement?

**Ms VERITY FIRTH:** Yes, I will give you a brief opening statement. I would like to start by saying I am very proud of the New South Wales Government's environmental record and I would be pleased to briefly report on some of the initiatives I have been involved with since beginning the portfolio at the end of March.

Firstly, one of the best things I have had to do is oversee the commencement of the Port Stephens and Batemans marine parks. The zoning plans for both the Port Stephens and Batemans

marine parks have commenced since March, and I have already had the pleasure of visiting these wonderful parts of our coast. I have no doubt that ultimately these parks will provide both important environmental benefits for the State as well as significant economic benefits for the local community.

An independent study of the Solitary Islands Marine Park, which is our oldest park, found that it injects approximately \$6 million into the area each year. By better protecting marine habitats and biodiversity we can improve opportunities not only for fishing, and our recreational fishers in particular, but also for diving, whale watching, and many other activities that generate opportunities for tourism. I would also like to say that the environmental imperative for protecting our valuable marine biodiversity has never been clearer, with the effects of climate change already being felt. Now, more than ever, we have to work hard to ensure that our coastal ecosystems are there for future generations to enjoy.

The other main area I have been involved with is the development of biobanking through the ministerial reference group. It is clear that innovative approaches are needed to tackle the challenge of balancing the housing needs of a growing population while also conserving biodiversity into the future. Over the last few months I have been involved with the progress of the biobanking scheme, which has been established to encourage development in areas with low biodiversity values while protecting and securing land with high conservation values. A ministerial reference group comprising key stakeholders was established in March 2007 to provide input and assistance into finalising the biobanking assessment methodology and regulations.

In relation to air pollution we have made increases to load-based licensing over the summer months. Industrial emitters pay what are known as load-based licence fees. The idea is simple: the lower the pollution, the lower the fee. Earlier this year I announced new measures that will drive industrial emissions down. Overall, annual fees for nitrogen oxide and volatile organic compound emissions for major industry in the Sydney Basin will be approximately doubled. This will greatly increase the incentives for industry to deploy better technologies to reduce emissions. Just as cars and fuels have improved significantly over the last decade, now industry will be stimulated to see what part it can play in helping keep our air clean.

Last, but not least, one of the great things I got to do was to go to the Arakwal, in Byron Bay, for the signing of the Arakwal plan of management. The co-management principles practised in our national parks recognise that that country is fundamental to Aboriginal culture, and ensures that parks are managed and used in ways that respect Aboriginal culture. Over the last 10 years the Government has negotiated 15 Aboriginal co-management arrangements, including indigenous land use agreements with Aboriginal communities in New South Wales. Six of these were included in 2006-07. One of these agreements was with the Arakwal people. Earlier this year I was privileged to sign the plan of management for the joint management of the Arakwal National Park. It was an absolutely wonderful day and an historical occasion to be part of.

**The Hon. MARIE FICARRA:** Minister Koperberg, Minister Ian Macdonald has recently claimed that greenhouse gas emissions in New South Wales have been reduced by 20 million tonnes over the past 12 months due to this groundbreaking Greenhouse Gas Emissions Reduction Scheme, and you have claimed a reduction of 40 million tonnes since the scheme began four years ago in 2003. How has the New South Wales Government collected the data on which this claim is based, since the Australian Greenhouse Office only has figures to 2005?

**Mr PHILIP KOPERBERG:** May I preface my remarks by saying that the data comes from the greenhouse gas administrator, that is, the Independent Pricing and Regulatory Tribunal. Roughly the way it works is that one greenhouse gas certificate corresponds with one tonne of CO<sub>2</sub> equivalent and therefore, when the certificates are obtained and then ultimately surrendered, given the fact that the retailers are required to procure a certificate per tonne of emission, we can calculate at the surrender stage, if you like, at the compliance stage, roughly what the reduction has been, because these are, by and large, offset.

I will, however, go into a more comprehensive answer by saying that the New South Wales Greenhouse Gas Abatement Scheme, known as GGAS, was implemented in January 2003 and now has been running for some four years. GGAS is, as I said earlier, the world's first mandatory greenhouse gas emissions trading scheme. The Independent Pricing and Regulatory Tribunal, the

scheme administrator and regulator, has recently reported on compliance under the scheme for 2006. The scheme will cease with the introduction of a national emissions trading scheme, which is likely to be within the period somewhere between 2010 and 2012. We now know it to be 2012.

To date, 50 million abatement certificates have been traded under the Greenhouse Gas Abatement Scheme. As I said, each certificate corresponds to one tonne of CO<sub>2</sub> equivalent, thus representing a reduction of one tonne of carbon dioxide equivalent for each certificate obtained or created by either the retailer or in the Independent Pricing and Regulatory Tribunal, respectively. Of these, 26,530,461 have been surrendered for compliance. It is estimated that more than 17 million certificates will be required for compliance in 2007, and demand for certificates will increase in subsequent years of the scheme. All New South Wales benchmark participants, both mandatory and elective, reduce or offset emissions associated with their electricity use or sales to the benchmark, or carry forward a small shortfall, as is permitted by the legislation. This represents 100 per cent compliance by parties with an obligation under the New South Wales scheme.

The Greenhouse Gas Abatement Scheme was originally designed to end in 2012. However, in November 2006 the Government extended the scheme to 2021 and beyond, or until a national emissions trading scheme is implemented. It is important to ensure a smooth transition from the New South Wales Greenhouse Gas Abatement Scheme to a national emissions trading scheme, to ensure that parties that invested in the New South Wales scheme in good faith are not disadvantaged in the moved to a national scheme.

**The Hon. MARIE FICARRA:** Minister, I understand that you are basing your groundbreaking reduction in greenhouse gas emissions on the Independent Pricing and Regulatory Tribunal. That body's annual report for the scheme in 2006 claims that New South Wales continues to meet its annual reduction targets, and this represents a supposedly 16 per cent reduction in greenhouse gas emissions since 2003. How is this consistent with the Australian Greenhouse Office's inventory figures for 2005, which show that New South Wales emissions have risen by 6.5 million tonnes since 2003? In other words, greenhouse gas has continued to rise between 2000 and 2005. Who do we believe here? Is the GGAS a phoney scheme at best, or a failed scheme at worst?

**Mr PHILIP KOPERBERG:** With respect, I suggest we are comparing apples with oranges here. The Greenhouse Gas Abatement Scheme and the consequent creation of certificates relate purely to the energy sector; they do not relate to any other sector. They do not relate, for argument's sake, to the transport sector or the building sector. This is a greenhouse gas emissions scheme, which is exclusively targeting the emissions as a consequence of energy generation, and therefore you will get that disparity. The reductions apply to the reductions that are associated with energy generation.

**The Hon. MARIE FICARRA:** We would tend to believe the Australian Greenhouse Office figures, which show a 6.5 million tonne increase of greenhouse gas emissions since 2003. That office's figures are audited. Can you provide audited figures to show your claim in reductions?

**Mr PHILIP KOPERBERG:** Yes, we can. I think the latest figure from either the GreenHouse Office, or somewhere else, I am advised— and I qualify this by saying that— are in fact not at six percent but somewhere in the order of 4.3 percent. Again I will take that on notice and provide the Committee with the detail. As I said, and it is really important to note, we are cloning these reductions in the confines of energy production. We have never said that there is an overall reduction because some of the other sectors of transport, building and what have you are not included. We are saying that this scheme has prevented x-million tonnes of carbon dioxide even entering the atmosphere and therefore, in terms of electricity generation, there is a net reduction.

**The Hon. MARIE FICARRA:** Mr Chair, through you, how many industrial abatement measures that have been given abatement certificates were already in place by 2003 when the scheme began and how many tonnes of greenhouse gas do these measures represent?

**Mr PHILIP KOPERBERG:** I defer to Mr Smith for an answer to this question.

**Mr SMITH:** The figures are already on the Independent Pricing and Regulatory Tribunal website so there is no point in me going to them. There was acknowledgement at the beginning of the scheme that some people just prior to the scheme's commencement had invested in greenhouse gas

reduction measures in good faith. In setting up the scheme, as was quite proper, some of those measures were granted certificates to reflect what had been achieved. That is all part of history now. They have been consumed in the abatement that has happened since then and the real action now is on the new certificates that are created as people go about participating in the scheme.

**The Hon. MARIE FICARRA:** How can these reductions then be claimed to be reductions under your scheme when they were in place before the scheme began? Some of them 10 years before: the Tower Appin coalmine gas project? Honesty in reporting?

**Mr SMITH:** The existence of those things were taken into account when the target was set and the target was set at an ambitious level about reducing the overall emissions attributable to electricity generation. So that was a necessary transitional measure to ensure that businesses that had entered investments in good faith, with the objective of meeting Government policy at the time of reducing greenhouse gas emissions, were not disadvantaged. Their targets were ambitious and they have been creeping up over the years to further improve performance—this is a strong driver. People, as a result of the scheme, are out there doing things all across the economy they are not otherwise required to do and would not otherwise do in order to reduce greenhouse gas emissions.

**The Hon. MARIE FICARRA:** So you would agree a lot of that good performance was not actually part of your project or scheme but was in place before this scheme came into operation

**Mr SMITH:** No, I would say that a proportion of measures were already in place. I guess part of what the scheme sought to do was to bring a national framework, to bring together all of the people in the industry, to provide for overall optimum investment to reduce greenhouse emissions.

**The Hon. MARIE FICARRA:** Why is the Independent Pricing and Regulatory Tribunal awarding abatement certificates to power stations that are still producing an increase in greenhouse gas emissions?

**Mr SMITH:** Under the scheme rules what is reported—it is called a baseline and credit scheme—is where people go beyond what is required to apply with the status quo. In some cases, quite rightly, if people want to go and invest in better technology at a power station to improve its performance and to reduce its greenhouse gas emissions compared to what would have been the case that needs to be recognised. If it is not, other people will not do it.

**The Hon. MARIE FICARRA:** Similarly in the same vein, why was the Snowy Mountains Hydro-Electricity Scheme awarded abatement certificates when it burnt gas to produce energy during the drought because water levels were insufficient to create hydroelectricity? What was the point in giving them a certificate?

**Mr SMITH:** The scheme rewards anybody who brings to market electricity generated by a means cleaner than the baseline—the baseline being the average performance of coal plants. If we were to allow other companies to use gas plants to generate cleaner power how on earth could the scheme say no, Snowy Hydro you are not allowed to do that! There was nothing the scheme could do that would put more water in the dams. What water was available to Snowy Hydro to generate was used for that purpose.

**The Hon. RICK COLLESS:** Minister, can you let us know why the carbon dioxide, or carbon dioxide equivalent, emitted from wildfires is not included in the greenhouse gas accounting system?

**Mr PHILIP KOPERBERG:** The temptation to give you an answer related to my colleague is overwhelming but I shall not. There is still a great deal of work being done. You may be aware that the Federal Government has set up the Bushfire Cooperative Research Centre. This is a seven-year program, comprising numerous scientists. One of the charters that they have before them is to calculate, as I understand it, the emissions from bushfires as opposed to the emissions from prescribed burning. Both obviously have varying degrees of emissions. I am advised that this work is probably going to be concluded by the end of 2008. In fact the Cooperative Research Centre itself concludes—although they are involved in a bid to keep going for another seven years—in 2009, as I understand it. The result of this particular project is designed to measure the levels of emissions from bushfires over

the last 10 years in Australia and compare that to the level of emissions from prescribed burning so that some scientifically-based decisions can be made on which side of the argument we should come down. Until that work is done these calculations cannot be taken into overall account. I will provide on notice to the Committee, if I am permitted, the latest information out of the Cooperative Research Centre on that issue.

**CHAIR:** Thank you, Minister.

**The Hon. RICK COLLESS:** Minister, would you agree then that the amount of carbon dioxide that has been omitted by wildfires—I refer specifically to wildfires rather than prescribed burning—has been enormous, in terms of millions of tonnes per forest fire?

**Mr PHILIP KOPERBERG:** It goes without saying, does it not, that a large fire event or any fire event will emit varying levels. So when you have the events of the order of magnitude of 2003, for the sake of the argument, then it is going to be considerable. There will be years when it is not as significant as those years but, yes, every fire that occurs is going to be responsible for a level of emission. How to mitigate that is a whole new challenge because one of the mitigation measures, as you particularly are very au fait with having given me grief over the last nine Estimates Committees on this very issue, is the matter of prescribed burning. Ultimately, again, the balance is going to have to be found in that regard. We are actually anxiously awaiting the outcome of the CRC and CSIRO research on that so we can make some informed decisions and that will allow us to include it. I doubt we will be issuing GGAS certificates to fire brigades though.

**Mr SMITH:** If I could just add, the national inventory reflects the calculated emissions pretty much from the anthropogenic sources and that, of course, is set within a much broader cycle of carbon emissions and sequestration coming back from the atmosphere. So measuring the impact of carbon dioxide emissions from fire of any type is complex in natural areas because whatever is emitted in general over time will be re-absorbed back in as the vegetation re-grows. For the purpose of managing the country's greenhouse gas emissions it is best for us to focus on the other sources that are featured in the inventory.

**The Hon. MARIE FICARRA:** I would like to ask a question about greenhouse gas emissions. How often is the average admission intensity rating adjusted in New South Wales to account for improvements in technology?

**Mr PHILIP KOPERBERG:** We will take that on notice, Mr Chair.

**CHAIR:** Yes.

**The Hon. RICK COLLESS:** Minister, on the issue of land clearing, the Government announced during its campaign that it would provide an additional \$3.5 million for increased satellite surveillance of privately owned farmland to monitor broadscale land clearing. Has an investment occurred? If so, what are the details of it?

**Mr PHILIP KOPERBERG:** Yes, it has commenced. Exactly where the results are up to I am able to tell you. Since 2003 the New South Wales Government has continued to develop the Hotspots program for identifying illegal clearing for compliance purposes. The program was developed jointly with scientific staff in New South Wales and other jurisdictions regulating native vegetation and it is now the leading program in Australia. Since that time \$1.5 million per annum has been spent on acquiring images and computer hardware, preparing detailed information to identify illegal clearing, supporting remediation of the land and providing evidence for prosecutions. The technology and information received is invaluable in regulating land clearing, as much of the land clearing is not seen or reported by the public and thus no complaint of illegal clearing is made to the Department of Environment and Climate Change. More breaches of the Act are now being identified through satellite monitoring than via complaints made to the Department of Environment and Climate Change.

**The Hon. RICK COLLESS:** I have a document here. I will not say where it came from but you could probably work it out if you are smart enough. It is from within the department. The document states, "All satellite monitoring for illegal land clearing has stopped in direct breach of the

Government's election promise to increase it." The document is dated September 2007. I would ask you to check the claim that it is proceeding.

**Mr PHILIP KOPERBERG:** I will check that. By way of additional comment, I might say that in the current budget the Government has announced a further \$5 million for the development of this technology to address precisely the issues you have raised.

**Dr SHELDRAKE:** The department's satellite monitoring is an ongoing program. The money that the Minister has referred to is to move towards the latest satellite imagery and technology. The satellite coverage is utilised when the satellite is going over. The difficult thing with satellite monitoring is not the satellite itself or the collection of data; it is the analysis of that data. That is incredibly complicated. We spent last year a number of months working with the Queensland Department of Natural Resources and the University of Queensland, who are recognised internationally as having the most sophisticated analysis of data. We have been working with them. Our latest data is coming through that technology and that system. Our satellite monitoring will be ongoing.

**CHAIR:** I will start by continuing on that line of questioning. My understanding is that the Hotspots program, which monitored up to 15 per cent of New South Wales with high resolution satellite imagery, has been cancelled. Do you disagree with that statement?

**Dr SHELDRAKE:** The Hotspots program has not been cancelled, no.

**CHAIR:** It is still ongoing and money is still allocated to that program?

**Dr SHELDRAKE:** Yes, that is right. The program you are referring to with the dollars that we have got is part of ongoing satellite monitoring.

**Mr PHILIP KOPERBERG:** It is also an evolving program, Mr Chair.

**CHAIR:** I will go first to Mr Brown to ask questions and then I will continue.

**The Hon. ROBERT BROWN:** Ministers, I raised an issue with the Minister for Primary Industries regarding what seemed to be environmental vandalism on the Murray River. Is one of the various departments under your purview responsible for the investigation and prosecution of any environmental damage caused in the river itself?

**Mr PHILIP KOPERBERG:** The answer is yes. We will take the specific complaint on notice.

**The Hon. ROBERT BROWN:** This has been at very short notice so probably you or your department are not aware of it. It was reported to me and I raised the issue with the Minister for Primary Industries, who controls Fisheries, that there had been reported an incident of a developer on about four to six kilometres of the river desnagging the river and disposing of the evidence, if I could call it that, at a great rate primarily between markers 2,042 kilometres and 2,046 kilometres on the river. The information I have is that the Fisheries inspectors to whom the matter was reported did not seem to feel it was their responsibility. Minister, you are obviously not aware of the incident but can I have your assurances that this situation will be investigated and investigated quickly because evidence will be gone within another week? If there are any breaches of any Acts that relate to this activity will the full weight of the department and the law be brought down upon the perpetrators?

**Mr PHILIP KOPERBERG:** Unequivocally yes. I am pleased to be able to say to the Committee that we are aware of this particular instance and that on Thursday the department will begin an examination. We would be very grateful for you to provide us with any information you have.

**The Hon. ROBERT BROWN:** Absolutely, I will do so.

**Mr PHILIP KOPERBERG:** That might assist us in our examination of the matter.



**The Hon. ROBERT BROWN:** The incident was brought to my attention by members of the South West Fishing Alliance and the Southern Riverina Hunting Club.

**The Hon. ROBERT BROWN:** Minister, two years ago your department purchased Yanga Station. I understand originally it purchased about 80,000 hectares. It was reported at the time that the capital cost was somewhere in the range of \$30 million to \$38 million. Can you tell me how much of the original purchase has been retained at this point in time? How much has been sold, if any?

**Mr PHILIP KOPERBERG:** The purchase of the 80,000 hectare outback property Yanga by the Government in 2005 represents one of the most significant additions to the reserve system. As I alluded to earlier, as well as protecting the unique ecosystems, the establishment of the Yanga National Park and Yanga State conservation area, which we gazetted on 27 February 2007, it will assist the regional economy by providing new tourism opportunities and local jobs. The national park provides a high level of protection to the key wetland and river red gum areas. The State conservation area also ensures that opportunities associated with mineral exploration remain open. The Department of Environment and Climate Change is working closely with local communities, including business, to promote, develop and manage this major regional attraction. We want to ensure that future generations can also enjoy the spectacular beauty and amenity. As to the particular area retained, I will defer to Tony Fleming.

**Dr FLEMING:** Four blocks have been sold. I will get the exact hectare figure during the course of the morning and report back to you.

**The Hon. ROBERT BROWN:** Thank you, Dr Fleming, good to see you again. Minister, in July 2005 the former Premier, the Hon. Bob Carr, said in press releases that the national park would inject about \$8 million into the local economy annually and employ up to eight staff in the first 18 months and a further 100 jobs will be created indirectly in the long term. Given that the Government has now had possession of the property for about two years, can you comment on whether any of those claims by the former Premier have been met? What is the current staffing level? Are there any measures of any flows into the economy at this stage? Bear in mind that at the time of the purchase the local shire councils, Wakool and Balranald, were concerned about loss of rates in the area—something like \$60,000 or \$70,000 a year. Could the Committee have an update on what the current situation is regarding staffing and economic flow into the community?

**Mr PHILIP KOPERBERG:** We will take that on notice.

**The Hon. ROBERT BROWN:** I have a question regarding the control of feral animals. Again, with Yanga Station one of the problems quoted at the time was a pig infestation. There appear to be anecdotally from time to time reports of major problems with feral animals and wild animals such as wild dogs in relation to rural properties that border national parks. Given that the Volunteer Game Council licensed shooters have been very successful in their program in State forests, do you believe it would be worthwhile considering that program being extended into national parks where there is a similar problem?

**Mr PHILIP KOPERBERG:** As to the extent of the problem and the impact of the Government's commitment to reducing both feral animals and other innovative species, to which we have a very strong commitment working closely with neighbours and adjoining landholders and what have you and a range of measures that include baiting and other measures of eradication of feral dogs and what have you, I might ask Tony Fleming to give the detail on the success of that program.

**Dr FLEMING:** Specifically, in relation to Yanga, over the last year more than 1,500 feral pigs have been removed from Yanga. In addition to that, we have also laid over 2,000 fox baiting stations. You asked a question about Yanga before; that is one of the things that has been occupying a lot of our time: trying to put in place an effective feral management control program. So far it has been very active and I think it has been very effective, and I think the community also believes that.

In relation to your last question on Yanga: seven jobs have been created at the national park. A number of those have been filled by the station's previous employees. So we have been able to keep about five of them as local employment from the station's previous employees. Around the State we plan to spend about \$19 million on feral animal and weed control. We have a large number of feral

animal control programs. Yanga is a good example of the way we approach new acquisitions and we work very hard to get on top of those problems. Largely, the techniques we use, for example, for pigs are around trapping and aerial culling. Ground shooting is used by exception; it is good for specific locations, special circumstances, but not generally.

So we do have a very active program throughout the State and a number of examples where we use, for example, aerial culling in the northern part of the State. We might get, over a three-day program, 3,000 pigs, that sort of order, in that range-land country. So, it is very active; it is a very high priority for us to maintain those programs. You are right: currently, the situation is that we manage the feral control programs on national parks. I note that in a number of State forests the Game Council is licensing shooters to go into those State forests. We think that is a good mix at the moment where the sort of programs we do for broad area feral animal control are largely things like aerial culling programs as well as tracking programs, with ground shooting being used by exception only.

**The Hon. ROBERT BROWN:** Minister, I refer you to the environmental trust, the fund within that for the acquisition of land for National Parks and monies for the declaration of marine parks. Under the City and Country Environment Restoration Program, announced by the previous Premier Mr Carr in December 2005 and valued at about \$316.5 million in the current budget over five years, how much has the Environmental Trust funded in this current budget for the acquisition of land for terrestrial national parks?

**Mr PHILIP KOPERBERG:** I thought the way that question was going it was steering towards marine parks. Can I ask you to repeat the last part of the question?

**The Hon. ROBERT BROWN:** How much out of that fund has been put aside for the acquisition of land for national parks terrestrial estates in the 2006-07 budget? It is not quite clear from the budget papers exactly how much has been put aside.

**Dr FLEMING:** In the 2006-07 my understanding is \$6.75 million was set aside for land acquisitions.

**CHAIR:** Minister, we talked about the Hotspots Program and Premier Iemma made an announcement on 9 March last year. At the same time he promised stronger on-the-ground enforcement. How many full-time staff are currently on the ground and dedicated to specifically investigating breaches under the Native Vegetation Act and where are they located?

**Mr PHILIP KOPERBERG:** Before I defer to Simon Smith, could I just say that the agency is taking more seriously than ever the breaches we are referring to and the investigative regime is of a very high order and we do anticipate fairly high levels of success. As to specifics, Simon?

**Mr SMITH:** The way we are approaching it is staff came from the Department of Natural Resources into what is now the Department of Environment and Climate Change. It was made clear to us in the department that the Government had placed a very high priority on some successful enforcement action and some very visible regulatory activity in relation to land clearing, because it was a high priority for the Government's program. We have learnt from the last time we had a merger that great benefit could be achieved if, rather than having specialist people who only do one piece of legislation, we integrate those people within our other regulatory staff, who can follow all manner of the environmental regulatory provisions that we administer.

The people who came across from the Department of Natural Resources have continued to work on Native Vegetation Act enforcement but they have been integrated within the team that investigates threatened species matters, pollution matters and Aboriginal cultural heritage breaches, which means that we have a substantial increase in capacity to pursue investigation in these areas. We have been talking with stakeholders about what is happening. I suppose people are impatient: They want to see immediate results in court or in terms of infringement notices and so forth, and that will not happen because the nature of evidential rules in the Land and Environment Court means we are not actually allowed to go to court until we can essentially present the whole of our case and all of our evidence.

Mr Smith agrees to take specific detail on notice on the next page

So, it does take some time. But I think if we reflect on what happened when investigative responsibility came to what is now the Department of Environment and Climate Change, we have substantially increased the enforcement and success in court under the National Parks and Wildlife Act for threatened species matters and Aboriginal cultural heritage matters—very substantially increased that over the last few years, and I am confident what you will see over the next few years is some very successful cases where people have committed flagrant violations of the land clearing laws, that people will be held to account with what the penalties of the law provide. I am happy to take on notice some specific detailed question about the numbers of staff and so forth, if that would give you some comfort.

**CHAIR:** Thank you for that. I have no doubt about the intention, however, I am concerned, and I would ask you is it not the case that under the Department of Natural Resources just before the election there were around 25 compliance staff and now there are between 15 and 17 native vegetation staff?

**Mr SMITH:** As I perhaps long-windedly tried to explain, we are not relying only on the people who have previously had a tag on their back saying, "I do native vegetation investigation."

**CHAIR:** Are you saying that there has been no reduction in staff levels?

**Mr SMITH:** We are shifting the resources around to increase our effort in this area.

**Mr PHILIP KOPERBERG:** Our approach to the management and preservation of native vegetation has been in part to develop property vegetation plans, with which I am sure you are familiar. So far some 500 property vegetation plans have been voluntarily negotiated across New South Wales with very good results. In addition, 300 of them involve incentive payments, which come largely through catchment management authorities, for farmers to improve or protect native vegetation. Satellite monitoring confirmed a decrease in woody vegetation clearing to approximately 31,000 hectares per annum between 2004 and 2006, of which only 16,000 hectares is associated with the clearing of farming land. That is a very significant improvement in the management regime. Clearing approvals decreased to less than 2,000 hectares in 2006-07 compared with 12,000 hectares in 2005-06. The Government's approach has been to enter into the preparation of property vegetation plans and we are looking at models at the moment to ensure balanced outcomes. We have had some very positive indications from the environmental side. The Hon. Rick Colless is shaking his head.

**CHAIR:** It is my question.

**Mr PHILIP KOPERBERG:** We are close to resolving a number of outstanding issues, particularly in the Walgett area, where we have very close contact with landowners. I have been out there on more than one occasion. We walked across those areas and we agreed with many of the propositions they have put forward. In recent weeks the department has closely examined its modelling to the point at which it is able to satisfy most of the requirements in the Walgett region. The feedback we are getting from the people concerned is very positive.

We recognise that this model must be migrated to places like Nyngan. In fact, it is my intention after this parliamentary session to go to Nyngan to speak with the farmers there to see whether we can achieve the same rationalisation that we are very close to achieving in Walgett. While there is still a lot of work to be done, progress in recent times is being acknowledged by the affected farmers. At the same time, we are maintaining the environmental integrity of the proposals.

**CHAIR:** Why is information made available to the public on private native forestry property vegetation plans so inferior to that provided for broadscale clearing property vegetation plans? Why is information on private native forestry property vegetation plans not available for inspection at catchment management authority offices as it is for other property vegetation plans, and why is information not provided in the public register of the area approved by a private native forestry property vegetation plan? Will you now fix these inconsistencies and make the same information available for private native forestry property vegetation plans?

**Mr PHILIP KOPERBERG:** We were not aware of the problem, so we will take the question on notice and examine it. If there are inconsistencies that are not there for perfectly valid legal or other reasons, we will ensure a higher level of consistency.

**CHAIR:** Do you acknowledge that half of all candidate old-growth forests as mapped by the CRAFTI system is available for logging under the code of practice without any field inspection?

**Dr SHELDRAKE:** Old-growth forests will require an examination. As part of the private native forestry code, if a farmer or landholder wishes to get approval for a private native forestry property vegetation plan, if it is old-growth or rainforest—

**CHAIR:** What about candidate old growth, or do you not look at that?

**Dr SHELDRAKE:** The definition relates to old growth. If it is considered old growth, it will be investigated and assessed by a Department of Environment and Climate Change officer.

**The Hon. ROBERT BROWN:** What is candidate old growth?

**Mr PHILIP KOPERBERG:** Young growth that will get old.

**CHAIR:** On its way and potentially old growth.

**Dr SHELDRAKE:** I should clarify.

**CHAIR:** It is deserving of preservation.

**Dr SHELDRAKE:** The CRAFTI definitions are very specific about old growth. I am certainly not going to attempt to describe them. However, it clearly defines old growth and it is very technical. That is the basis of the definition and that is what all the stakeholders agreed to.

**The Hon. RICK COLLESS:** I turn to the structure of your department and staffing issues. I understand that a review of the Department of Environment and Climate Change may be done by PricewaterhouseCoopers. Is that correct?

**Mr PHILIP KOPERBERG:** We have no knowledge of that. Were such a review to be been done, I think the Minister would have initiated it or known about it.

**The Hon. RICK COLLESS:** I am asking whether you have initiated such a review.

**Mr PHILIP KOPERBERG:** Neither Minister nor the executive have any knowledge of that. PricewaterhouseCoopers is probably out of a job in that regard.

**The Hon. RICK COLLESS:** So you are not concerned about excessive layers of management in the department?

**Mr PHILIP KOPERBERG:** I do not think I have ever referred to the management layers in the department as being excessive. I am very conscious of the fact that the Department of Environment and Climate Change is a relatively new department and has only very recently subsumed a lot of responsibilities from elsewhere. There has been an integration of function to give effect to the integrity of the Government's commitment to address climate change, hence the department has now assumed responsibility for a range of things. It is perfectly legitimate to say that the department is still settling into some of those tasks. It has had to absorb a range of functions and some people who were previously associated with those functions. Some have gone to water and energy, some have gone to the Department of Environment and Climate Change and so on. You would expect me as the Minister to remain vigilant in ensuring efficiencies coming from that or any department. That is precisely what I propose to do. If I were to become aware of an apparent excess in resources, I would address that. At this stage we are examining a number of means of rationalising functions and so on. We do so in concert with the management of the department and obviously with the Minister assisting me. That is about as much as I can say at this stage.

**The Hon. RICK COLLESS:** Do you believe in a flatter management structure rather than a strongly tiered structure?

**Mr PHILIP KOPERBERG:** This goes to the issue of personal likes and dislikes. My preference is for reasonably flat structures, but I am also cognisant of the need for connectivity. For argument's sake, the Government's move towards the sharing and centralisation of corporate services has been a major initiative in saving taxpayers' dollars.

Clearly, there are benefits in a number of functions coming together, being centrally serviced, if you like, by a whole range of corporate service entities, because there are savings to be made in that regard. That in itself tends to make fairly large structures. I see no evidence at this point in time to have concern about the structure of the department, either the Department of Water and Energy or the Department of Environment and Climate Change. As we evolve there is no question that ideas will occur to us to assist them in the more effective discharge of their functions, but at the moment there are no such plans.

**The Hon. RICK COLLESS:** So, in the case of a compliance officer, for example, who reports to a unit head, who reports to a regional manager, who reports to a regional director, who reports to an executive director, who reports to a deputy director general, who reports to a director general, does that not seem like excessive layers of management? Surely, at least two or three of those could be knocked out of that structure?

**Mr PHILIP KOPERBERG:** It is a lot of reporting.

**The Hon. RICK COLLESS:** It is a lot of reporting and a lot of bureaucracy, and that is the current situation, as I understand.

**Mr PHILIP KOPERBERG:** I am happy to look at those sorts of examples.

**The Hon. RICK COLLESS:** I turn to a specific issue regarding one of your officers by the name of Tom Grosskopf. Is it a fact that until 2005, 2006 this officer had an annual travel budget of around \$50,000 to allow him to travel between his home in Orange, his office in Wellington and Sydney, as well as a fully maintained government vehicle?

**Mr PHILIP KOPERBERG:** I understand the person was employed by the former Department of Natural Resources, but I will take that question on notice.

**The Hon. RICK COLLESS:** Is the Government meeting this officer's relocation expenses to Sydney, even though that move is at his own request?

**Mr PHILIP KOPERBERG:** I will have to take that question on notice, Mr Chair. You would not expect me to be aware of that level of detail.

**CHAIR:** That is fair enough—a fair question to ask and a fair answer to give.

**The Hon. RICK COLLESS:** Can the department provides some details of the land clearing breaches per year, in particular the number of prosecutions, fines, locations and area of land cleared?

**Mr PHILIP KOPERBERG:** I will take it on notice.

**The Hon. RICK COLLESS:** The Government had announced a fund of \$37 million to compensate farmers for loss of land clearing rights. How much of that fund has been taken up?

**Mr PHILIP KOPERBERG:** I will have to take that on notice.

**The Hon. RICK COLLESS:** I understand that the package included \$15 million for sustainable farming grants, \$12 million in exit assistance packages and \$10 million to help farmers unable to set aside offset areas for the environment in return for clearing. Can you provide us with a detailed breakdown of exactly how much of that money has been spent, whether the funding package is still available and until when?

**Mr PHILIP KOPERBERG:** Yes, we will. The member is quite correct in his apportionment—\$15 million in sustainable farming grants, \$12 million in farmer exit assistance and \$10 million for offset pools. So, we will provide details of that.

**The Hon. MARIE FICARRA:** Moving on to national parks, can you tell the Committee how much revenue is currently being received from commercial activities in national parks, such as kiosk leases and accommodation hire of residential properties located in national parks?

**Mr PHILIP KOPERBERG:** Yes. There is a range, as you would expect, in other incomes to the National Parks and Wildlife Service. I am advised that from the rental cottages the income is \$160,000; consulting services are in the order of \$1.7 million; Murray-Darling Basin Commission, \$6.2 million; stock agistment, \$54,000; river management agreements, \$856,000; minor sales, including lab testing services and what have you, \$2.6 million; materials to produce goods and services, \$278,000; investment income, \$551,000; grants and contributions of \$2.489 million; and publication sales and the like, in the order of \$1.725 million. I have completely misled the Committee. I was giving you figures from the Department of Water and Energy.

**The Hon. MARIE FICARRA:** If you could just take it on notice. Revenue currently received from commercial activities, if you could provide it.

**Mr PHILIP KOPERBERG:** If you could ask me the question in relation to the Department Water and Energy?

**CHAIR:** I do not think you will be accused of misleading the Committee. We take the point that you gave us the wrong figures. Thank you to that information.

**The Hon. MARIE FICARRA:** It would be good if you could give us the accurate figures. What does the department estimate to be the likely increase in revenue as a result of the amendments being proposed to the National Parks and Wildlife Amendment (Leasing and Licensing) Bill 2007?

**Mr PHILIP KOPERBERG:** I will take it on notice.

**The Hon. MARIE FICARRA:** Can you also confirm if the \$113 million referred to in the 2007-08 Budget Paper No. 3, volume 1 at page 6.20, for sale of goods and services, includes the increased commercialisation of parks?

**CHAIR:** Before you answer that, Minister, did I get it right that you are going to table some documents?

**Mr PHILIP KOPERBERG:** No, we were not. We were going to provide the details, as I listed them for the Department of Water and Energy, in relation to national parks.

**The Hon. MARIE FICARRA:** And if you could provide that confirmation about the budget papers?

**Mr PHILIP KOPERBERG:** Sure.

**The Hon. MARIE FICARRA:** Given the expansion of parks to 6.7 million hectares, how many staff are employed in the direct maintenance and upkeep of New South Wales parks and what are the total staffing costs? If you could provide that as well?

**Mr PHILIP KOPERBERG:** Okay, I will do that.

**The Hon. RICK COLLESS:** I turn to some issues relating to the catchment management authorities. Did you terminate the appointment of the chairman of the Border Rivers-Gwydir Catchment Management Authority, Mr James Croft?

**Mr PHILIP KOPERBERG:** No, I did not terminate his appointment. I did not renew his appointment. There is more than a subtle difference between the two. He was due for reappointment and I did not reappoint him.

**The Hon. RICK COLLESS:** Was he invited to reapply?

**Mr PHILIP KOPERBERG:** He had the opportunity to reapply. I chose not to reappoint.

**The Hon. RICK COLLESS:** Did you encourage him?

**Mr PHILIP KOPERBERG:** No, I chose not to. He was in a position to reapply. However, I had an acting chairperson—this is the Gwydir or Northern Rivers catchment management authority, as I understand it?

**The Hon. RICK COLLESS:** Yes. Were all the CMA board positions up for reappointment at the same time or only the chair's?

**Mr PHILIP KOPERBERG:** No, a number of board members were also, but their appointments were staggered. We did not make any other changes—I do not think, if my memory serves me correctly—other than not to reappoint the chair, and have an interim acting chair, who I believe was the deputy chair at the time.

**The Hon. RICK COLLESS:** Could I ask you the reason for your decision not to reappoint him?

**Mr PHILIP KOPERBERG:** There were a number of issues relating to the Gwydir Border Rivers CMA that required some response. There were allegations, as you may be aware, of some illegal land clearing having taken place—quite a large area of wetland. Naturally, we were very concerned about this. Suffice it to say that I was not satisfied with the response that we initially received.

**The Hon. RICK COLLESS:** From the board?

**Mr PHILIP KOPERBERG:** From the chair of the CMA. The allegation as to the illegal clearing is the subject of an independent investigation and I have asked a former member of the judiciary to undertake a review of the effectiveness of the Gwydir Border Rivers CMA and once that report is to hand, I will then be in a position to determine the composition of the board and invite applicants to chair that particular board. Suffice it to say that we take very seriously what allegedly occurred within the area of that CMA. There were a number of significant issues that had attached to them a degree of vagary, which did not lend itself to resolving the problem and, therefore, I took those particular measures.

**The Hon. RICK COLLESS:** It seems to me to be a little irregular, though, if you have an inquiry going on yet you have decided not to reappoint the chairman in relation to this matter before the results of the inquiry have been released.

**Mr PHILIP KOPERBERG:** If my memory serves me correctly, one of the circumstances surrounding my decision not to renew the chair's appointment was because of the paucity of response that we were able to ascertain from him. That event took place before the inquiry was investigated, the independent overview. It was not a question of announcing an inquiry and then not reappointing the chair. If my memory serves me correctly—and I qualify it by saying that—it was the other way around. We initially attempted to glean some information that would help the department in determining the extent, if any, of a breach and where it might go from an investigative point of view and ultimately a prosecution, if that were found to be valid. Again, I reiterate that the initial response was not in keeping with the response, as advised by the Crown Solicitor, of a CMA board and chair; in other words, the response was not consistent with that obligation.

**The Hon. RICK COLLESS:** This matter related to the control of a weed called lippia within a wetland area, is that correct?

**Mr PHILIP KOPERBERG:** That particular incident?

**The Hon. RICK COLLESS:** Yes?

**Mr PHILIP KOPERBERG:** It is still under investigation.

**The Hon. RICK COLLESS:** This alleged breach that occurred was in a wetland area where the board had approved some work on that wetland area for the control of lippia?

**Mr PHILIP KOPERBERG:** The extent, if any, to which the board had approved the work is the subject of this current overview. We are not sure yet, pending the outcome of the inquiry, whether or not a breach occurred, did the breach occur as a consequence of failing to get necessary approvals; did the CMA approve it in part or not? I do not want to delve into all these issues for obvious reasons, but all of these issues are the subject of this examination.

**The Hon. RICK COLLESS:** Certainly the Border Rivers-Gwydir prescribed recommendation for control of lippia is to cultivate it when it is dry, is it not?

**Mr PHILIP KOPERBERG:** Mr Chairman, I do not know if I can add much more of value to the answers I have already given, given the fact that this is the subject of two quite separate but parallel investigations.

**Mr SMITH:** In particular, the investigation into the allegation of illegal clearing is the subject of a criminal investigation that we are in the middle of, so it really would be inappropriate to go into that.

**The Hon. RICK COLLESS:** Leaving that aside, I am more interested in the recommended methods of control of this weed known as lippia. As I understand it, it is a well-recognised procedure for controlling it. Let us put the facts on the record here about the impact of lippia on native vegetation. It can completely choke out other native species where it takes over. Therefore, it is important that it is controlled. It is an introduced weed and it is important that it is controlled in areas of native vegetation. One of the control methods recommended in Queensland and northern New South Wales in wetland areas is to cultivate it when the wetland area is quite dry. Is that correct?

**Mr SMITH:** It would be inappropriate for us to answer questions when the answer could be construed—

**The Hon. HELEN WESTWOOD:** Point of order: This matter is under investigation. I think that point has been made.

**CHAIR:** I appreciate that, Mr Smith, and if there are legal proceedings—

**The Hon. RICK COLLESS:** To the point of order: I am not talking about the legal proceedings now; I am talking about the control of a weed called lippia, which is a well-known weed of wetland areas. I would like to get some indication from the department about their awareness of control methods for lippia, the investigation aside. That has got nothing to do with it.

**The Hon. HELEN WESTWOOD:** The question was asked in relation to the investigation.

**CHAIR:** Mr Smith cannot comment on the investigation. He can only answer in general terms about lippia.

**Mr SMITH:** The investigators in this case are fully aware of lippia, the need to manage it and the procedures and rules that are available to landowners to do that. That is being fully taken into account as the investigation proceeds.

*[Time expired.]*

**The Hon. ROBERT BROWN:** Minister, I was pleased to hear your answer that your preference is for a flood-efficient management structure. I appreciate the difficulties that you are going to have now incorporating such a wide range of departments into the 1½ to 2 portfolios. I am



aware that the Minister for Primary Industries had similar problems when he did his rationalisation. In regard to the National Parks and Wildlife Service and the management of national parks, firstly, terrestrial national parks, you probably do not have the figures to hand but can you advise the Committee whether you have done any comparisons on the cost of management of terrestrial national parks on a per hectare basis in the last 10 years and, if so, has there been any increase in the cost per hectare over and above the consumer price index?

**Mr PHILIP KOPERBERG:** You are perfectly right, I do not have that sort of financial data to hand but I am happy to provide it and take the question on notice.

**The Hon. ROBERT BROWN:** Secondly, in relation to terrestrial national parks the figure has been given that 6.7 million hectares or 8.3 per cent of the State's terrestrial land mass is in reserves. Can the Minister responsible tell us how many hectares are covered by marine-protected areas and what percentage of those marine-protected areas are the subject of either sanctuary zones or any other zone that limits recreational fishing?

**Mr PHILIP KOPERBERG:** None of the terrestrial.

**The Hon. ROBERT BROWN:** No, the marine parks I am now referring to.

**Ms VERITY FIRTH:** Can I get a clarification of your question? It is the percentage of sanctuary zones versus habitat zones, is that right?

**The Hon. ROBERT BROWN:** Yes, what is the total area under marine protected areas—I am assuming that it goes out to three nautical miles—and what percentage of that total area, and I am only interested in those areas that are subject to either sanctuary zones or other zones that may limit under recreational fishing the taking of marine stuff?

**Mr PHILIP KOPERBERG:** I cannot give you the total size but I can give you some advice on the percentages. The Port Stephens Great Lakes Marine Park, for example, which commenced in April, provides for 17.6 per cent of the park in sanctuary zones, 38 per cent in habitat protection zones, and 44 per cent in general use zones—which is the figure you are particularly interested in I suspect—and 0.3 of 1 per cent in special-purpose zones. The plan also provides for the protection of grey nurse sharks at several sites.

In relation to Batemans Bay Marine Park and a similar comparison, I can say that 19 per cent of the park is in sanctuary zones, 43 per cent in habitat protection, 37 per cent in general use, 0.4 of 1 per cent in special-purpose zones; trawling and dredging is prohibited in the park, and commercial netting has been removed from the Clyde River estuary and Durras Lakes.

**The Hon. ROBERT BROWN:** How many baseline biodiversity studies have been done in the Eden bioshelf region?

**Mr PHILIP KOPERBERG:** I will defer to my colleague the Hon. Verity Firth.

**The Hon. ROBERT BROWN:** The unasked question there is, in preparation for the future declaration of a marine protected area.

**Ms VERITY FIRTH:** I will take on notice the question about whether any baseline studies have been done. There are no current plans for future marine parks. However, obviously, we are always open to the science and the arguments. In reference to your previous question, 34 per cent of the State's coastline is now a marine park. In terms of the sanctuary zones, which is what you are talking about, in each park approximately 12 to 25 per cent is sanctuary zones. So in the majority of parks recreational fishers can still fish 80 per cent of the park or so, depending on each park's zoning obviously. We will take on notice the specific question about the plans.

**CHAIR:** Minister, there is some concern that, with the changeover you have made, in certain circumstances former Natural Resources staff are in place and they are primarily former foresters, rather than forest ecologists, and they are being given primary responsibility for private native forestry policy and compliance in the Department of Environment and Climate Change. Could you comment

on that? Also, could you assure me that the rules restraining ecological harvest plans are developed by highly qualified, independent ecologists and not by staff now working in the Department of Environment and Climate Change who were responsible for some of the failings under the current code, and how you guard against that?

**Mr PHILIP KOPERBERG:** Obviously I cannot tell you, without reference, which staff prepare which particular policy issues, but I am happy to look at it. I do not think we should assume for one moment that staff previously employed by the Department of Natural Resources do not have the capacity to develop policy which is ecologically sustainable, notwithstanding their previous roles. If it goes to expertise to do this, I have faith in the judgment of the executive of the department to ensure that expertise is matched to the particular task.

So far as private native forest is concerned—and this is an issue that remains stagnant, as you know, for some time—we have had relatively good breakthroughs in very recent times, and that is as a consequence of some true bipartisan approaches, comprising environmental groups and private native forestry owners and so on. We now have a code of practice that is specific to the four forestry regions in New South Wales. We continue to have dialogue. I have met with the unions, I have met with the environmental side of the equation, I have met with the product side of the equation, I have met with the transport side of the equation, and so it goes on. There is a degree of optimism about what this compromise has achieved. We will continue to monitor it very, very closely. There were some initial difficulties, which related to ensuring that things like habitat, old growth and riparian zones were protected. It was very encouraging to see that the potential users of private native forest readily agreed to the need to develop codes to protect those sorts of areas.

If you take the private native forestry outcome as one example of the work that is now being produced by the department, you would have cause for some optimism, irrespective of which particular individual is making that contribution. But it is something that we will continue to monitor closely. The one thing I would not like to do is to presuppose that someone coming from that area is not capable of making some adjustment and doing what is asked of them in an objective fashion; I think that would be unfair to the people concerned.

**CHAIR:** I understand there were some visits recently to three properties of logging industry interests in northern New South Wales at the behest of staff now with the Department of Environment and Climate Change. Can you confirm that?

**Mr PHILIP KOPERBERG:** Perhaps Dr Sheldrake could assist.

**CHAIR:** Dr Sheldrake, can you confirm the nature of the visit and whether there was any logging, for example, to reduce the effect of the private native forestry code of practice on properties held by these interests when they applied for a private development plan?

**Dr SHELDRAKE:** The purpose of the visit was for me to get an understanding and appreciation of the complexities of the issue. As the Minister said, we have come a long way from where we were a year ago, and I think both stakeholder groups recognise that the outcome is an outstanding outcome. My purpose was to get myself out of Sydney and to visit some forests and actually see the issues that confront people who are working in the industry. I looked at both sides. We were looking at the issues from a forestry harvest point of view, and we looked at things like old growth and the riparian zones that the Minister referred to, as well as habitat. So, from my point of view it was a balanced visit, and I came away with a real appreciation for the need for both environmentalists to have the code in place and for industry to have a code.

**CHAIR:** Did you give any undertakings at these meetings?

**Dr SHELDRAKE:** I gave no undertaking, and I am not in a position to give an undertaking. There is a regulation as part of the Native Vegetation Act, and it is part of the statute.

**CHAIR:** What ecologists from the Department of Environment and Climate Change were present at these meetings?

**Dr SHELDRAKE:** I took along a policy person from Sydney, for much the same reason that I went, and that was to get an understanding.

**CHAIR:** Was that an ecologist?

**Dr SHELDRAKE:** No, that was a policy person from the Sydney head office. The officers we met with and who arranged the visits were two of the key private native forestry officers, and they were former Department of Natural Resources staff who are now part of the Department of Environment and Climate Change.

**CHAIR:** I am wondering whether that visit could result in an increase of access for logging by those interests. I would like to get verification on that.

**Mr PHILIP KOPERBERG:** It is highly unlikely. I accept completely what Dr Sheldrake has told the Committee, and I am encouraged by the fact that our people do go out—as you very well know it is my practice to get out there, spend time in the bush, and talk to the people who are affected by these things, the stakeholders and so on, as I have been doing for a long time. I cannot assume, and will not assume, that a visit by a senior executive of the Department of Environment and Climate Change who used to be a senior executive within the Department of Natural Resources to an area with which he has become very familiar will lead to an imbalance in terms of either side of the argument.

**CHAIR:** I go to biobanking. When will the final biobanking methodology be released for public comment?

**Ms VERITY FIRTH:** Thank you for that question. It is lovely to be asked one. As you know the Department of Environment and Climate Change is establishing the Biodiversity Banking and Offset Scheme. The Ministerial reference group has been established. It was established in 2007 and has actually met six times since then. I am advised further detail on the operation of the scheme will be placed on public exhibition in November 2007. This will include the assessment methodology and background, peer review and response, compliance strategy, pilot report, regulations and a regulatory impact statement. Obviously discussion with industry and green groups is a high-priority and work on the regulation itself is well under way. I am advised the scheme is expected to commence in 2008.

**CHAIR:** Will endangered ecological communities, old growth and rainforests be allowed to be cleared under the biobanking scheme?

**Ms VERITY FIRTH:** I will defer to Mr Smith but the important thing about the biobanking scheme, as a principle, is that for the first time in a long time we are actually giving an economic incentive to not developing your land, giving an economic incentive to private landowners who have bits of land of high biodiversity value to keep those lands undeveloped. I think that is one of the real strengths of the scheme. Another strength of the scheme is the fact that it also gives Aboriginal landowners a source of income for their land of high biodiversity value. That is the strength that I see in it.

**Mr SMITH:** The scheme does not operate to give approval to clear or not. It operates connected with the planning laws and the decision about what can take place on a site is made under the planning laws. What it does instead is offer, through a scientifically robust method, to evaluate whether or not a proposal that incorporates gains or losses into the future could be said to achieve, maintain or improve outcome for biodiversity values and, if so, to get a much faster path through the development assessment process. It has very extensive, robust and scientifically based protections for every listed threatened species, plant or animal, and every listed endangered ecological community.

**CHAIR:** My understanding is that it is actually transferring the responsibility from your department, which is looking clearly at environmental values, across to a planning process—

**Mr SMITH:** No, it is not doing that.

**CHAIR:** Could I ask the Minister, because it is important for me, are you not concerned that certain lands that would be protected under the Native Vegetation Act already can then be used to get a double credit, if you like, by being a biodiversity banking trade-off? In actual fact we are not getting

any net gain. Those lands that are used as a trade-off are already protected under other mechanisms and then we have a situation with planning where they then double dip, if you like, to say we are getting a biodiversity trade-off. In actual fact we are trading a protected area of land and allowing some other land that has dignity and values to be destroyed in a developmental process.

**Mr SMITH:** Can I just respond before the Minister responds? One of the really important things to differentiate is—the scheme has within it recognition of the principle of additionality. Credit is only given where people do things they are not otherwise required to do. To say that simply ending broad scale land clearing and prohibiting land clearing as it is defined in the Native Vegetation Act will immediately, or even in time, result in the full restoration of conservation values of land, is just not true. If people are going to protect and restore land, yes, they have to stop broad scale land clearing but they have to actively manage it to restore its conservation value. So the biobank scheme gives credit to people who will control weeds and feral species and who will agree to desist from activities that they may lawfully otherwise do, such as agreeing not to do things that can be done under the various exemptions of the Native Vegetation Act. So the scheme is saying yes, that is good and certain protections may well be there, but the credit you are going to get is because of what you commit to do to protect the natural values of the land into the future.

**Ms VERITY FIRTH:** I think the most important thing is when the methodology is released in November 2007. You will find the scientific methodology is pretty robust and the conversations around the ministerial reference group have addressed a lot of these issues. But, of course, there will be this public exhibition time and I do encourage you to come and see me when it is on public exhibition.

**CHAIR:** Thank you. I will take that opportunity. What is the total budget allocation, monitoring and enforcement of covenants over protected biobanking sites?

**Ms VERITY FIRTH:** I will take that question on notice.

**Mr SMITH:** Obviously there are no biobanking agreements yet so there is nothing in the estimates period that relates to that. It is more about the plans we make for the future and we would be happy to give you information on that. In fact, what is going to come out on public exhibition is an overview of our whole compliance strategy because a key design feature has been the recognition that we will need to keep a close eye to make sure people fulfil their agreements.

**CHAIR:** On the matter of threatened species protection, I wonder what the budgetary expenditure for threatened species protection for this year is, how it compares to the three previous years and why was the threatened species unit at Coffs Harbour closed down?

**Mr PHILIP KOPERBERG:** I will take the first part of your question in terms of expenditure on notice, thank you, Mr Chair. As to the second part of your question, I am advised that the Coffs Harbour unit has not been closed down.

**CHAIR:** Thank you. I will investigate that one. Given the continuous loss of biodiversity, why is your department downgrading threatened species monitoring and protection or are you downgrading threatened species monitoring and protection?

**Mr PHILIP KOPERBERG:** No, we are not, Mr Chair.

**The Hon. MARIE FICARRA:** On equality, particularly vapour recovery stage two plans, how does the contribution of petrol and diesel from cars compare to the noxious fumes associated with lawnmowers, boats, and solid fuel stoves? What plans does the Government have for these products? Will lawn mowing be banned or will households be required to install vapour recovery equipment on their Victa's? If you are going to be consistent, this is a serious question.

**Ms VERITY FIRTH:** From my understanding we do not have any detailed data on petrol vapour emissions from lawnmowers—oh, we actually do. I will take that on notice and I will provide that to you. I think the public can rest assured that we are not going to ban the Victa lawnmower.

What I will say on the vapour recovery legislation is that it is really quite exciting because this is a technology that allows not only the vapours to be recovered and sent back underground but also then those same vapours to be recycled and formed into a new fuel source. It is really quite exciting in terms of taking them out of the atmosphere but also bringing benefits to the retailer themselves.

**The Hon. MARIE FICARRA:** It has been estimated to cost about \$200,000 for the larger service stations but some of the smaller independent operators, how will it affect them?

**Ms VERITY FIRTH:** One of the good things about the system is that we have staged introduction up to nine years. So the bigger ones doing their fit-out immediately, or new petrol stations will apply immediately and then it is staged but the very smallest, your mum and dad retailers, are actually exempt from the scheme.

**CHAIR:** Just one more short question while we have time on voluntary conservation agreements. Conservation agreements have been a strong conservation method of private landowners entering into a covenant with the Government and have been something that landowners have been working with government on. Recently there was an ABC report saying these people have lost their status in terms of rate exemption. It completely wipes out the incentive for voluntary conservation agreement, which has to be seen as a valuable private contribution to the whole process. Is that fair? Is that the case? Can you comment on that?

**Mr PHILIP KOPERBERG:** Could we take that on notice?

**Dr FLEMING:** I am happy to answer. Concerns have been raised with us as well. We have been working with the relevant department, the Department of Lands, to try to correct the minor legislative amendment that occurred which had that impact. I think that there is agreement in government to solve that problem.

**Mr IAN COHEN:** You mentioned the Department of Lands. Voluntary conservation agreements were taken out directly with what was the Environment Minister's portfolio at the time, I understand.

**Dr FLEMING:** Yes, but it is not part of the National Parks and Wildlife Act, where the problem emerges. It is to do with the rating of lands. The voluntary conservation agreement program is a very popular and very successful program. We are working with the department responsible for the legislation to deal with that issue.

**CHAIR:** Both Ministers, I thank you very much of your attendance here today. We have had fruitful conversations. The questions on notice as a result of today's questions are to be answered within 21 days. Questions on notice that are forwarded to you should be returned within 35 days.

**Mr PHILIP KOPERBERG:** We thank the Committee for its line of questioning, which was germane to our responsibilities. Thank you for your indulgence in allowing us to take questions on notice.

**(The witnesses withdrew)**

**The Committee proceeded to deliberate.**

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