

UNCORRECTED PROOF

## GENERAL PURPOSE STANDING COMMITTEE No. 5

Friday 18 September 2009

Examination of proposed expenditure for the portfolio areas

### WATER, REGIONAL DEVELOPMENT

The Committee met at 2.00 p.m.

#### MEMBERS

Mr I. Cohen (Chair)

The Hon. R. L. Brown  
Dr J. Kaye  
The Hon. M. J. Pavey

The Hon. H. S. Tsang  
The Hon. L. J. Voltz  
The Hon. H. M. Westwood

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#### PRESENT

**The Hon. P. J. Costa**, *Minister for Water, and Minister for Regional Development*

**NSW Office of Water**  
**Mr D. Harriss**, *Commissioner for Water*  
**Ms D. Bock**, *Chief Financial Officer*

**Hunter Water Corporation**  
**Mr J. O'Hearn**, *General Manager*  
*Business Strategy and Communications*

**Industry and Investment NSW**  
**Mr B. Buffier**, *Deputy Director General*  
**Mr M. Cullen**, *Executive Director, Enterprise, Small Business and Regional Development*

**Sydney Water Corporation**  
**Dr K. Schott**, *Managing Director*

**State Water Corporation**  
**Mr G. Warne**, *Chief Executive Officer*

**Sydney Catchment Authority**  
**Mr M. Bullen**, *Chief Executive Officer*

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## **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:** I declare the hearing for the inquiry into budget estimates 2009-10 open to the public and I welcome Minister Costa and accompanying officials. The Committee will examine the proposed expenditure for the portfolio of Water and Regional Development. Before we commence, I will make some comments about procedural matters. In accordance with the Legislative Council *Guidelines for the Broadcast of Proceedings*, 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 photographs.

In reporting the proceedings of this Committee, members of the media must take responsibility for what they publish or what interpretation they place on anything that is said before the Committee. The guidelines for the broadcast of the 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, I remind you and the officers accompanying you that you are free to pass notes and to refer directly to your advisers. I remind everyone to turn off their mobile phones. Questions will be asked in rounds of 20 minutes each for the Opposition, the Crossbench and the Government and we will divide the remaining few minutes accordingly. It has been agreed generally that answers to questions on notice must be returned within 21 days. Transcripts will be available on the web tomorrow morning.

**MICHAEL BULLEN**, Chief Executive, Sydney Catchment Authority, and

**JOHN O'HEARN**, General Manager—Business Strategy and Communications, Hunter Water Corporation, and

**GEORGE WARNE**, Chief Executive Officer, State Water Corporation, and

**KERRY SCHOTT**, Manager Director, Sydney Water Corporation, and

**DAVID HARRISS**, Commissioner for Water, New South Wales Office of Water, and

**DEBRA BOCK**, Chief Financial Officer, New South Wales Office of Water, affirmed and examined:

**CHAIR:** Minister, we do not have opening statements during estimates hearings, as you are probably well aware.

**Mr PHILLIP COSTA:** I have noticed.

**CHAIR:** The Opposition will commence questions.

**The Hon. RICK COLLESS:** Minister, the Office of Water comes under the Department of Environment, Climate Change and Water.

**Mr PHILLIP COSTA:** Correct.

**The Hon. RICK COLLESS:** Could you give us an overview of how that operates? I notice that the director general of that department is not here today. Could you give us a bit of an overview of how that operates, and what the relationship is with the Minister for the Environment?

**Mr PHILLIP COSTA:** Yes. Thank you for the opportunity to respond to that question because it is one that has come to me a number of times. What we have done in the new structure is create the Office of Water with its own commissioner, and that commissioner reports directly to me. The commissioner, who is on my right, David, is the Commissioner for the Office of Water. He works with the director general. They have a very close working relationship. We also have had meetings between the previous Minister, Minister Tebbutt, and me to talk through how we would interface the work we need to do.

What we have tried to do is set up an Office of Water in that some of the work that we do is very separate and at arm's length with DECCW. We are running an office that is very much the same as it was, but still within DECCW. A lot of the back office is where the changes will be. What we are looking at with this restructure is the best value for the taxpayer's money. We are trying to create a much more efficient and responsive organisation, which we are doing, that cuts out some red tape and makes decision making and implementation a lot smoother.

Other governments across the country—Queensland, Victoria, South Australia and Tasmania—already have established similar super agencies. Their public sectors as well as that of Western Australia also have announced a similar consolidation in their 2009-10 budget. We are moving along with what other jurisdictions have been doing. The changes will build upon the reform we are looking at. It is different from the Kennett one in the 1990s in that we are doing that without shedding jobs. What we have tried to do is move all of those organisations and personnel who have been working with me under the Ministry of Water across to the Office of Water.

All of those front-line services and all the work we have done in the past continues to operate as it did, directly reporting to the Minister for Water, which is me. As you would be aware, there are many jobs that we do. Particularly for compliance and management of water in terms of the markets, it is a detailed and intricate process. We need to keep that separate because, although DECCW has some role to play, we have a major role to play. What we have tried to do is create a very clear path, particularly for irrigators out in the country who need to know where they can go. Also, there is no deviation in terms of process.

The Office of Water has been set up and is working with DECCW and with the Minister. Having the director general in common, Ms Corbyn, is useful at this juncture because we will now be able to look at the

delivery of services in a much more global approach. However, the day-to-day function of the Office of Water reports directly through the Commissioner for Water to me. Does that answer your question?

**The Hon. RICK COLLESS:** Yes. Thank you very much. I turn now to the desalination plant. Can you tell us what was the original cost per kilolitre of potable water obtained from the desalination plant using standard electricity from the grid?

**Mr PHILLIP COSTA:** Original? What do you mean? Can you elaborate on that a bit for me? What do you mean by that?

**The Hon. RICK COLLESS:** When the desalination plant was first mooted, what was the cost of potable water based on using electricity directly from the grid?

**Mr PHILLIP COSTA:** I will defer that question to my chief executive officer.

**Ms SCHOTT:** The original estimate—and it was just an estimate—per kilolitre for the operating cost was about 60¢. That has gone up slightly because of the cost of renewable energy increasing in cost. The estimate at the start always included it. It is just that the renewable energy cost has increased, but it was always included.

**The Hon. RICK COLLESS:** How does that compare with the cost per kilolitre of water that I buy out of my tap?

**Ms SCHOTT:** The water you buy out of your tap is sold to you at a retail price, if you buy it in Sydney. It is around \$2 a kilolitre.

**The Hon. MELINDA PAVEY:** You said that the original plan was 60¢ per kilolitre?

**Ms SCHOTT:** That is 1,000 litres.

**The Hon. MELINDA PAVEY:** That was the original.

**Ms SCHOTT:** Yes. But it was just an estimate. This was very early in the piece.

**The Hon. MELINDA PAVEY:** What is it now?

**Ms SCHOTT:** I am struggling to remember, but I think it may be 65¢ or something of that order. It is not a large increase, but the increase is entirely due to the increase in renewable energy costs. You would appreciate that they have been going up as the demand for renewable energy has been going up.

**The Hon. RICK COLLESS:** The energy you are getting supposedly comes from the Capital Wind Farm at the moment.

**The Hon. MELINDA PAVEY:** That is the plan, is it not? It will come from the Capital Wind Farm at Bungendore?

**Ms SCHOTT:** We have a contract.

**Mr PHILLIP COSTA:** There is a wind farm at Bungendore that is linked to this project. Capital Wind Farm is an offset program in terms of renewable energy, and it is already in the process of being commissioned. It is already producing power, and that will be used to make available certificates for the operators of the desalination plant as time goes on. The design of that wind farm is to be, with all the science we have, equivalent to the energy requirements of the plant itself over a 12-month period. Normally, people think that you have a power lead from one to the other but it feeds into the grid and there will be certificates that they will sell on to the operators of the desalination plant.

**The Hon. RICK COLLESS:** What will be the cost of the electricity that will come from that renewable source?

**Ms SCHOTT:** At the moment renewable energy costs about twice what dirty energy costs, if you want to put it like that. It is about double the price.

**The Hon. MELINDA PAVEY:** What contracted price have you got from Capital Wind Farm at Bungendore?

**Ms SCHOTT:** We have two prices. We have a price for the electricity that goes into the grid and we have a price for the renewable energy certificates [REC].

**The Hon. MELINDA PAVEY:** Can you take that on notice and give us the cost of those prices?

**Ms SCHOTT:** I can take it on notice. Black power is the black power price, and the REC price is set in line with rises in the consumer price index, which is an unusual feature of the contract and makes it favourable for us.

**The Hon. MELINDA PAVEY:** So what you are saying is that you are getting a good price from Capital Wind Farm?

**Ms SCHOTT:** Exactly.

**The Hon. MELINDA PAVEY:** You estimated at 60¢ and now it is 65¢.

**Ms SCHOTT:** Or thereabouts. I will take that on notice.

**The Hon. MELINDA PAVEY:** When there is no wind and there is fog, as often happens in that part of the world—you only have to fly into Canberra to know this—what is your prediction of the cost for the electricity that you have to buy from green sources instead of getting it from the Bungendore wind farm?

**Ms SCHOTT:** We are contracted with the wind farm at Bungendore. I might point out that it would not have been built if it did not have the Sydney Water contract. It is the largest wind farm in New South Wales at present, and it will produce more than the desalination plant requires and sell the rest to other parties, including RECs. On days when it is not windy, which does not happen a great deal in Bungendore, we will, on other days, be purchasing more. The RECs are purchased as they put it in. Their RECs are made as they put it into the grid. Some days they will be putting more in and some days they will be putting less in. That is the nature of wind farms.

**The Hon. MELINDA PAVEY:** Do you see the irony in a regional country community building this development, which is good in terms of green energy, and all that energy being consumed by a desalination plant for Sydney residents?

**Mr PHILLIP COSTA:** I do not see it any different than any other alternative energy processes we have where the energy goes into a whole range of activities across the basin, including Sydney.

**The Hon. HENRY TSANG:** So they move to the city.

**Mr PHILLIP COSTA:** That is the point. The way we see it, it is no different than any other consumer of power, be it for desalination plant, be it for a factory or an industry of some sort. I do not see that as an anomaly at all.

**The Hon. RICK COLLESS:** What is the power requirement for the desalination plant?

**Ms SCHOTT:** The wind farm has a capacity of 140 megawatts, and we are taking a bit over half of that.

**The Hon. RICK COLLESS:** At what wind speed is that capacity of 140 megawatts?

**Ms SCHOTT:** I have no idea.

**The Hon. RICK COLLESS:** That is the critical thing with wind farms. It is all very well to say 140 megawatt capacity, but that may be based on a six, eight or nine kilometre an hour wind, which might only blow

30 per cent of the time. What is the actual output expected from the wind farm? We heard in the wind farm inquiry the other day that normal is about 30 per cent to 35 per cent of their capacity. That is what they actually produce because the wind does not blow at the optimum speed all the time. If it is only going to produce 35 per cent of 140 megawatts, is that enough to power your desalination plant?

**Ms SCHOTT:** It is. That number may not be but I go back to the answer I gave originally, which is that there is sufficient power from that plant to power the desalination plant and much more. So there is far more power being generated by those 67 turbines when the wind blows than we need.

**The Hon. RICK COLLESS:** That is the critical point—when the wind blows. But the wind does not blow all the time; it blows only 35 per cent of the time.

**Ms SCHOTT:** It is not measured by when the wind blows. I am talking about output, not capacity.

**Mr PHILLIP COSTA:** It is an annual average. Under the contract arrangements between Sydney Water and Capital Wind Farm, the amount of energy required to power the desalination plant was a major consideration in how big that wind farm would be, based on all the science they had in terms of output over a 12-month period. So over a 12 months averaging, that is what it was designed to do. As you said, there will be times when there will be little wind; there will also be times when it will not stop. One problem we had with the construction of the wind farm was that we were way behind schedule in terms of getting the towers up because it was just too windy. So it is in a good location for wind.

**The Hon. RICK COLLESS:** You know what will happen, do you not?

**Mr PHILLIP COSTA:** Yes, and I will be forced to eat my words. I have been informed that the plant produces about three times our needs over a 12-month period. So it is the average of the 12 months. That is why we have the REC specifics that we buy into it. The note we have is that the desalination plant will yield about 37 per cent to 42 per cent of that power.

**Ms SCHOTT:** No, that is the wind farm.

**Mr PHILLIP COSTA:** The wind farm itself. It is about three times over the needs in a 12-month period. The wind farm was designed and constructed to address the potential for calm and wind, and it was designed to provide three times over what we need. Therefore, the average across the 12 months, we are confident that we will meet that demand in productivity. When I first got into the job I asked the same question: how do we know that this will generate enough power? I was told that it was built for a much greater capacity than what is required at the desalination plant and therefore it has to accommodate for those times when there will be a lull. Of course, when you have fog you have a lull in the wind. That location was chosen because history shows that there is adequate wind there.

**The Hon. RICK COLLESS:** Does the desalination plant need to run at a constant capacity or can it be varied according to the amount of power that is available?

**Mr PHILLIP COSTA:** It can be varied. My information is that the plant has the capacity to run less or greater. The maximum capacity is 250 megalitres per day but it can be geared back to produce less. In fact, in the process of setting it up to produce water for Sydney it will be run at those variable rates to ensure that the quality and the quantity, as was determined in all the planning, will meet the standards we have set.

**The Hon. RICK COLLESS:** Will you be required to use black electricity on those occasions when the wind does not blow?

**Ms SCHOTT:** When the wind does not blow we will still be taking electricity off the grid. The point is that over the course of the year we will have enough renewable energy certificates to cover our green energy requirements. So if it is not producing RECs one day it will produce more than that the next day. You have to look at the average. It is not a sort of one day—

**The Hon. RICK COLLESS:** Is it not a case of the green electrons actually running the plant?

**Mr PHILLIP COSTA:** No, it is not. It is an offset system. It is a process of offsets so that the wind farm will produce electricity when it is windy. As you rightly said, different wind speeds produce different

capacity. But all of that will be calculated and the RECs will be purchased based on the availability of what the desalination plant operators need. There will be times when the turbines are not turning but they still have to acquire the certificates by the end of the 12 months. They will offset. The wind farm will produce around about three times more than what we need.

**The Hon. MELINDA PAVEY:** Given that the Metropolitan Water Plan calls for a water recycling target of 70 billion litres of water by 2015, and some 100 billion litres of water by 2020, why in the recent budget did you approve a cut of \$23 million to Sydney Water's recycling budget and a further cut of \$20.5 million to recycling projects in western Sydney?

**Mr PHILLIP COSTA:** I do not know where those numbers came from. I know that we are certainly on target to reach our target of the 70 billion litres of recycled water. In fact, the Premier and I announced one at Smithfield. We have been doing a lot of work. Work is happening in a range of locations. I can confidently say that we are certainly working very well to get to our 70 billion litres of recycled water by 2015. I think we are up to about 24 billion litres already since we began this program. The cut in the budget, I will have to take that on notice because my understanding is that we are still progressing quite well towards that. The budget paper allocated \$7.15 million for the 2009 program for the replacement of flows—

**The Hon. MELINDA PAVEY:** Is it right that you are not sure whether that is a cut? I have information before me saying it is a cut but you cannot say for definite whether it is?

**Ms SCHOTT:** Sydney Water's budget is not a Government budget item; it is entirely a Sydney Water matter. There has been no cut to the recycled water budget. We are on target to hit that 70 gegalitres a year by 2015. At the moment a very large plant is being built at St Marys, which will come on line in May 2010. It is about half way there. It is costing us about \$200 million and that is a major contributor to meeting our target.

**The Hon. MELINDA PAVEY:** Will it potentially save 44 billion litres?

**Ms SCHOTT:** From the replacement flows project, I cannot remember without looking at my briefing note. When you read the budget papers it may look as if we have cut a budget but it is actually just because a project is going quicker so the money has been spent earlier, or it is going slower which has been the case with the Camellia Smithfield project, and it is going into another financial year. It is simply a timing matter.

**The Hon. MELINDA PAVEY:** St Marys is on track and it will be done by May 2010.

**Mr PHILLIP COSTA:** I can understand where you got the numbers from because I have them here now. The total estimated cost was \$193 million for 2006-11 original numbers. The expenditure to the end of June 2009 was \$113.3 million, and the anticipated expenditure is \$71 million because it is part of a continuum of a program so the total is still the same but some of it was spent earlier.

**CHAIR:** Have the 2008 amendments to the Water Management Act increased compliance investigation or compliance levels?

**Mr PHILLIP COSTA:** That particular Act increased the penalties for extraction of water illegally. We know that we have had some very difficult matters there to deal with, particularly with some elements with the theft of water. We have strengthened the investigation of compliance capacity of the Office of Water through improvements to the Water Management Act and they have improved the ability to take action against those, for example, extending the time in which to initiate a prosecution to three years under the Water Act 1912 for some matters. This time it was as short as six months.

What also came out of the change was it gave authorised officers greater powers to enter premises and gather evidence and require answers to questions, provide evidentiary certificates to streamline court processes, provide powers to require information and records, and improve the provision of statutory directories to direct people to do things to ensure that works or activities are brought into compliance with the Act. These powers have already improved the efficiency in achieving compliance by allowing unlawful works to be stopped. Since January 2009 the Office of Water issued 16 statutory notices requiring individuals and corporations to provide records or information streamlining investigational processes, three draft stop-work orders and two final stop-work orders and one statutory direction to modify works is a result of that.

**CHAIR:** Have there been any prosecutions? Will you take that question on notice?



**Mr HARRISS:** A successful prosecution has been undertaken in that time in terms of a water user deliberately interfering with a meter. We have a number of compliance activities currently under investigation that may ultimately lead to prosecution.

**CHAIR:** At the 2008-09 budget estimates hearing for Water the Deputy Director General, Mr Harriss, I think it was, said that the department was slowly but surely moving toward requiring metering for entitlements under 20 giganlitres. Furthermore, he mentioned that the department was successful in getting \$221 million from the Commonwealth to progress metering for unregulated groundwater and regulated river systems throughout the Murray-Darling Basin. Would you provide the Committee with an update on metering?

**Mr PHILLIP COSTA:** We are committed to the metering program. Yes, we are working with the Federal Government in relation to the \$221 million that you mentioned. The money has not yet come forward but work has been done in relation to that. The metering program is one that we believe will deliver a great deal of benefit not only to the environment but also to those who have access to the water. The Intergovernmental Agreement between the Federal and State governments is a \$708 million program, of which \$221 million is for the metering program. Hundreds of millions of dollars will flow into New South Wales and there is a whole range of projects, of which the metering one is important. It will be into water saving projects, such as piping of stock and domestic water supply system, irrigated farm modernisation, improved water metering, and reforming the management of water on flood plains.

I mention that because we are taking them all in a package and negotiating with the Federal Government at this point. The processes are very complex and we are working with the Commonwealth to complete the work as quickly as possible. New South Wales has received in-principle agreement from the Commonwealth on the \$221 million funding under the Australian Government Water for the Future Program to implement the New South Wales metering scheme. This particular project will install meters at sites where they presently do not exist and replace existing meters that do not meet the new standards, so that is the intent. The scheme involves both the State Water Corporation and the New South Wales Office of Water. National standards have recently been developed for non-urban water meters, which are the ones we are referring to, and it is likely that most existing water meters will not comply with these new standards and will need to be replaced.

**CHAIR:** Would you comment on the Strategic Compliance Project in Macquarie Valley which I believe has recently been concluded? How many findings from that project might affect the broader compliance policy of the department?

**Mr PHILLIP COSTA:** As you are aware, in late 2007 the Strategic Compliance Project in the Macquarie Valley was commenced. The project was funded by the New South Wales Wetland Recovery Program and was initiated to locate existing structures of concern, establish their legal status and address their impact on wetland ecology and water flow throughout the system for all water users.

Three joint agency compliance operations, involving the former Department of Primary Industries, the Department of Water and Energy, and the Department of Environment and Climate Change, and the Commonwealth Department of the Environment, Water, Heritage and the Arts, have been carried out in the Macquarie Marshes as part of this project. The project investigated both in-stream and floodplain structures using a combination of ground and aerial surveillance. A total of 119 structures were investigated.

This resulted in action being taken on 28 structures. These actions included advisory and warning matters and draft notices requiring removal or modification of structures. A number of structures identified through the project are still undergoing assessment. Macquarie Marshes is a complex system and, through a program like the New South Wales Wetland Recovery Program, we are increasing our knowledge and understanding of how these systems work and improving our ability to manage the marshes. A meeting was recently held on 5 August 2009 to review the outcomes of the project. These are generally seen as providing a positive contribution in balancing the water of the marshes. These are very complex. We appreciate the work that needs to be done. There is movement and, as we said, there is still some action as we speak.

**CHAIR:** What is the status of the \$1.358 billion in-principle approval for funding given to New South Wales under the Commonwealth Sustainable Rural Water Use and Infrastructure grants, and have any of the projects progressed beyond in-principle approval at this point in time?

**Mr PHILLIP COSTA:** I am going to refer that. It is complex.

**CHAIR:** I appreciate that.

**Mr HARRISS:** The \$1.358 billion, agreed by the Government for the Intergovernmental Agreement on Murray-Darling Basin Reform, was provided subject to due diligence, and that is determined by the Commonwealth Government. The status at the moment is that we have nominated projects or undertaken the Government's due diligence processes. That has been up to now developing the requirements for the preparation of a business plan for those projects to meet the Commonwealth Auditor-General's requirements. We have recently completed a consultancy, which was required by the Commonwealth Government as part of the due diligence program and has identified the issues required by the Commonwealth in developing the business plan. We are now negotiating with the Commonwealth the funds required to develop the business plan for those projects.

At the same time we have negotiations with the Commonwealth Government about conducting two pilot projects, one in terms of on-farm works as part of the \$300 million on-farm program being coordinated by the departments of industry and infrastructure, still subject to final negotiations. Similarly, State Water and the Office of Water are undertaking negotiations for the development of a pilot project to look at a feasibility study of the metering program. That will probably be located in the Murray Valley because it can include meters for the regulated river system, meters for the unregulated river system and meters for the groundwater system, to work out practicality and how to hook them up with telemetry, but currently we are going through the due diligence process required by the Commonwealth Government and at the same time we are trying to develop a couple of priority projects so that we can get some of the works on ground.

**CHAIR:** Will the department include in this year's annual report a report on its performance towards achieving the State Plan Priority E4 target? Will the Minister provide information on key performance indicator results?

**Mr PHILLIP COSTA:** Could you read E4?

**CHAIR:** No, I do not have E4 here.

**Mr PHILLIP COSTA:** Good. I have not memorised the entire State Plan, but I will work on it.

**Dr JOHN KAYE:** You could make it up.

**Mr PHILLIP COSTA:** I could make it up—he would not know the difference, would he? It is bound to be an outstanding target. Could I take it on notice? We are more than happy to give you that information.

**CHAIR:** It was not a trick question; I thought you would have it.

**Mr PHILLIP COSTA:** I have not memorised the State Plan. However, I will get back to you on that.

**CHAIR:** I would appreciate it, thank you. My next question is this: The E4 targets call for an improvement in the condition of riverine and groundwater dependent ecosystems by 2015. Considering most of the increased rainfall over the last two years has been diverted to increasing general security allocations at the expense of environmental flows, are river and groundwater ecosystems getting better or are they just getting worse at a slower rate?

**Mr PHILLIP COSTA:** We can give you a response to that.

**Mr HARRISS:** We will be providing a report about the E4 and the nature of the groundwater and surface water systems. There is a bit of a mixed bag in results from around New South Wales as a consequence of different climactic circumstances and the different actions we have in place. In terms of groundwater, what we have found over the last 20 years with the Cap and Pipe the Bores Program in the Great Artesian Basin is that there has been a substantial increase in the artesian pressure, so much so that mound springs, which are a groundwater dependent ecosystem, dependent on the Great Artesian Basin, in many instances have recommenced to flow after many years of not flowing. Similarly the pressure levels in bores are also increasing. So that is an exceptionally positive result for the program. In fact in the 20 years to date we have probably

stopped 47,000 megalitres per annum that would otherwise flow into open drains. It is now being capped and piped and we propose another 20,000 megalitres in the next few years of the program.

In terms of some of the other groundwater systems, the six alluvial groundwater systems throughout New South Wales, the major alluvial groundwater systems, we have now introduced a structural adjustment package which has returned each of those aquifers to a level whereby the entitlements issued for those aquifers equal sustainable yield and there has been an adjustment package as part of that program. That has been a substantial restructure of groundwater use throughout the Murray-Darling Basin in particular. For all other groundwater systems throughout New South Wales, they are expected to be covered by water sharing plans which will return, where they are over-allocated, to their sustainable yield over the next few years.

Notwithstanding that, the drought is having an impact where aquifers are typically recharged by the high river flows or by floods. The lack of floods means that in many instances there has not been a significant renewal of the aquifers, particularly in areas like the lower Murrumbidgee, the lower Lachlan and the lower Murray. We are finding that there is a continuing decline as a consequence of the drought and no recharge as opposed to continuing extraction by the groundwater, but that extraction has been limited by the new water sharing plans for those systems.

**Mr PHILLIP COSTA:** On a general note, we would like to get on record the value of the water sharing plans, and they include the groundwater. The groundwater dependent ecosystem policy is implemented through those water sharing plans. We now have water sharing plans for 90 per cent of the State and we are working very well towards ensuring those. We appreciate the value of the groundwater system and how it supplements the health of the ecosystems. The groundwater is protected from extraction, as was mentioned, specifically to meet those environmental needs and in essence the water sharing plan ensures that sufficient water is quarantined in the aquifer to ensure its sustainability. We manage these on a week-to-week basis, even a day-to-day basis, depending on how the system is operating.

All the major inland groundwater sources are covered by water sharing plans, including, as was mentioned, the Great Artesian Basin. Those water sharing plans with their requirements for protection of groundwater dependent ecosystems are complemented through groundwater licensing and approvals and environmental planning instruments. The protection of groundwater dependent ecosystems is a primary consideration in assessments undertaken by the Office of Water on any proposal involving groundwater extraction. So even in areas where water sharing plans are not in place the office has a duty of care to ensure that this approach is maintained across the State. We need to put on record that there is a very complex but a very effective plan or model in place, which is linked to our water sharing plan.

**Dr JOHN KAYE:** Minister, my questions refer to Tillegra Dam. In March 2009 the peer review group looked at the geological and geotechnical features based on the data provided to them by Hunter Water. They recommended a significant additional geological investigation, including two shears at the dam site and one at the left abutment. Has this geological investigation work been conducted? Perhaps Mr O'Hearn could help you with an answer to that.

**Mr PHILLIP COSTA:** I would like to open with a general statement on Tillegra, if that is all right, Mr Chair, because this is a very important and complex project.

**Dr JOHN KAYE:** Minister, my time is extremely limited, and I have questions on specific data that I wish to obtain.

**CHAIR:** Minister, perhaps your statement could be accommodated in the Government's questions.

**The Hon. HELEN WESTWOOD:** We will accommodate that.

**Mr PHILLIP COSTA:** In relation to the geological report to which Dr Kaye referred, an independent panel of international experts has completed a review of extensive studies and found that Tillegra is a very safe and effective site for a dam. The New South Wales Dam Safety Committee also required Hunter Water to have in place an ongoing monitoring and reporting program to confirm the safety of the structure over time. This should allay any concerns regarding the stability of the Tillegra dam. It also confirms that Hunter Water's budget is robust and accurate.

In terms of the rim safety, the detailed geotechnical report—which I believe is the report referred to in the member's question—on the proposed Tillegra dam and the finding of the independent peer review released on 4 March concluded that the area proposed for Tillegra dam is safe and stable. The concept design further confirms that the dam foundation is suitable for a dam. In relation to the Dam Safety Committee—

**Dr JOHN KAYE:** My question did not relate to the Dam Safety Committee. It related to work requested by the peer review group in respect of additional geological studies. My question was: Have those studies been conducted, or have they not? It is a kind of yes/no response that I am looking for here.

**Mr PHILLIP COSTA:** I will need to take that question on notice.

**Dr JOHN KAYE:** Perhaps Mr O'Hearne could tell us. Has additional geological work been done since February 2009 at the Tillegra dam site?

**Mr O'HEARN:** I too will have to take the question on notice. My understanding is that we had completed the geotechnical reports and had that peer reviewed by international experts, and that the advised site is an ideal dam site.

**Dr JOHN KAYE:** But did they or did they not ask for additional investigation work of those two features, the shear at the dam site and the shear on the left abutment?

**Mr O'HEARN:** I will have to take the question on notice.

**Dr JOHN KAYE:** Why does the environmental assessment report not contain any geological information after February 2009, even though we have continual reports from local residents of ongoing geological investigations on that site?

**Mr O'HEARN:** The environmental assessment report is very comprehensive and provides quite detailed information on the geotechnical work that has been undertaken.

**Dr JOHN KAYE:** But only up to February 2009, and nothing subsequent to February 2009.

**Mr O'HEARN:** I have just been handed a note that the work to which you referred has been completed.

**Dr JOHN KAYE:** So there has been additional work since February 2009?

**Mr O'HEARN:** The work in respect of the two shears that you talked about has been done.

**Dr JOHN KAYE:** So that testing has been done. So why was the report on that work not in the environmental assessment report, whereas the earlier reports were?

**Mr O'HEARN:** I will take the question on notice.

**Dr JOHN KAYE:** Why did Hunter Water reject the November 2008 request from the No Tillegra Dam group for additional geological information?

**Mr O'HEARN:** When was that request made?

**Dr JOHN KAYE:** That request was made in November 2008.

**Mr O'HEARN:** At that point the geotechnical studies were still being undertaken, and probably were not completed at that time, so it would not have been appropriate to make them available.

**Dr JOHN KAYE:** But you will make them available now?

**Mr O'HEARN:** The environmental assessment report is out there.

**Dr JOHN KAYE:** But there is no updated information in the environmental assessment report. The environmental assessment report information stops at February 2009. Will you make available to the community

the full set of geological data, so that the community can understand the impacts of the geological features on the costing of the dam?

**Mr O'HEARN:** We believe that the environmental assessment report provides all the information that the community needs to assess the impacts of the dam and to make submissions. Through that process—

**Dr JOHN KAYE:** What if the community does not agree with you on that? [*Time expired*]

**The Hon. HENRY TSANG:** What investment is the Government making to improve water and sewerage services in the Hunter, including drought security measures?

**Mr PHILLIP COSTA:** As we know, with the Hunter Water program, we seem to spend an enormous amount of time on Tillegra dam, but Hunter Water is undertaking many other works to improve the security of services in that region. I am pleased to inform the Committee that a record \$181.7 million will be spent on water and wastewater infrastructure for the Hunter this financial year. This is on both new and upgraded infrastructure—a raft of pipes, mains, pumps, treatment plants, sewers and importantly recycling will also occur across the region.

This is an investment that will support more than 500 jobs in an engine room of the State's economy, the Hunter region. Hunter Water is embarking on its largest ever capital works program, which will increase the region's water storage and recycled water use as well as improve wastewater treatment services. These works are being done to ensure that Hunter residents both today and into the future will continue to benefit from first-class water and sewerage services. During this financial year a whole series of projects will commence, delivering service improvements and environmental benefits. More than \$75 million will be spent improving the water supply network alone, including a series of major trunk main replacements to improve delivery and reliability across the entire network.

Hunter Water will also be undertaking a significant investment of some \$106 million to improve its wastewater services. This includes works that will start or continue on nine major wastewater treatment projects, each improving service standards for residents and delivering obvious environmental benefits. The increased reuse of wastewater is also an important element in securing the Hunter's water supply into the future. Funding is allocated this year to progress the Kooragang Island and Chisholm recycling projects, which will provide dual reticulation to new residential subdivisions at Gillieston Heights and Thornton North.

Hunter Water's forward infrastructure works are in the order of \$700 million, and this excludes the Tillegra dam. So there are many other works engaged in by Hunter Water to improve both water security and water management, as well as the management of wastewater. When the Tillegra dam works are taken into account, more than \$1 billion is being invested in the Hunter region. That \$1 billion investment in vital water and sewer services underpins hundreds of jobs, in a challenging economic climate. It is important to note that a significant amount of Hunter Water's investment—apart from the Tillegra—will be on other assets across the region, all for the benefit of the Hunter community now and for many decades ahead.

**The Hon. HELEN WESTWOOD:** Minister, what is the status of the project, and planned expenditure in 2009-10, on Sydney's \$1.9 billion desalination plant?

**Mr PHILLIP COSTA:** The desalination plant is by far one of the largest pieces of infrastructure that Sydney Water has embarked upon since Warragamba and some of the bigger dams. It is a quite important project. As Committee members know, we have had an unusually warm August, and as a result dam levels dropped 1.2 per cent in that time. The dam level is 58.6 per cent at the moment. We know from research that we will have more irregular rainfalls, with wetter wets and drier dries. This is what scientists are telling us.

This is what the scientists are telling us. I am pleased to say that this coming summer we will have a water source that is 100 per cent independent of rainfall. Sydney's desalination plant is on time and on budget and is due to come on line this summer. This year there is a budget commitment of more than \$338 million to complete the project. During the construction of this massive infrastructure project we have achieved quite significant engineering feats and some world firsts. Our concrete pours have been among the largest in the country. To date, more than 75,000 cubic metres of concrete has been poured and more than 11,500 tonnes of reinforced steel has been installed on site. This is a very large project.

In August last year, the giant Seafox 6 jack-up barge arrived in Sydney from Singapore and moved into place offshore from Cape Solander, in the Tasman Sea, and started work. Its important work off the coast involved complex underwater work to construct the intake and outlet pipes for the plant. They are of course complete. In June this year we reached a major project milestone when Seafox 6 completed its work in the Tasman Sea and departed Sydney. Just last month I announced the completion of the Botany Bay crossing, another major engineering feat. I have been told that never before in the world had two pipes of that size and length been laid beneath a waterway, so we believe it is a world first in engineering.

The Nebula lay-barge itself is a significant feat of engineering. It is a floating pipe factory purpose-built for the Sydney desalination project and brought in from Malaysia. The Nebula having completed its work has now moved from Botany Bay to White Bay in Sydney Harbour. Just last week I witnessed the last aboveground piece of pipe laid in the construction of the 18-kilometre pipeline. All of that is going very well and I was very pleased to see the last of the aboveground pipes have been put in place. At the same time, we have been boring tunnels under quite a lot of country, not under houses but under roads and parks et cetera, and the pipes have gone into those as well. Once complete, this 18-kilometre pipeline will be one of the largest individual pieces of infrastructure in the Sydney Water supply system. The desalination plant itself is one part of the project and the pipeline network is another part of it. They are separate projects that together make up the whole project.

These facts are important for the people of Sydney, not just because the desalination plant will secure their water supplies for decades to come but because this is evidence of the largest water project to be delivered in this State for the past 50 years. As I said, it is on time. It is a \$1.9 billion project with 18 kilometres of pipeline and it has supported thousands of jobs during a very difficult economic downturn. It will deliver water to 1.5 million households across the city for generations to come. Not only will Sydney's desalination plant be 100 per cent independent of rainfall, it will also be 100 per cent wind powered. That relates to questions we had earlier.

Commissioning of the 67 wind turbines at Bungendore is underway and once up and running will supply enough green energy to meet the desalination plant's energy requirements. On top of this, our water efficiency program consisting of water efficient showerheads, washing machines, toilets and rainwater tanks, will contribute up to 24 per cent of our water needs in 2015. We all need to be reminded that the desalination plant is one component of a suite of solutions for Sydney's water supply. It is about a 15 per cent solution in terms of the daily needs for water. We must not take our eye off the ball when it comes to all the other elements that make up our water supply. One of those is water efficiencies across the city. We are planning that 24 per cent of our water needs will come from the water that we save. Today there was a very interesting story about the rebates for washing machines. The amount of water that can be saved by having 4.5 star washing machines compared to those we used to have is phenomenal. The people of Sydney have embraced all that and they are working with us towards that 24 per cent goal.

The Waterwise rules are in place. We will continue to work with the people of Sydney to ensure that they maintain that enthusiasm and commitment to minimising their water use. They are very good at that. The global city of Sydney requires a reliable and clean water supply and we believe that the suite of solutions will deliver that. We are very clear in our direction, focused on our policy, and confident that what we are doing will deliver a very reliable, high quality world's best practice water supply to the people of Sydney. The desalination plant is one part of that important solution.

**The Hon. HENRY TSANG:** I refer to Budget Paper No. 4, page 3-27. What is the planned investment in water recycling this year, particularly in key industrial centres such as Western Sydney and the Illawarra?

**Mr PHILLIP COSTA:** I thank the member for that question. I am very excited about a lot of things. In particular, I am very excited about the desalination plant. It is a sad day. My water tank cracked the other day so I will have to make sure I have my own water supply.

**The Hon. MELINDA PAVEY:** How old was it?

**Mr PHILLIP COSTA:** Ten years old.

**The Hon. RICK COLLESS:** Are you eligible for the rebate?

**Mr PHILLIP COSTA:** I am afraid not. I am on a farm and I use on-site water.

**CHAIR:** Is it a poly tank?

**Mr PHILLIP COSTA:** No, a big concrete one, 15,000 gallons.

**CHAIR:** I would be going back to the manufacturer.

**Mr PHILLIP COSTA:** It just cracked and I lost all my water, but I have a 5,000-gallon backup, which has been handy. I have a licensed domestic bore and I might have to process some of that water until we get our water supply.

**The Hon. MELINDA PAVEY:** Until you take it away from yourself.

**Mr PHILLIP COSTA:** Yes, I might have to. The point is I have been able to have a shower, which is a good thing.

**The Hon. HENRY TSANG:** When you shower do you have a bucket underneath?

**Mr PHILLIP COSTA:** I would love to get onto that. I am passionate about a lot of things and recycling is one of those passions. I do recycle all the water on-site. We get at least two uses out of the systems we have. We have been like that for 35 years and learned very quickly how to manage water efficiently, because if you do not you will run out of water. You also have to cater for and plan for contingencies, such as your 15,000-gallon tank cracking. That is why I have a 5,000-gallon backup. Incidentally, 5,000 gallons will last us three months, so it is not that bad. That is, of course, if we do not waste water. I purchased my wife a brand new front-loading washing machine, which was a very good move.

**The Hon. HELEN WESTWOOD:** I am sure you purchased it for more than your wife!

**Mr PHILLIP COSTA:** I did indeed. On reflection that was rather a chauvinistic statement. I retract that. I purchased a front-loading washing machine for Christine and me. I have actually learnt how to use it.

**The Hon. HENRY TSANG:** Was it your wedding anniversary or your birthday?

**Mr PHILLIP COSTA:** I have a lot of interesting things that I have purchased. The most recent gift I purchased for my wife is a Poo Vac, which is a vacuum machine that goes round the farm and picks up all the alpaca poo.

**The Hon. LYNDIA VOLTZ:** Why would your wife want to use that?

**Mr PHILLIP COSTA:** She loves the farm. We recycle everything at home and it is going on to the gardens. It is a great life. Can I get back to the question of water recycling in Western Sydney and the Illawarra? I am more than happy to go over what we have been doing because, as I said, I am very excited about that work. The Government has invested in an unprecedented number of water recycling projects across Sydney, helping to create a secure and sustainable water supply. Indeed, we in Sydney are home to 20 water recycling schemes including some of the largest residential, industrial and environmental recycling schemes in Australia. Stormwater harvesting is also a key focus and we factor that in as well. Over 90 stormwater harvesting projects have received financial or other support from the Government in greater Sydney and the Central Coast alone.

Let me begin with the large scale recycling schemes. In July this year I had the pleasure of announcing the licence for a new \$100 million private sector recycled water scheme in Rouse Hill and Camelia. This scheme will be able to supply over four billion litres of recycled water each year to some of western Sydney's largest industrial and irrigation water users. The project also will give the local construction industry a boost by providing over 300 construction jobs. This private sector scheme was made possible thanks to new regulations introduced by the Government empowering the private sector to become involved in water services through the Water Industry Competition Act. This is just one of the projects that will ensure that by 2015 we will be recycling around 70 billion litres annually—equal to 12 per cent of our water needs. Something interesting about that particular project is also how we have been able to recycle some old infrastructure. We are recycling some of the old AGL gas pipelines as part of the distribution system.

**CHAIR:** At last.

**Mr PHILLIP COSTA:** Yes. I thought that was an important part of the program. We are making use of that old resource by using it in how the water distribution system will work. Some other projects underway or planned include the Liverpool to Ashfield pipeline project, estimated to provide up to 30 billion litres of recycled water a year to established areas of Sydney; Australia's largest residential recycling scheme at Rouse Hill, which is currently being expanded to over 36,000 homes; construction on the Hoxton Park Recycled Water Scheme, which is expected to ultimately supply 2.5 billion litres per year of recycled water to 13,000 new homes and other users; the use of recycled water in 180,000 new homes in the north-west and south-west growth sectors; and the Wollongong recycled water scheme in which 20 million litres of recycled water is being used at Port Kembla's BlueScope Steel's operations each day. I went down for the turning on of that scheme. That one project represents equivalent to about 70 per cent of the Illawarra's water use.

The Western Sydney Recycled Water Initiative will produce up to 50 million litres of recycled water each day by 2010 to substitute the use of water from Warragamba Dam to provide an environmental flow through the Hawkesbury-Nepean River system. Our recycling program has a local benefit, and it means we can look at those environments in a different light. Individual industrial companies at Kurnell, Blacktown, Prospect, Botany and Rosehill are set to receive funding and technical assistance from the Government for various recycled water and stormwater harvesting projects with a potential recycled water volume of over six billion litres per year. On the other hand, stormwater harvesting projects are best done on a smaller scale. That is what most of the projects have been.

I will give two examples of more than 90 projects that have received funding and other support under the Climate Change Fund. In North Sydney, stormwater runoff from the Warringah Expressway will be captured in a massive re-use program and returned to playing fields and parks, taking pressure off our potable water system. In Lane Cove an underground storage tank will be built at the golf course to store harvested stormwater to use on the greens, tees and fairways. Recycling, including stormwater harvesting, continues to be a key part of the Government's Metropolitan Water Plan. We will continue to investigate and implement cost-effective recycling and stormwater schemes. Under the Government's Metropolitan Water Plan, recycling, together with dams, desalination and water efficiency will be delivered to the people of Sydney securing Sydney's future water supply.

**The Hon. HELEN WESTWOOD:** What is the status of the Government's reform agenda in the Murray-Darling basin? Would you include the implementation of the water sharing plans in your answer?

**Mr PHILLIP COSTA:** It is very complex, but we are certainly making good progress. As you know, the Murray-Darling is an iconic river system. It covers over one million square kilometres or 14 per cent of Australia's land area, the majority of which, some 54 per cent, is within New South Wales. The Australian Bureau of Statistics Agricultural Census reports that 84 per cent of the land in the basin is owned by businesses engaged in agriculture—a statistic that quite rightly tags the Murray-Darling Basin as the national food bowl. More than 30,000 wetlands are in the basin, which are home to 35 endangered birds and 16 endangered mammals. Importantly, the basin is home to thousands of people whose livelihoods rely on that water supply. It is paramount for the New South Wales Government to get the social, economic and environmental balance right.

The fact that the basin spans four State borders has traditionally complicated the management of its precious water resources. This, combined with high demand for agricultural water and severe record drought, has led to a decline in the health of the basin's river and groundwater systems. However, the Government has not sat on its hands. We have been working hard to ensure the shared distribution of that water. We have embarked on a bold path of structural reforms to make our water system more adaptable and secure. We have put in place the framework for an open and competitive water market, one that respects the environment and considers the needs of irrigators and industry.

After years of delay and arguments we have now moved forward. We have signed up with the other States and the Rudd Government to the historic Murray-Darling Basin intergovernmental agreement. New South Wales was the first State to pass legislation to refer powers to the Commonwealth and is the leading State in fulfilling our national water initiative commitments. New South Wales was the first State to provide the environment with a statutory water right and initiated the \$105 million New South Wales RiverBank program, which has led the way in purchasing water from willing sellers. This will improve river and wetland conditions in the Murray-Darling Basin. It will also contribute 85,000 megalitres of entitlements to be returned to the environment. As a State we have done the heavy lifting on environmental water purchase to date.



The embargo on environmental water purchase currently in place in New South Wales is not going unnoticed by other basin States. Only yesterday I was pleased to see Victoria fulfil its commitment to remove the 10 per cent restriction on water trade. That is a very good outcome. It is a step forward in restoring equity to the interstate water market. New South Wales will continue productive discussions with the Commonwealth on these matters to ensure a fair deal for New South Wales water users. I am also pleased to inform the Committee that 90 per cent of water in New South Wales is covered by water sharing plans. Water sharing plans are a fundamental tool of our reform agenda to strike a balance between all water users. These plans equitably distribute precious water resources between urban users, farmers, the environment and indigenous and cultural needs.

This year's budget includes \$2 million to continue the implementation of water sharing plans across the State. I am pleased that we were able to put some of those on exhibition recently. The Office of Water will also spend \$16.5 million on operation and works programs in irrigation areas. Climate scientists are suggesting that Australia is headed towards another El Niño weather event. As a Government we are doing all we can to prepare our State for a future with less water while remaining committed to both improving the health of the Murray-Darling Basin and securing the future for our regional communities and industries that rely on the basin's water resources.

**The Hon. RICK COLLESS:** How much of the water included in the purchase of Toorale Station has been allocated? And to where? In particular, how much water remains attached to Toorale Station?

**Mr PHILLIP COSTA:** Is that in relation to current flows or generally?

**The Hon. RICK COLLESS:** To the entitlements.

**Mr PHILLIP COSTA:** We will have to get that specific detail to you.

**Mr HARRISS:** I can probably answer that inasmuch as the water entitlements that were issued to Toorale Station remain at Toorale Station. Currently they are issued to the Department of Environment, Climate Change and Water with the idea that when a water sharing plan for the Bowen-Darling is completed, water then can be separated from land and transferred to the Commonwealth environmental water holder.

**The Hon. RICK COLLESS:** At this point in time it is still attached to Toorale?

**Mr HARRISS:** It is still attached to Toorale, but it is managed by the New South Wales Government on behalf of the Commonwealth Government.

**The Hon. RICK COLLESS:** The Federal Minister's comments about water flowing down the Darling River since the purchase of Toorale were incorrect?

**Mr PHILLIP COSTA:** That is why I wanted to clarify your question. Water has flowed as a result of good rains we had in Bourke in that region. As that water flowed down the Darling we sent some into the Menindee Lakes, but we also shepherded water away from there.

**The Hon. RICK COLLESS:** This water came down the Darling River, not down the Warrego?

**Mr HARRISS:** It was a combination of both, but the majority of the water that continued down the Darling was from water that would otherwise have been pumped onto Toorale Station from the Darling River. There was some water, which otherwise would have flowed from the Warrego into the Darling River, that could have been stored but continued into the Darling River. At a particular date in early March, we estimated that there were 11.4 gigalitres that otherwise would have been stored on Toorale but now would be put into the Darling River. We proceeded over the next few weeks to shepherd that water down through the Menindee Lakes, down through the lower Darling River, and into the Murray Valley.

**The Hon. RICK COLLESS:** What proportion of Toorale entitlements was pumped out of the Darling?

**Mr HARRISS:** During that flow event?

**The Hon. RICK COLLESS:** No. They must have had an entitlement to take water out of the Darling River. What was that compared with their entitlements that flowed down the Warrego River?

**Mr HARRISS:** If I understand you correctly, it is very difficult to estimate what proportion of water can be diverted from Toorale compared to the Darling River because it will depend on the different event. For example, they have a number of licences, which have different commence-to-flow heights. If you get a small flow in the Darling, they will not be able to divert water. If you get a substantial flow in the Darling River, they will be able to divert more water. They have what are called A-class licences, which are very restrictive. I cannot recall off the top of my head the proportion.

**The Hon. RICK COLLESS:** What I am trying to get at is this: How much of Toorale entitlements were they able to pump out of the Darling River? How much did they collect from flows coming down the Warrego River? They must have had a different allocation from the Warrego to the Darling.

**Mr HARRISS:** They have a number of different licences, which entitles them to store water from the Warrego and to pump water at different flow levels from the Darling River. Whatever water is taken at Toorale Station depends on the circumstances, where the water is flowing through, and what level is in the Darling River. So it will vary.

**The Hon. RICK COLLESS:** Perhaps you could get that information for us with a list and all the detail of the licences, in particular where the water came from and whether it was the Warrego River water or the Darling River water.

**Mr HARRISS:** We can certainly take that on notice. We did produce a report, which is on the Department of Water and Energy's website.

**The Hon. RICK COLLESS:** I am sure you will provide that.

**Mr HARRISS:** We will provide that on notice.

**The Hon. MELINDA PAVEY:** That report includes the information of the flows during that recent rain event. Is that what you are saying?

**Mr HARRISS:** From memory, the report includes the assessment of the volumes that we estimate would have otherwise been stored or taken from the Darling River at Toorale Station. Then it mostly focuses on how that water was shepherded down through the Darling, accounting for losses, until it got to the Menindee Lakes, and therefore accounting for losses within the Menindee Lakes, and how it was shepherded through to the Murray River, where it was attached to a licence.

**The Hon. RICK COLLESS:** Can you tell us how much water after being reallocated and after it has been separated from the land, as you explained before, will remain attached to Toorale for their needs there, once it is a park?

**Mr PHILLIP COSTA:** That is a matter for DECCW because they have a licence as to how they will allocate that water into the environment. They are obviously going to go through and look at that. As some of you may be aware, there are some ecosystems that have been created on Toorale, and they are looking at the impact of removing water from that.

**The Hon. RICK COLLESS:** From what is on there.

**Mr PHILLIP COSTA:** Therefore, if those studies show that, no, we cannot, that will change the impact on what they will make available. But that is a question that my colleague in DECCW will need to get to. We will attempt to get that data for you.

**The Hon. RICK COLLESS:** Good. Can you tell the Committee the proposals that are in place for future water buybacks in the light of your comments a few minutes ago, either from the State perspective or both State and Federal?

**Mr PHILLIP COSTA:** That is a very good question. The concern we have had in recent times has been the water buyback program, particularly for the environment, about finding out the quantum we require.

We are working with the Federal Government and we are working with DECCW in relation to the components of quantum. We need to be able to ensure that the purchase of the buyback will not only assist the environmental conditions of the systems, but also maintain the socioeconomic integrity of communities. Work is being done on that, as we speak.

In terms of the components of the quantum or how much DECCW will buy, you will have to talk to them. In terms of how much for the feds, I am afraid they have their own plans as well. They do not necessarily share those with us. We certainly manage the purchases in terms of the legal process, but we are in discussion with them.

**The Hon. RICK COLLESS:** As the Minister for Water, do you automatically agree with the Federal Government when it announces it will conduct a buyback, such as it did with Toorale Station? Do you have any right of appeal or right of objection when it decides to do that, given the impact that will have on New South Wales regional communities, particularly in regard to your role as the Minister for Regional Development?

**Mr PHILLIP COSTA:** When I first got into this job, I found out what was happening and it does concern me that purchases are going on without some global plan. Because of commercial in confidence and the way in which the market works, no, we are not given that type of access to information early. In most instances, the first time I am aware that water has been sold is from staff in that legal process after the commercial-in-confidence stage. That is why we need to have in place some global position and plan for what water is required for the environment over time. We are trying to work that one through. To answer your question, no, I do not get that.

**The Hon. RICK COLLESS:** It would appear that there is no coordination, although I would hope there is, between your departments, since you are the joint Minister of both of those.

**Mr PHILLIP COSTA:** Yes.

**The Hon. RICK COLLESS:** In terms of the coordination between the Federal Minister of Agriculture, Fisheries and Forestry and the Federal Minister for Climate Change and Water, surely there needs to be a roundtable set up to make sure that all the impacts are considered prior to any future water buybacks occurring.

**Mr PHILLIP COSTA:** We know what our own people are doing—but agreed, yes. The reason for placing the embargo at the time I did was because of the impacts of buybacks. We are negotiating with the Federal Government as we speak to come to a landing on those matters because we need to be confident that the acquisition of water anywhere across the State is considered in the light of the impact that it has on communities and the environment. We have been in very deep negotiations and discussions with the Federal Government on that. It was one of the reasons why I placed the embargo at the time. I know that it has caused some grief and some concern for people. We could not afford to lose certain activities within certain communities because it is the social and economic impact as much as it is the environmental impact.

**The Hon. RICK COLLESS:** Absolutely.

**Mr PHILLIP COSTA:** It was pleasing to hear, for example, what the Victorians have done only recently. Obviously we have hit a nerve. We are very confident that we will be able to come to some landing with the Federal Government on this.

**The Hon. RICK COLLESS:** Thank you. The last issue I wish to raise with few you is fixed water charges. During this period of drought conditions, I am sure you are aware that many irrigators have had to pay exorbitant fixed water charges when in many cases they have not been getting any water at all. Will you have another look at that and give a commitment that you will address that issue and assist some of those farmers by waiving those water charges?

**Mr PHILLIP COSTA:** I have been approached by many irrigators in relation to fixed water charges.

**The Hon. RICK COLLESS:** I am sure you have.

**Mr PHILLIP COSTA:** The cost of running our systems, in terms of compliance and maintaining the systems we have, does not change whether or not there is drought. In fact, some have come to me with an

argument that during a very dry spell you have to work harder to share the little water that you have. I asked for a review of that to examine how we can level out those costs, but the fixed water charges basically pay for essential bulk water services. My understanding is that, in other jurisdictions, fixed charges are the main source of return. They need to be provided whether there is water, or there is not water.

Everyone benefits from us managing the water system, and the fixed charges are essential in terms of maintaining the integrity of the cost of running the whole system. Activities such as maintaining water infrastructure and managing water are more intensive during times of drought. We are forced to use our water management systems in a new and different way. In August 2009, 63.9 per cent of New South Wales was in drought, and 0.7 per cent decreased from last month. This slight change gives you some indication of the drought conditions that are continuing across the State.

The average fixed charge bill for general security licence holders on regulated rivers is approximately \$240. I know that there is hardship in some, but that is the average across basic general security licence holders. There are hardship payment options available for some which enables licence holders to make smaller payments over a longer period. In addition, I am advised that in 2008-09 the fixed water charges of about 75 per cent of the State's water customers were less than \$1,000. The point is that as difficult or as hard as some circumstances where fixed charges apply, they are not a major contributor to the cost of the operations. Water users experiencing financial difficulties in paying their bills can take advantage of hardship payment options, which provide for payment of the outstanding charges as well. We are committed to providing drought assistance programs to support rural families, particularly in this difficult time.

**The Hon. MELINDA PAVEY:** So those charges are staying.

**Mr PHILLIP COSTA:** Yes, the charges need to stay.

**The Hon. MELINDA PAVEY:** In relation to the Lachlan River downstream of Condobolin, the flow of water is to be stopped at the end of October. What actions have you put in place to ensure that downstream towns are supplied with water?

**Mr PHILLIP COSTA:** I will pass that to Mr Buffier. I had a briefing on that but it is complex.

**MR BUFFIER:** As you know, there are not too many townships downstream of Condobolin, so what we intend to do is to maintain river flows down through to Condobolin and provide pulse flows thereafter down to the weir for Lake Cargelligo to provide water for Lake Cargelligo. The areas downstream are likely to be carting water to areas like Hillston during that period.

**The Hon. MELINDA PAVEY:** In 1982-83, when water at Wyangala Dam was down to 2.5 per cent, flows down the Lachlan were continued. Why are flows now proposed to be stopped when Wyangala, I understand, is now at 6 per cent and 7 per cent capacity?

**MR BUFFIER:** It is simply a precautionary measure. We try to maintain town water supply as best we can for two years out in case of continuing drought. We do not have too many options in the Lachlan River so what we intend to do is to maintain flows until the end of October, after which we will cut them off. It is primarily to ensure continuing supply for critical human needs in the years to come should conditions remain dry.

**The Hon. MELINDA PAVEY:** In relation to Keepit and Chaffey dams in the New England region, what is the Commonwealth Government's share of the cost of the Chaffey Dam augmentation?

**Mr PHILLIP COSTA:** We are committed to fund 100 per cent of Chaffey Dam's safety upgrade component and share of the augmentation of Chaffey Dam. We are working with the Commonwealth to progress that augmentation. One key condition in relation to this Commonwealth funding contribution is the completion of a regulated river component with a water sharing plan for Peel River. Development of the water sharing plan for the Peel has been made a priority and is well underway. The water sharing plan will strike an equitable balance between the different water users, such as irrigators, Tamworth residents and the environment.

**The Hon. MELINDA PAVEY:** So the Commonwealth's share will not be known until the water sharing plan is finalised?

**Mr PHILLIP COSTA:** We have to do the water sharing plan first. Then we were looking at moving on the augmentation of the safety component. If we can get the water sharing plan—we are still on track to have it done this year—then we will have a much clearer picture in relation to the contribution by the Federal Government.

**The Hon. MELINDA PAVEY:** In relation to your comments of 4 February 2009 that the Peel valley water sharing plan is a priority, what date did work on drafting this document begin? When do you expect it to conclude?

**MR BUFFIER:** I am not sure of the date it commenced but we have established a regional committee—

**The Hon. MELINDA PAVEY:** You will take that on notice?

**MR BUFFIER:** Yes, but I can assure you that we are aiming to have a draft plan by the end of this calendar year.

**The Hon. MELINDA PAVEY:** So by Christmas we should have an answer.

**MR BUFFIER:** That is the intention at the present stage.

**Mr PHILLIP COSTA:** Some preliminary work started prior to that date; then once I had made that announcement we then got into earnest with it. I set up an advisory group to report directly to me to help with that process. So we are on track for this year.

**The Hon. MELINDA PAVEY:** I need to check some inconsistency in public comments in relation to Tillegra Dam. With reference to your interview on radio 2HD on Thursday 10 September 2009 where you spoke about the 1,850 jobs that the Tillegra Dam would create, why did the Treasurer in his budget speech say that the Tillegra Dam construction would support 280 jobs?

**Mr PHILLIP COSTA:** We had some work done by Monash University. The separation between the two sets of numbers is that the 300 is the people involved in actually building it.

**The Hon. MELINDA PAVEY:** So it is the multiplier effect.

**Mr PHILLIP COSTA:** Yes, the multiplier effect, and it is about the benefit of the dam in terms of supply to the region and what multiplier effect it will have.

**The Hon. MELINDA PAVEY:** So it is a five times multiplier effect?

**Mr PHILLIP COSTA:** Yes.

**The Hon. MELINDA PAVEY:** How many consultants has the Department of Environment, Climate Change and Water [DECCW] and its predecessors engaged since 8 September 2008? You might need to take that on notice.

**Mr PHILLIP COSTA:** I am advised that consultants are only engaged when the required professional expertise is not available internally or cannot be provided in a more cost-effective manner. Details of consultants expenditure over \$30,000 are reported in agency annual reports. Does that help with your question?

**The Hon. MELINDA PAVEY:** My question is seeking numbers and names. How many consultants have been engaged since 8 September 2009? What are the names of each of these consultants and/or the companies? How much was each consultant paid? What specialist projects were each of these consultants employed on? Which consultants did the Minister directly appoint and which were appointed by way of the public tender process? If directly appointed, what were the specific professional qualifications upon which the appointments were made?

**Mr PHILLIP COSTA:** My understanding is that that question was relating to the DECCW?

**The Hon. MELINDA PAVEY:** No, in relation to your portfolios.

**Mr PHILLIP COSTA:** Of water—

**The Hon. MELINDA PAVEY:** And regional development—you do not have regional development.

**Mr PHILLIP COSTA:** I do have regional development.

**The Hon. MELINDA PAVEY:** In your capacity as Minister responsible for the agencies under your control.

**Mr PHILLIP COSTA:** I will take that on notice.

**The Hon. MELINDA PAVEY:** I understand that you visited the stormwater project in Orange and liked it.

**Mr PHILLIP COSTA:** It is a great project.

**The Hon. MELINDA PAVEY:** We are very good at recycling in country New South Wales.

**Mr PHILLIP COSTA:** You are indeed.

**The Hon. MELINDA PAVEY:** Unlike Sydney.

**Mr PHILLIP COSTA:** Leaps ahead, by necessity.

**The Hon. MELINDA PAVEY:** How much funding did the New South Wales Government provide to Orange City Council to bring the stormwater harvesting and recycling project online?

**Mr PHILLIP COSTA:** I am impressed with what the people have been able to achieve in Orange. I take my hat off to the council and the community, because it is a combined effort. The total cost was \$4.5 million. The number is in my head but I do not want to throw that number out unless I am sure, so I might get back to you with a specific figure for that. I will take the contribution that we have made in terms of our country town water scheme, but I will check the number.

**The Hon. MELINDA PAVEY:** While you are taking that on notice, can you tell us which other councils or regions you may be encouraging to take on this type of technology, if there are talks or hopeful negotiations with that?

**Mr PHILLIP COSTA:** I have spoken to the mayor, the general manager and the team at Orange council, and they are keen to share their experiences with others, and I have encouraged them to do that. Certainly, there is some interest coming from other communities but I suspect that people are waiting to see how effective the system in Orange is before they join them. What is important with the Orange success story has been the way in which they have engaged their community to ensure that the run-off from their roads, parks, gardens and so on is the best quality possible. Engagement with the community is, I believe, one of the main contributors to the success of the program. I have been to Orange a couple of times. I visited after a recent storm event—it seems to rain most places I go so I will have to go to the south-west a bit more often.

**The Hon. MELINDA PAVEY:** Can you go to Monaro? It would be a very practical visit if you could attract rain clouds.

**Mr PHILLIP COSTA:** Rainmaker?

**The Hon. HELEN WESTWOOD:** Rain man.

**Mr PHILLIP COSTA:** The rain man.

**Dr JOHN KAYE:** It rained in Orange when you were there because I was there the day before you and I bring rain more than you do.

**Mr PHILLIP COSTA:** Last time I was in Dubbo only a few weeks ago it teemed down. I have been to quite a few places where it has rained. I know Orange Council has moved to try to share that work, and we have done the same. We are trying to sell their story. It is a good story. They have won many awards for what they are doing and it is a very sensible solution to a closed catchment, which they have. I take my hat off to them for their commitment and work. I will get back to you about the contribution.

**CHAIR:** It is commendable what the public are able to achieve in water savings.

**Mr PHILLIP COSTA:** Not only in Orange but even in the Sydney Basin.

**CHAIR:** Would you take this question on notice. You said that the figures for desalinated water produced, water recycled, storm water harvested and water saved through education, if that is possible, in the Sydney Basin would be interesting figures to have. Could you provide those figures.

**Mr PHILLIP COSTA:** I will provide those figures, yes. I have given you some fairly global numbers, it works out at 20 billion litres of recycled water. When the desalination plant comes on line it will be 250. Do you want percentages?

**CHAIR:** It would be good to have them but I do not expect them now.

**Mr PHILLIP COSTA:** As to our targets and where we are heading, for example, desalination will supply 15 per cent of Sydney's daily water supply needs. The water efficiencies target is 24 per cent, and we are already on that. Recycling is between 11 and 12 per cent by 2015 and we will certainly get there the way we are going at the moment. Of course, the balance comes out of the dam system.

**CHAIR:** Is the department looking at riverine groundwater dependent ecosystems et cetera? Has the department also been able to find an agreed protocol at the national level for identifying and assessing groundwater dependent ecosystems?

**Mr HARRISS:** I will take that on notice. A lot of research work is being undertaken at the present time. A lot of that will roll up into the Murray-Darling Basin for the Murray-Darling Basin Plan, which is due for release in 2011.

**CHAIR:** I understand the Office of the Hawkesbury-Nepean has received \$77 million from the Federal Government for programs. What contribution has the New South Wales Government made to the office?

**Mr PHILLIP COSTA:** We opened the office at Penrith. The new agency is a one-stop shop about improving the operations or the cutting of red tape we are heading towards for this particular river system. It is \$77.4 million from the Federal Government for seven projects in New South Wales which will be overseen by the Office of the Hawkesbury-Nepean. The office has a number of priorities, including contributions to a comprehensive river health strategy, a nutrient management strategy, stormwater management and water sensitive urban design initiatives, sustainable agricultural strategies, including water efficiency and nutrient management, infrastructure projects and weir modifications, fish passage program and water sharing plan to provide a secure environment. A number of our agencies, for example, the Sydney Catchment Authority, are already putting significant funds into the fish passage program on the Nepean River. I will need to get the specific project funds from each of the agencies that are making contributions to the projects that are listed there.

**CHAIR:** And where the Hawkesbury-Nepean Catchment Management Authority funded program overlaps with programs undertaken by the office, and the nature of the overlap?

**Mr PHILLIP COSTA:** I will do that, yes. The ten staff at the office are being resourced by New South Wales. The staffing and operations of the office is coming through New South Wales. A number of projects will be run parallel with the seven projects. I mention, for example, the Sydney Catchment Authority, which is already in the process of putting fish passages on the upper Nepean. I will ask Michael to elaborate on that because it is a good project and a lot of money is going into it.

**Mr BULLEN:** Do you want specifically in relation to Hawkesbury-Nepean?

**Mr PHILLIP COSTA:** Yes.

**Mr BULLEN:** Works underway to permit release of new environmental flows from the Cataract, Cordeau and Nepean dams in the upper Nepean River in early 2010: these works will improve the movement of fish past the weirs and maximise the environmental benefits of the Nepean and Hawkesbury rivers. Expenditure for those programs is \$33 million, of which about \$8 million refers to modifications to the dam and the residual refers to modifications of the weirs to allow the flows to pass, and the construction of fish ways past those weirs.

**Mr PHILLIP COSTA:** That is money coming from the State, as an example.

**CHAIR:** On page 70 of the 2007-08 State Water Annual Report, State Water indicates that it was developing operating protocols for dams with multi-level off-take, starting with the Glenbawn Dam. What are the operating protocols for the management of cold-water pollution from Glenbawn Dam? Has State Water implemented those protocols?

**Mr PHILLIP COSTA:** We are very much aware of the cold-water pollution problem. For example, when we announced the money towards Keepit and Split Rock dams, built into that new work to be done will be environmental work that will actually address cold-water pollution. In relation to Glenbawn Dam, I ask George to answer that. In accordance with the New South Wales Cold Water Pollution Strategy State Water is undertaking investigations, including modelling behaviour, thermodynamic behaviour and the development of engineering options to mitigate cold-water pollution from its large storages. As I mentioned earlier, investigations at Lake Keepit, near Tamworth, to mitigate the potential impacts of cold-water pollution have involved data collection analysis to understand the thermodynamic behaviour of the storage and model potential improvements off the flow mitigation. Investigations have indicated that a louvre system, similar to the one we use on Warragamba and other dams, will be the most cost-efficient system. I also add that we have just done some work on the Tallowa Dam as a result of work that we need to do for cold water. We have environmental flows now running through Tallowa and we have the variable depth extraction of water so that we can maintain the best, healthiest water down river. In terms of the Glenbawn Dam, I ask George to respond.

**Mr WARNE:** I have a little more in specifics to add. State Water is looking at all of its dams as we go through the dam safety upgrade, part of which is to address the issue of cold-water pollution. A lot of the dams are 70 or 80 years old, or in the case of Burrinjuck, almost 100 years old, and obviously they were designed for hydraulic efficiency, not to address the issue of cold-water pollution. It can be very expensive to address that in a cost-effective manner but we certainly see that as one of our key responsibilities. As we go through our dam portfolio and bring them up to dam safety requirements we are at the same time addressing the issue of cold-water pollution through a variety of methods. The Minister just outlined that one of them that is being used has been found to be more cost effective than a lot of others.

**CHAIR:** I understand that in the spring of 2008 and in February 2009 two significant fish kills occurred on the Wakool River as a result of a deliberate release of water by State Water. Do you have appropriate procedures for the release of water currently? Is this situation being resolved?

**Mr PHILLIP COSTA:** That was a rather unique experience, one about which I was very concerned. There was a combination of temperature, and because the soil had been dry for so long, there were some reactions and that created that very difficult situation. There are some protocols. I might get the director to go through it. We learned a lot from that situation. We released water because it was required and with a combination of an extreme hot day—

**CHAIR:** It sounds like a bit of a nightmare.

**Mr PHILLIP COSTA:** It was.

**CHAIR:** You released hot water on the hottest day of the year—

**Mr PHILLIP COSTA:** Cold water on a hot day.

**CHAIR:** Yes, over hot dry riverbeds.

**Mr PHILLIP COSTA:** Yes. I will get the director to go over that, but there was a reaction with the soils because it had been so dry for so long.



**CHAIR:** Tannin poisoned the soil?

**Mr PHILLIP COSTA:** Yes, poisoned the soil, but I will refer it to the commissioner.

**Mr HARRISS:** We have not had enough water in the Murray Valley to maintain a continuous flow into the Wakool system, which is a braided tributary system. It consists of not just the Wakool River, but a number of creeks—Colligen Creek, Merran Creek. It is quite an elaborate system. We typically put over 50,000 megalitres per annum down there just to maintain a constant flow, but we have not had the volumes to do that, so over the last couple of years we have released water by a series of pulses.

In September 2008 we released 30,000 megalitres with no problem and we then got rains in December-January, which gave us enough resources to provide a second pulse in January. There certainly were not the temperatures we experienced at the beginning of February when we started to make those releases and, having put water in in September, we thought we had got over the problem of increased tannins because we had had a flow down there already, but because of the incredibly hot summer there was a lot of leaf litter in the channels again and when we released the water in January it effectively picked up a lot of that leaf litter and deoxygenated the water, and we had what is called a black water event, which caused rapid deoxygenation of the pools where it was going. We were advised that that was occurring about seven days after we made the initial release. As I said, we did not expect to have a black water event because we had put water down there earlier in the spring and we did not expect that kind of build-up of tannins, but as it was we had to cease the releases and try to ameliorate the problem by trying to prevent the flow of that black water down into Colligen Creek and further on down into the river system.

The question that you asked was what we are doing about it in the future. Again this year we have only got enough water to provide a pulsed release. We commenced that pulsed release earlier this week, but what we have said to the locals is that we are hoping to get further inflows, which will enable us to keep the water going as a continuous flow, albeit a small flow, but if we are having to turn the water off and maintain a pulse we will not be maintaining a second pulse until the weather and the water temperatures in particular cool down early in the new year, so we will not be making a second release until we get through to about March-April.

**CHAIR:** That would not resolve the potential leaf litter, et cetera, causing a vegetation-black water event, would it? It is not the heat itself but the effect of the material in the water when you do the release. Is that not the case?

**Mr HARRISS:** That is right. The hotter the water, the less oxygen it can hold, so if we release it now—

**CHAIR:** Fair enough, but that is not the only matter.

**Mr HARRISS:** That is true, but we are working with the Murray-Darling Freshwater Research Centre to develop the best strategy should conditions stay whereby there is not enough water to maintain constant release. The strategy at the present stage is to provide a release commencing this week when it is still relatively cool, but if we have to provide a second pulse we will preferably not be doing that until the water temperature starts to cool down in the autumn.

**CHAIR:** I appreciate what you are saying, but we have had regular rather sickening fish kills, I suggest, because of out-of-date river management on the North Coast, and it happens in the rainy season, so it is not necessarily related to the heat, it is quite clearly more related to decomposition and lack of flow of water. It worries me that this could happen again in this system. If you are going to wait until the cooler weather, that is not—in my book—a guarantee of safety or survival of the fish population.

**Mr HARRISS:** I do not disagree with you. It is not a guarantee and that is why we are working with the Murray-Darling Freshwater Research Centre to provide the best flow management pattern that provides for the environment. One of the reasons we are putting the water there is to in fact maintain the pools and the habitat of the native fish, so it is a bit of a rock and a hard place. If we do not put the water in and the pools dry up completely, so too the fish will die, so it is a bit of a balancing act. That is why we are working with the Murray-Darling Freshwater Research Centre to work out the best flow management strategy.

**Dr JOHN KAYE:** Ms Schott, when you responded to Mr Colless's question about the cost of water coming from the desalination plant, you were referring to incremental costs, not an average cost?

**Ms SCHOTT:** Yes.

**Dr JOHN KAYE:** What is the equivalent incremental cost for purchasing water from Sydney Catchment Authority once it has been treated—incremental, not average?

**Ms SCHOTT:** I would have to ask Michael Bullen what I am paying him.

**Dr JOHN KAYE:** No, you cannot ask him because I understand you pay him—

**Ms SCHOTT:** I pay him a wholesale price.

**Dr JOHN KAYE:** You pay a wholesale price, but you also pay a treatment price.

**Ms SCHOTT:** Yes, I do.

**Dr JOHN KAYE:** So there can be an apples with apples figure for Mr Colless's question, which you declined to give—the 65 cents incremental from Sydney Water and an equivalent incremental cost—

**Ms SCHOTT:** Yes, the numbers that I was talking about with Mr Colless were just the operating costs. They did not include a capital component.

**Dr JOHN KAYE:** Yes, and the equivalent for the Sydney Catchment Authority would just be the incremental cost, the variable charge.

**Ms SCHOTT:** Yes. I will need to take it on notice, and I would need, as you rightly point out, to add the cost of treatment.

**Dr JOHN KAYE:** So you will take that on notice and get back to us?

**Ms SCHOTT:** Yes.

**Dr JOHN KAYE:** Mr Bullen, how much does Ms Schott pay you per kilolitre of water?

**Mr BULLEN:** I will have to take that on notice as well and get back to you.

**Dr JOHN KAYE:** So you are unaware of the incremental price—

**Mr BULLEN:** I do not have that information with me, so I will have to take it on notice and get back to you.

**Dr JOHN KAYE:** You will get back to us with that?

**Mr BULLEN:** Yes, sure.

**Ms SCHOTT:** And he has just had a price rise, so he probably cannot remember how much extra.

**Dr JOHN KAYE:** But you would accept that it is substantially lower than the incremental cost of desalination?

**Ms SCHOTT:** Yes, it is.

**Dr JOHN KAYE:** By a factor of about 2?

**Ms SCHOTT:** Yes, roughly.

**Dr JOHN KAYE:** When you come to make determinations about dispatching the desalination plant, after we have gone through the two-year phase-in period you will then make those decisions based on the incremental cost of water from the two sources?

**Ms SCHOTT:** The decision will be a policy decision, it will not be a Sydney Water decision, and it will be based most likely on the level of storage in the total dam system supplying Sydney.

**Dr JOHN KAYE:** So it will not be an economic decision?

**Ms SCHOTT:** Well, it is in a sense in that we would prefer to take dam water first because it is cheaper, but because that is unlikely to be sufficient we will take desalination water when the storages are below some particular level.

**Dr JOHN KAYE:** Will that dispatch algorithm be a public document or will you deem it to be commercial-in-confidence?

**Ms SCHOTT:** No, it will not be commercial-in-confidence, but it is not likely to be an extraordinarily tight mechanical rule either because you would need to take into account what is going to happen with the next summer's rainfall and various long-term judgemental things.

**Dr JOHN KAYE:** Of course, but there will be a dispatch algorithm.

**Ms SCHOTT:** It will not be a dispatch algorithm; it will be a rule of thumb, if I can put it like that. It will certainly be public.

**CHAIR:** Green thumb, I hope.

**Dr JOHN KAYE:** Minister, going back to Tillegra Dam, we were talking about the capacity of rural people to conserve water and we all agree that rural people are very good at conserving water, but why is it that the Hunter region needs to have a dam built—at this moment a \$477 million dam—to achieve a 1 in 1,250 year chance of achieving level 1 water restrictions when the rest of the nation is busy working on water savings and when Sydney now has what is effectively permanent level 2, if not level 3, water restrictions. You do not call them that, you call them water saving rules—

**Mr PHILLIP COSTA:** Water wise rules.

**Dr JOHN KAYE:** Whatever. What is so precious about the Hunter consumers that you have to keep them away from a level 1 water restriction on a 1,250-year basis—and charge them \$477 million for the pleasure?

**Mr PHILLIP COSTA:** It is a net \$407 million. I could go through that detail for you in a moment.

**Dr JOHN KAYE:** It is the Treasurer who says it is \$477 million. But you can have that fight with the Treasurer.

**Mr PHILLIP COSTA:** Yes, I will have that fight with the Treasurer! We remain committed to this particular water supply because it is about the future, and it is about the generational movement of resources to the community of the Hunter. Even today, there were some new projections about an increase in the population of the Hunter, and that will have impacts on the Hunter. On current planning, the Hunter population is believed to grow by 160,000 more people by 2031. We have to find a reliable water supply for that community, including the current community.

The Tillegra Dam project will secure the water future of the region for at least 50 years, much like Warragamba did for Sydney in the forties and fifties. The dam will meet the challenges of variable climate change. We store in dams what we can to maintain supply. The other elements to which you referred still have to go ahead. We should not be complacent about ways to manage efficient use of water in our homes. This is about putting in place some infrastructure that will give water security for a region that will undeniably grow, and grow rapidly—160,000 more by 2031 is the projection.

**Dr JOHN KAYE:** That is the lower Hunter strategy figure?

**Mr PHILLIP COSTA:** Yes, that is the lower Hunter strategy figure.

**Dr JOHN KAYE:** So that is not a projection; it is a desire.

**Mr PHILLIP COSTA:** It is a desire, yes.

**Dr JOHN KAYE:** Let us be clear that it is not a projection.

**Mr PHILLIP COSTA:** True.

**Dr JOHN KAYE:** You are calling it a projection, but there is no demographic reason for that. That is what the Government wants.

**Mr PHILLIP COSTA:** Yes. We believe that will happen because it is a region that has the potential for good growth. The Sydney Basin has its targets, and we believe the Hunter will reach its targets. The environmental assessment report on this project is on display, and it will remain on display for 60 days. It addresses some of the matters that the member just raised. The comprehensive report documents the benefits of the dam, what it will bring to the community, and measures to offset its environmental impact. This \$26 million environmental offset package includes a whole range of programs, such as 1,800 hectares of native vegetation, creating biodiversity corridors, and a hydro-electric turbine is on the program. So a lot of benefits come from this project over and above the fact that it will secure water supply to a very large community over many decades. For example, \$80 million will be spent on building roads and bridges. It is not just about water.

**Dr JOHN KAYE:** That is very nice, Minister, but you have not answered the question about 1:1,250 years.

**Mr PHILLIP COSTA:** I have been given these interesting numbers in the past. It is about the assumptions that people make in relation to those numbers. We have had four independent reports come to us, or reports that have come to us about the justification for the dam.

**Dr JOHN KAYE:** They were not independent.

**Mr PHILLIP COSTA:** Some are and some are not. IPART recently had one done.

**Dr JOHN KAYE:** IPART did not have one done, Minister. Your predecessor stopped IPART from doing that by using section 16 (a) of the Act. IPART was not allowed to ask the question about the dam. Is it not true that IPART was not allowed to ask the question?

**Mr PHILLIP COSTA:** I cannot answer that because I am not privy to that matter.

**Mr O'HEARN:** If I could add something, Minister?

**Mr PHILLIP COSTA:** Yes.

**Mr O'HEARN:** IPART engaged SYM Consulting to review modelling in terms of yield. That was a key part of the most recent determination to look at the assumptions in terms of yield.

**Dr JOHN KAYE:** But, Mr O'Hearne, it was not an analysis of the need for the dam, because IPART was prohibited from doing that by Mr Costa's predecessor, under section 16 (a) of the Independent Pricing and Regulatory Tribunal Act.

**Mr O'HEARN:** That is true. But they did two things: looked at the costs and budget for the dam, and they looked at our modelling on the reliable yield.

**Dr JOHN KAYE:** Did they not come up with the figure of 1,250 years? Is it not correct that it was the SYM Consulting report, commissioned by IPART, that came up with the 1:1,250-year chance of the dam reaching a level 1 water restriction if Tillegra is built?

**Mr O'HEARN:** Yes, I think that was in their report. But that is when Tillegra is on line. The reality is that, without Tillegra, with drought, climate change and the population growth expected in the region, we run the risk of running out of water, and that is just not acceptable for our community. We need to do something. Tillegra is the least-cost option to provide water security for the people of the Hunter.

**Dr JOHN KAYE:** So you say. Thank you, Chair.

**CHAIR:** Minister, I had discussions with the Government about dealing with some regional development issues. I would like to have those officers join you at this point of time. The Government members, generously, have agreed not to take the remainder of their allocated questions.

**Mr PHILLIP COSTA:** We are here to help.

**CHAIR:** Mr Buffier and Mr Cullen have been sworn, so I will ask them to identify themselves for the record.

**MR BUFFIER:** Barry Buffier, Deputy Director-General, Industry and Investment New South Wales.

**Mr CULLEN:** Michael Cullen, Executive Director, Enterprise, Small Business and Regional Development.

**The Hon. RICK COLLESS:** Minister, I would like to raise the issue of ethanol targets in relation to regional development. Correct me if I am wrong, but I understand the Government's target was to triple the 2 per cent ethanol mandate to 6 per cent by 2010, rising to 10 per cent in 2011. Is that correct?

**Mr PHILLIP COSTA:** That is the Government's position, yes. The details of ethanol are being managed through Rural Affairs, a portfolio I have not had for some time. Minister Kelly has had that portfolio, and I am told it is still with Minister Kelly.

**The Hon. MELINDA PAVEY:** How does it sit with Minister Kelly, because Minister Whan is responsible for Rural Affairs?

**Mr PHILLIP COSTA:** He is now, yes.

**The Hon. MELINDA PAVEY:** Minister Kelly is Minister for Lands.

**Mr PHILLIP COSTA:** Yes.

**The Hon. MELINDA PAVEY:** How does ethanol fall under the Lands portfolio?

**Mr PHILLIP COSTA:** You will have to ask Minister Kelly.

**The Hon. MELINDA PAVEY:** But how?

**Mr PHILLIP COSTA:** I cannot answer that question. It is outside my portfolio.

**The Hon. RICK COLLESS:** Minister, are you able to take questions on ethanol?

**Mr PHILLIP COSTA:** Probably not. It is probably more appropriate that they be directed to Minister Kelly.

**The Hon. MELINDA PAVEY:** Minister, did you go to the opening of Country Week?

**Mr PHILLIP COSTA:** No.

**The Hon. MELINDA PAVEY:** Funding for Country Week comes from your portfolio, does it not?

**Mr PHILLIP COSTA:** It does indeed.

**The Hon. MELINDA PAVEY:** So this is not a matter for Minister Kelly or Minister Whan. We are onto the right one here!

**Mr PHILLIP COSTA:** Minister Whan did attend on that occasion.

**The Hon. MELINDA PAVEY:** What is the funding allocation for promotion of regional areas and regional business through your department?

**Mr PHILLIP COSTA:** In relation to Country Week specifically, we provided \$100,000 towards that event. I do not know whether your question was that specific.

**The Hon. MELINDA PAVEY:** Will that funding continue for next year?

**Mr PHILLIP COSTA:** That is being reviewed. It has been reviewed in the past. I have been told that the Tree and Seachange Expo promotes Sydneysiders, but there is a change occurring to the structure of that, and it will be reviewed.

**The Hon. MELINDA PAVEY:** What do you mean by a "change to the structure"?

**Mr PHILLIP COSTA:** I will ask Mr Cullen to respond.

**Mr CULLEN:** With regard to the timing, after Country Week is finished they put a proposal to us for the next two years. At this stage we do not have a proposal for the future of Country Week. That will be coming in the next four weeks or so, I understand. We have spoken to the proponent. They have turned themselves into a foundation, so it is not a private sector company, and they will be looking at doing things other than just Country Week.

**The Hon. MELINDA PAVEY:** I understand it has been adopted by other States, such as South Australia and Queensland, and they have followed the theme and the principle.

**Mr PHILLIP COSTA:** I understand there are moves afoot that way. It has been a good project. This year about 50,000 people attended the six annual Country Week expos, which began here in 2004. The Government has been a major sponsor throughout those six years. As was explained by Mr Cullen, we are looking at the new model and hope we are going to move forward with that. This year's expo provided information about more than 600 employment opportunities in regional locations and when I was at Dubbo there had already been some responses to expo. Last year some participating local councils reported almost immediate relocation of people to their areas.

Some very interesting strategies are being employed by a lot of regional towns and engaging in Country Week has been one of them. They have also got some very good responses. For example, last year some communities held open days in their towns, which were very successful. Fifty families visited Cootamundra and 54 people took the tour from Sydney to Muswellbrook to look at what was available. Country Week's successes include families that relocated and opened cafes, for example in Boorowa. A couple bought a bed and breakfast at Liverpool Plains and another person moved to Muswellbrook, so it is working and it is making a difference.

**The Hon. MELINDA PAVEY:** What other strategic leads are you taking to encourage development in regional communities, particularly in the west of the State, given the population pressures and demands in Sydney? Even Minister Macdonald said today there is a lot of pressure in living in Sydney and trying to get around. What are your aims and goals to improve the lifestyle of many people in New South Wales by encouraging them to go to regional New South Wales?

**Mr PHILLIP COSTA:** There is a very interesting statistic relating to New South Wales. For example, look at employment. Employment is improving in some of the bigger communities, so there is movement. I visited Dubbo only a couple of weeks ago and announcements by STOTA, for example, indicate it will bring a great number of very professional people into the region. This is typical of the work we do and some of the things that are happening. When I spoke to STOTA—

**The Hon. MELINDA PAVEY:** What is STOTA?

**Mr PHILLIP COSTA:** STOTA is a company that is going to make lights out of cardboard. It is very clever stuff and massive technology. When I asked why they chose Dubbo, the answer reflected what we typically do in our regions. We fold back into the community the resources that cause people to make the decision to go to these regional towns. It is about the service delivery they get, their proximity to Sydney and other markets, and how they can move in and out quickly, so air and road transport are important to them. It is

about the professional services, such as medical services, that are available. There is a whole suite of reasons that people go to regional New South Wales. We are spending about \$90.4 million in this budget to drive programs and activity within regional communities across New South Wales to show people that places such as Wagga Wagga, Bathurst, Dubbo, Orange and Parkes can deliver a quality lifestyle as well as employment opportunities. It will drive economic development and change in those communities. We are putting \$90.4 million into our budget for regional investment to try to get investment and other things happening out there.

Our Building the Country package is important. We are putting \$85 million into rural and regional towns to embellish and enhance small regional communities through our programs, such as improvements to chambers of commerce and community halls. We are putting all those dollars in to build up the attraction of the region. We know that if you make an area attractive, people will be more inclined to say that is the place to settle. Land availability, land price and, as I said, the services such as schools and hospitals, are important. Whatever it might be, we in Regional Development try to do as much as we can. There are also many programs and services. We expect to help around 3,000 businesses in the next 12 months and 150 investment projects in 70 communities in regional New South Wales. We have established some other specific programs, such as the \$7 million Regional New South Wales Employment Fund and the \$12 million Western Sydney Employment Fund. These employment funds will help small and medium size businesses to create much-needed jobs. It will give them an opportunity to focus on what they can do to improve and expand their business. We are expecting about 1,200 extra jobs to go into these regions. Up to 2,000 jobs will be created in western Sydney as a result.

The budget funding for Regional Development includes \$25.5 million from the Building the Country package in the next 12 months. We are approaching service delivery in regional towns through some very targeted programs. When I chaired the broadband committee and went to regional towns I discovered, as did the committee, that that was also a very important part of people moving to those communities. That led to some money being allocated in the \$85 million Building the Country fund for broadband services in rural and remote communities. The whole purpose of that is to raise the appeal of regional New South Wales to ensure jobs will go there and therefore people will also go there. Over the past five years there has been an increase of 95,000 jobs and that helps to grow communities, which in turn helps economic prosperity in towns. There are a lot of good things happening in the bush and we are quite proud of our results. We know people are going through difficult times for a whole range of reasons, one being the drought and another being the economic downturn in recent times. It has impacted and we are trying to deliver other services.

**The Hon. ROBERT BROWN:** Does the portfolio of Regional Development have any role in Government discussions about government department decentralisation or is that not discussed these days?

**Mr PHILLIP COSTA:** Decentralisation is probably more of a State Development portfolio matter. The Regional Development portfolio is right at the pointy end. It is about delivering projects and providing support for individual companies and businesses to grow. In terms of the bigger picture, we have moved Lands to Bathurst, for example, and without a doubt universities and those sorts of things make a big difference to those communities. That level of change is probably at Minister Macdonald's level. We embellish and support whatever government agencies we have. The Department of State and Regional Development [DSRD] has offices across the State and we coordinate as much as we can for those communities. The headquarters of the Department of Industry and Investment is in Orange. We do our part, but those moves are at a much higher level. As I said, DSRD's offices are scattered across the State and we embed them in the community and try to deliver a front-line service. However, we do the pointy end of the work. We go to STOTA, a company, and say we will help it locate somewhere, or we go to Drivetrain Systems Australia in Albury and help it. We help individuals.

**The Hon. MELINDA PAVEY:** And the Molong gelato factory. That is sensational.

**Mr PHILLIP COSTA:** It is fantastic. What is happening across rural and regional New South Wales is understood and appreciated by the local community, but the stories do not get told in the broader sense. An enormous amount of good work is happening.

**The Hon. MELINDA PAVEY:** Imagine the promotion and advertising you can have out there.

**Mr PHILLIP COSTA:** Absolutely. In my travels, and I travel a lot to get amongst the communities across the State as much as I can—

**The Hon. MELINDA PAVEY:** You will be doing more travelling now that you are known as Rain Man.

**Mr PHILLIP COSTA:** I am the Rain Man. I am looking forward to that. For example, there was a gentleman at Wagga Wagga who developed a machine that separates building materials and soils on front end loaders and bobcats. This is going to be a worldwide product. This person got support from the Department of State and Regional Development to develop his product. He is manufacturing in Wagga Wagga. His company was called Flip Screen. This product will go worldwide. He developed a product in rural New South Wales and he employs rural people. In my view his company will grow exponentially. He is targeting companies such as Rio Tinto and BHP to actually send his technology over to the Pilbara so that when they pick up the red powder that has all the iron ore in it, it spins around, the sand stays there, the iron ore goes on the train and they can save 15 per cent of cartage. This man has a really clever piece of equipment, and that is happening in many of our rural towns. In response to the specifics of your question, yes, the Government does try to find opportunities to put agencies where they can. In my DSRD capacity we do the work at the pointy end.

**CHAIR:** Minister, there was a company in Ballina called Permadrive, which was a revolutionary automotive gearing trucking universal stored energy concept. My understanding is that that company went to the wall because of lack of support at a critical time. Are you aware of that company and that situation?

**Mr PHILLIP COSTA:** We are.

**Mr CULLEN:** Permadrive is a company that actually was in our Australian Technology Showcase. It was looking for significant capital—that is, over tens of millions of dollars. As I understand, it is still operating but had to wind back. Part of its issue was being able to pin big contracts in the United States. They were basically defence contracts and also with the postal services in the United States. What their status is right at this second, I could not tell you, but my understanding is that they are still operating but have had to basically come back a little in understanding what capital they can raise particularly over the next incremental step. Certainly from our program point of view, the company has been helped along the way, but it really reached the point where it needs to grow globally, and that is where it has had difficulty at the moment.

**CHAIR:** My understanding is that the plant near Ballina airport had to close down. I could be wrong. I will check it out. Perhaps you could investigate that and get back to me on that one?

**Mr CULLEN:** Sure. The thing is that they did not have a commercial scale plan. It was basically a small operation.

**Mr PHILLIP COSTA:** In DSRD we do not put significant capital money into programs. We put some money but not when you are talking about an operation that is going to be tens of millions of dollars. We assist them in getting themselves established. We might even go through a payroll tax incentive scheme, for example, where you help them on those sorts of things. We also try to maintain the workforce in the community. When we had the drastic downturn in the DSI plant in Albury, for example, 400 jobs were under threat. We moved in very quickly. I was there with the workers and within a day we were putting support together for that community. What we were able to do was not only help them find a new owner, but also we helped with the redeployment of a lot of staff. In fact, that has been quite successful. We were able to find work or get work for a significant number of those people. That is the kind of work we do—the really hands-on work.

**CHAIR:** Thank you Minister. Time has concluded, thanks to the Government. Thank you for your attendance and the attendance of your staff.

**(The witnesses withdrew)**

**The Committee proceeded to deliberate.**