

## **HOUSE OF ASSEMBLY**

**Monday, 1 August 2016**

### **ESTIMATES COMMITTEE B**

**Chair:**

Mr L.K. Odenwalder

**Members:**

Hon. P. Caica

Hon. S.W. Key

Mr S.J. Duluk

Mr J.P. Gee

Mr A.S. Pederick

Mr T.J. Whetstone

*The committee met at 09:00*

*Estimates Vote*

**DEPARTMENT OF ENVIRONMENT, WATER AND NATURAL RESOURCES, \$144,698,000**

**ADMINISTERED ITEMS FOR THE DEPARTMENT OF ENVIRONMENT, WATER AND  
NATURAL RESOURCES, \$19,193,000**

**Minister:**

Hon. I.K. Hunter, Minister for Sustainability, Environment and Conservation, Minister for Water and the River Murray, Minister for Climate Change.

**Departmental Advisers:**

Ms S. Pitcher, Chief Executive, Department of Environment, Water and Natural Resources.

Ms M. Griffiths, Chief Finance Officer, Department of Environment, Water and Natural Resources.

Mr T. Goodes, Group Executive Director, Strategy and Advice, Department of Environment, Water and Natural Resources.

Mr J. Schutz, Group Executive Director, Partnerships and Stewardships, Department of Environment, Water and Natural Resources.

Mr B. Bruce, Group Executive Director, Customer and Corporate Services, Department of Environment, Water and Natural Resources.

Mr A. Geytenbeek, Senior Accountant, Department of Environment, Water and Natural Resources.

Dr J. Virtue, General Manager, Strategy and Policy, Biosecurity, Department of Primary Industries and Regions SA.

Ms B. Marsden, Chief of Staff.

Dr T. Bates, Adviser.

**The CHAIR:** This is a relatively informal procedure. As such, there is no need to stand to ask or answer questions. I understand that the minister and the lead speaker for the opposition have agreed an approximate timetable. There have been no changes to that timetable, I understand? Excellent.

If the minister undertakes to supply information at a later date, it must be submitted to the secretary by no later than Friday 28 October. I propose to allow both the minister and the lead speaker of the opposition to make opening statements of about 10 minutes each, should they wish. There will be a flexible approach to giving the call for questions, based on about three questions per member, alternating each side.

Supplementary questions will be the exception rather than the rule. Questions must be based on lines of expenditure in the budget papers. They must be identifiable and referenced and they must be directed to the minister. Members can only table documents that are statistical and short. Television cameras and the media will be permitted in both the northern and southern galleries. Minister, welcome.

**The Hon. I.K. HUNTER:** Thank you, Chair.

**The CHAIR:** You are here today in your capacity as Minister for Sustainability, Environment and Conservation. I declare the proposed payments open for examination, and I refer members to the Agency Statements, Volume 3. I now call on the minister to make a statement, if he wishes, and to introduce his advisers.

**The Hon. I.K. HUNTER:** I would like to thank the committee for spending some time with me today. Can I introduce the people who will be with me this morning. I have, over on my left, Michelle Griffiths, the chief financial officer for the agency; Sandy Pitcher, my Chief Executive; Tim Goodes, Group Executive Director, Strategy and Advice.

Behind me are John Schutz, Group Executive Director, Partnerships and Stewardships; my Chief of Staff, Bel; and Andrew Geytenbeek, management accountant. Further back, we should have Ben Bruce, Group Executive Director, Customer and Corporate Services; Dr John Virtue, Manager, NRM, Biosecurity; and my adviser, Tara.

Thank you very much for allowing me to make a few comments. The state government's focus throughout the 2015-16 financial year has been to explore sustainable ways of engaging South Australians and visitors alike with our state's amazing natural assets. Through sustainably managing our natural resources, we are benefiting the environment as well as the communities and businesses that depend on them and, importantly, we are creating a population and a community that understand, value and protect that environment.

We know that our tourism sector relies heavily on the appeal of our state's unique natural attractions, such as our national parks and our marine parks. Nature-based tourism supports thousands of our tourism sector jobs and brings \$1.1 billion into the state each year, I am advised, and we know that there is further potential in this sector. Research shows that our wildlife and places like Kangaroo Island, Eyre Peninsula and the Flinders Ranges have significant and untapped appeal for both the local and international tourism markets.

To capitalise on this opportunity, the state government has developed a new nature-based tourism strategy that aims to create 1,000 new jobs and inject an extra \$350 million per annum into the state's economy by 2020. We have invested significantly in a number of projects over the past financial year. For example, \$5.8 million has gone into developing the Kangaroo Island Wilderness Trail, a new internationally competitive multiday walking experience along the south-west coast of Kangaroo Island. Kangaroo Island parks are already responsible for over 20 per cent of the economic activity associated with nature-based tourism in the state, and this new multiday walk will further establish the island as an ecotourism destination of choice, as well as creating opportunities for the private sector to invest in luxury eco accommodation or new tourism products on KI.

We have also invested \$1.7 million over four years to establish the Adelaide International Bird Sanctuary, which now stretches 60 kilometres up Gulf St Vincent, north of Adelaide, and up to Proof Range. We will also create a national park for the bird sanctuary to protect vital habitat for

migratory shorebirds and create a great leisure and tourism asset on the fringes of the Northern Adelaide Plains.

Shark cage diving in the Neptune Islands Marine Park is another example of the unique and environmentally sustainable nature-based tourism opportunities this government is supporting. Shark cage diving attracts over 9,000 people each year, I am advised, to Eyre Peninsula, contributes over \$11 million to the state's economy and supports 70 jobs. With the support of the state government, this enterprise is growing at the rate of about 10 per cent per year. We are now working with operators to facilitate even more investment in industry by transitioning to 10-year licences and providing the certainty that operators need to invest to grow their businesses.

We are also looking at ways of creating fantastic nature-based tourism experiences closer to the city. For example, Cleland Wildlife Park is already one of South Australia's most loved tourist destinations. We want Cleland to become a global destination of choice for koala experiences, showcasing premier wildlife experiences and providing for the establishment of an international koala centre of excellence. To this end, we have committed \$500,000 for the 2016-17 financial year to complete a business case for the redevelopment of the Cleland Wildlife Park. We will establish an international koala centre of excellence to strengthen South Australia's position as a go-to source for koala experiences in the world, as well as help support the state in our koala management and conservation.

Of course, we have our fantastic Botanic Gardens that offers locals and visitors alike a beautiful nature-based experience in the heart of the city. Adelaide Botanic Gardens already invests in a range of activities, events and classes. We recently saw a surge in visitor numbers and interest due to events such as the flowering of the corpse flower. Over 16,000 people lined up to see this rare and spectacular event, including a special night-time opening of the Adelaide Botanic Gardens. This has the potential to reinvigorate the East End in a new way, enhancing visitor experience and providing further commercial opportunity for the gardens, and I look forward to the completion of a number of these exciting projects throughout the 2016-17 financial year.

I would like to thank the staff of DEWNR, led by my incredibly fantastic chief executive, super Sandy Pitcher, and her executive team, who have worked tirelessly this year to ensure we are helping South Australians to conserve, sustain and prosper in our state. Thank you, Chair.

**The CHAIR:** Thank you, minister. I just want to clarify, did you say the koala centre of excellence?

**The Hon. I.K. HUNTER:** Yes, indeed.

**The CHAIR:** Excellent. I just wanted to clarify for *Hansard*.

**The Hon. I.K. HUNTER:** You do not like koalas, Chair? We can introduce you to one.

**The CHAIR:** I would appreciate that. Member for Chaffey, do you have an opening statement.

**Mr WHETSTONE:** No, I do not. I will just start with questions.

**The CHAIR:** Does anyone have any questions? Member for Chaffey.

**Mr WHETSTONE:** Welcome, minister, and to all your hardworking staff.

**The Hon. I.K. HUNTER:** Thank you, Tim.

**Mr WHETSTONE:** I would just like to start off with Budget Paper 4, Volume 2, page 149, with the Workforce summary. The number of staff listed in 2015-16 was estimated to be 1,582 for DEWNR. Does that number include NRM staff?

**The Hon. I.K. HUNTER:** My advice is that, yes, it does.

**Mr WHETSTONE:** What is the total number of NRM staff across the state?

**The Hon. I.K. HUNTER:** I expect it is in the area of around 200 or so. I will see if I can get you a more comprehensive answer. It is complicated because we do not define staff as being either departmental staff or NRM staff. Some staff are paid or funded through the levy process, some are

paid through state appropriations and some are paid through commonwealth funding, so it becomes very complicated then. Some staff will be doing jobs throughout the day on all three different funding streams, so it is complicated, but my further advice is that it is around about the 300 mark.

**Mr WHETSTONE:** Referring to DEWNR's move into the new premises at Waymouth Street, there is a reference to 770 staff—

**The Hon. I.K. HUNTER:** Sorry, Chair, could you just ask for a reference to the budget paper and page.

**Mr WHETSTONE:** It is Budget Paper 4, Volume 2, page 149, Workforce summary. There was a reference to 770 staff and there is also a reference to 900 staff under one roof of DEWNR. Which office location is this referring to? There was an *Advertiser* article referring to DEWNR's move.

**The Hon. I.K. HUNTER:** A credible journal of record, yes, indeed. Approximately 900 staff in the Department of Environment, Water and Natural Resources located in seven different leased sites moved into a consolidated site at 81-95 Waymouth Street in Adelaide during April and May 2016. I am advised that cost savings of over \$30 million will be returned to the state government from savings in lease costs, base savings, power and cleaning costs over the next 12 years of the lease.

The new Waymouth Street site has been designed to achieve a six-star Green Star Rating but is currently awaiting assessment by the Greening Building Council of Australia. I am just looking down the page to get to your answer. There are lots of lovely bits of information here that you might want to come back and ask me about. I am advised that the 900 staff is approximately correct but includes staff from the agency called Green Industries SA—GISA.

**Mr WHETSTONE:** Minister, you say that there was a \$30 million saving with the relocation to Waymouth Street.

**The Hon. I.K. HUNTER:** I say that cost savings of over \$30 million will be returned over the 12 years of the lease.

**Mr WHETSTONE:** Of that \$30 million, is that going back into general revenue?

**The Hon. I.K. HUNTER:** This is future savings, part of it is future savings directed to the department. Some of it will be future savings that have been made through DPTI because they organise the buildings for the whole government of course, and some of it is just simply straight-up savings because we have consolidated staff on-site, saving on cleaning costs, saving on energy costs, etc.

**Mr WHETSTONE:** Of that \$30 million, is it going back into general revenue or will any of that money be put into programs?

**The Hon. I.K. HUNTER:** They are savings. So they are savings on building costs, they are savings on rental costs, they are savings on electricity costs. They are not a return to government, they are actually savings.

**Mr WHETSTONE:** I understand the savings. Over that time period there will be a \$30 million saving. Will any of that \$30 million be put back into programs and initiatives within the department or will it just go into the general revenue bucket?

**The Hon. I.K. HUNTER:** In a roundabout way this stops the agency from needing to make savings in other programs. This is part of our savings target. As I said, part of it is through DPTI and presumably this will be measured against their savings targets as well. This is one way in which we have made the savings that the agency is required to make by consolidating staff on site, and by doing this we have actually saved our programs.

**The CHAIR:** The member for Colton has been very patient.

**The Hon. P. CAICA:** My question refers to Budget Paper 4, Volume 2, Program 3 at page 172. Will the minister outline for the committee the economic and cultural contribution that the Botanic Gardens of South Australia and State Herbarium make to our state?

**The Hon. I.K. HUNTER:** Thank you member for Colton; a very well-referenced question. Of course he is a very experienced member for Colton and a former minister of course, and knows the estimates process backwards, forwards and all round as well. He has pulled out a very penetrating question. I will attempt to answer it as best I can.

South Australia's Botanic Gardens are a significant asset to the people of South Australia. I think I mentioned them in passing in my opening address. They do make a significant contribution to our state's culture and our history. We of course have three magnificent botanic gardens: Mount Lofty, Wittunga and of course here in the city, with the Botanic Park right next door. We also have laboratories in the Goodman Building and former Tram Barn A, and the Santos Museum of Economic Botany, the Palm House and Bicentennial Conservatory, and internationally renowned architectural assets on Botanic Gardens' land.

One fact that might not be as well known is that the three botanic gardens are the most visited cultural attractions in the state. Around 2.7 million people visited the Botanic Gardens in the last financial year, I am advised, and that is an increase from last year. That is more visitors than either the Art Gallery or the Museum or the Zoo, but we are not competitive in this. In fact, the only other place that has a comparable number of visitors is the Adelaide Oval, driven by football, soccer, cricket and major concerts.

We know that people love our beautiful botanic gardens. Working with Deloitte Access Economics, we are gaining a better understanding of the botanic gardens' contribution to the state's economy. Deloitte is assessing, I am advised, a number of factors, including the gardens' cultural value, their economic and social contribution, as well as the gardens' digital presence. I am advised that a preliminary assessment, based on 2013-14 visitor numbers, shows that the cultural asset value of the Botanic Gardens is a combination of both the consumer value and intangible value of the gardens and has been valued at \$403 million.

The gardens' economic impact on the state is broken down into direct contribution to the economy, which is estimated at \$10.8 million, and \$12.5 million per annum in contribution to the tourism industry. These are quite impressive figures and the final report will be based on the most recent visitor numbers, I am advised. There is the social and scientific contribution, of course, of the Botanic Gardens, through initiatives such as the Kitchen Garden and the school outreach programs, and the research undertaken by botanists and scientists of the State Herbarium and the South Australian Seed Conservation Centre.

It is great to note that the gardens' popularity keeps growing year on year. I have already mentioned the substantial increase in visitor numbers, but the gardens have been very active in increasing their social media presence, which has contributed to an increase of interest, I expect. For example, over 16,000 people lined up to see the rare and spectacular flowers of the corpse flower—I mentioned that earlier—and that was widely shared on social media, although you probably did not get the full effect of the smell through Facebook, but people talked about it a lot.

In April alone, the Mount Lofty Botanic Garden attracted more than 60,000 visitors to see the stunning myriad of autumn colours prompted by people sharing photos of the beautiful foliage. There was also that wonderful drone shot of the Mount Lofty Botanic Garden in its autumn colours—that was just fantastic, that went viral. The Botanic Gardens is, of course, exploring ways to expand the gardens' offerings, enhancing visitor experience and providing further commercial opportunities for the gardens.

For example, they are investigating the possibility of opening the Adelaide Botanic Garden at night, especially during daylight savings, to reinvigorate the East End in many different ways. The redevelopment of the old Royal Adelaide Hospital site and the new city high school will each represent a range of new opportunities that could create jobs in hospitality, horticulture and building and construction, depending on the final outcome there.

While new opportunities are being explored, the Botanic Gardens is cognisant of staying true to its role as a collections-based cultural institution and its image as a place offering peace, beauty and tranquillity in the heart of the city. I would like to commend the work of all those associated with the Botanic Gardens. These initiatives are sure to add to the Botanic Gardens' substantial economic

and cultural value, as estimated in the Deloitte Access Economic reports, which we are eagerly awaiting.

**Mr WHETSTONE:** Minister, I refer back to Budget Paper 4, Volume 2, page 149. How many regional biodiversity coordinators are employed in DEWNR and/or in the NRM system?

**The Hon. I.K. HUNTER:** I think I need to ask you to define your question a little more. That regional biodiversity coordinator is not a catch-all job title, it includes many people doing many different jobs, so what precisely are you after there?

**Mr WHETSTONE:** What I am precisely after is how many coordinators are employed within DEWNR and how many are employed within the NRM system?

**The Hon. I.K. HUNTER:** The problem we have is that we do not recognise that title. What exactly are you after? Are you after people working in pest management, for example, or are you after people who are coordinating with community volunteer groups? What exactly is the title you want to try to drill into?

**Mr WHETSTONE:** You can make it as broad as you want. I am looking to know is how many people are employed in that role as a biodiversity officer.

**The Hon. I.K. HUNTER:** I might ask Mr John Schutz to take you through the structure of our regions.

**Mr SCHUTZ:** In trying to understand your question I will talk through the structure the department uses to deliver its regional programs. We have a regional director, who has overall responsibility for the workforce across eight regions. In those eight regions we have a regional management team structure that sits under the regional director. In each of those teams one of those regional management team members has responsibility for biodiversity conservation programs, and that would be a shared responsibility with other activities. Then there will be a range of programs that are funded by state NRM boards and the commonwealth, which would have various project officers delivering those, either in partnership with community or back in partnership with the department or other agencies.

**Mr WHETSTONE:** Moving on to Budget Paper 4, Volume 2, page 153, under 'Targets': talking about developing an NRM investment strategy for South Australia. How much funding is coming out of the South Australian appropriation for that investment strategy?

**The Hon. I.K. HUNTER:** I might invite Sandy to answer that question.

**Ms PITCHER:** Thank you for the question. What the investment strategy is focused on is bringing together all the South Australian partners who are involved in natural resource management in the broadest possible way, so Primary Producers SA, all the NRM boards, the South Australian government from PIRSA, DEWNR and other agencies, as well as some of the Aboriginal groups, and we have pulled together a demonstration of how strong and robust the system is across so many different parts of South Australia, and we are presenting this as a prospectus, particularly to funders like the commonwealth, to say that, if you have Green Army projects, if you have Landcare projects, the prospectus of investing in South Australia is very strong, so it is a demonstration of the strength of the partnership. Conservation Council also has joined in with that prospectus.

**The Hon. I.K. HUNTER:** I think it is well recognised around the country, particularly at a commonwealth level, that the NRM model in South Australia is incredibly strong, and it is a strong partner to deliver particularly commonwealth funding but also perhaps private sector investment as well—philanthropic or otherwise. So, by putting together this investment strategy we are hoping, not to put too fine a point on it, to attract more funding to South Australia than otherwise we would get in trying to compete with the other states. We do have a very good reputation with the commonwealth, I am advised, in terms of our delivery of projects, on time and on budget, and their model is outstanding.

**Mr WHETSTONE:** Minister, you talk about the commonwealth a lot, but the question I asked was: how much funding will come from the South Australian appropriation?

**The Hon. I.K. HUNTER:** How much funding has come for us to develop our investment strategy?

**Mr WHETSTONE:** Yes.

**The Hon. I.K. HUNTER:** Well, I think you just heard the chief executive: we are putting this together in house and working with our cooperative groups through primary producers.

**Mr WHETSTONE:** Is there a number?

**The Hon. I.K. HUNTER:** We are doing it ourselves. We are doing it in house.

**Ms PITCHER:** No additional cost.

**Mr WHETSTONE:** So there is no additional cost?

**The Hon. I.K. HUNTER:** No, we are doing it as part of our regular business.

**Mr WHETSTONE:** I refer to Budget Paper 4, Volume 2, page 153, under 'Highlights': we are talking about the natural resource management boards delivering programs. How many programs were cut in the 2015-16 year as a result of, to put it kindly, the imposition of the water planning and management costs?

**The Hon. I.K. HUNTER:** My advice is, for 2015-16, which was the question I think, none.

**Mr WHETSTONE:** So, no programs have been cut?

**The Hon. I.K. HUNTER:** For 2015-16, no, not in relation to your question. Of course, programs cease all the time. They get funded for a period of time—from the commonwealth, for example, for a period of two years—and then they stop, but that is a different situation. You asked specifically about programs that were cut in 2015-16 on the basis of water planning management, and that is the answer.

**Mr WHETSTONE:** What are the forecast programs to be cut—not finished, but cut—in the 2016-17 year?

**The Hon. I.K. HUNTER:** My advice is, going forward, three of the larger boards—South Australian Murray-Darling Basin, Adelaide and Mount Lofty Ranges, and the South East—are looking at cutting their business by between 9 and 11 per cent across a range of programs, but my advice, at this stage at least, is they are not expecting to cut whole programs.

**Mr WHETSTONE:** So, if they are going to cut 9 per cent, are they going to make their programs 9 per cent smaller or are they going to cut 9 per cent of programs?

**The Hon. I.K. HUNTER:** Potentially, or they will find efficiencies in their business, but my advice so far is they are not looking at cutting any specific programs. They may deliver slightly less of them, but they will find efficiencies.

**Mr WHETSTONE:** Is that information coming from the NRM boards or is that coming from your office?

**The Hon. I.K. HUNTER:** That is advice I have just had from my chief executive.

**Mr WHETSTONE:** So, how many programs in the 2015-16 year were cut as a result of corporate services cost recovery?

**The Hon. I.K. HUNTER:** The advice from my agency is none.

**Mr WHETSTONE:** Moving on to coastal protection, I refer to Budget Paper 4, Volume 2, page 184, under Grants and transfers. What is the total available funding for new projects in that budget line of \$515,000?

**The Hon. I.K. HUNTER:** I can give the committee this advice: responsibility for coastal protection of South Australia is shared between state and local government. The Coast Protection Board, with funding from the state government, provides grants to local councils to assist them with coastal management projects. The grants help councils undertake crucial studies and works that may not be possible without grant funding.

In 2015-16, the board invested a total of \$354,000 in coastal management grants to 11 councils across the state and, of course, those grants are invited by the board from councils on

an annual basis. The board typically receives grant applications well in excess of the available budget and uses a risk-based prioritisation system to allocate grant funding to the highest-priority projects. Councils must contribute at least 20 per cent of the total cost of each grant project, and the assessment and allocation of grants is a matter for the Coast Protection Board.

In 2015-16, the following grants were made, I am advised: \$60,600 to the City of Holdfast Bay for urgent seawall repairs at Brighton and Glenelg North following the 9 May 2016 storm event; \$60,000 to the City of Port Augusta for construction of a section of levy bank to deliver Port Augusta sea flood protection strategy; \$60,000 to the Wattle Range Council for seawall repairs at Beachport; \$35,000 to the City of Whyalla for beach replenishment to maintain storm erosion buffers; \$30,000 to the City of Victor Harbor for beach replenishment to maintain storm erosion buffers; \$30,000 to the Kingston District Council for beach replenishment at Wyomi Beach to protect against ongoing erosion; \$28,000 to the District Council of Barunga West for reconstruction of a section of the Port Broughton seawall; \$20,000 to the District Council of Robe for the replenishment of Town Beach to maintain erosion protection for the town; \$17,600 to the City of Marion for urgent erosion remediation works at Hallett Cove; \$10,000 to the District Council of Grant to provide seed funding for the development of whole of settlement protection strategies for Pelican Point; \$2,750 to the Kangaroo Island Council for a small grants program used to support community groups undertaking voluntary coastal management projects.

I am pleased to note the response of the Coast Protection Board following a significant storm this year in May. The board resolved to have a session to approve grant funding totalling \$78,250 to the City of Holdfast Bay and the City of Marion to assist with emergency repairs. I also note that past storms of this magnitude have caused much more significant damage to the coast. This, of course, is testament to the long-term active management of Adelaide beaches by the Coast Protection Board and the Department of the Environment, Water and Natural Resources.

In 2016-17, I am advised, the board will be inviting applications for coastal protection funding. It is anticipated that the board will approve its 2016-17 coastal grants program at its meeting in July (that has just gone; that would have been yesterday or last week). That is all the information I have before me.

**Mr WHETSTONE:** Minister, obviously, there was quite a bit of sand pumping and sand carting in the 2015 year.

**The Hon. I.K. HUNTER:** Yes.

**Mr WHETSTONE:** How much was spent in the 2015-16 year, and what is the estimate for expenditure on both sand pumping and sand carting in the 2016-17 year?

**The Hon. I.K. HUNTER:** The Adelaide's Living Beaches strategy protects coastal properties and infrastructure and maintains the amenity of Adelaide's metro beaches. These beaches are the most visited public land in the state. In 2015-16, \$5.72 million was spent implementing the strategy. The main component of the strategy involves collecting sand from areas where it builds up and moving it back to areas of erosion. A sand pumping system, completed in April 2013, is now being used instead of trucks to move sand along two of our busiest sections of the beaches. I am advised that, in 2015-16, the pumping system successfully moved the same volume of sand that had historically been shifted using trucks but with much less impact on the community. In terms of estimates for 2016-17, the cost to operate and maintain the sand pumping system alone for those two sections in 2016-17 was \$2.13 million.

**Mr WHETSTONE:** The board produced a paper last year pointing out that funding is inadequate for works required, and they have provided a list of high-risk unfunded coastal issues, which tallied to between \$20 million and \$30 million. I am presuming that a lot of that would be about beach erosion, coastal erosion and loss of sand. In your first recommendation, you were going to write to the Treasury and look for some support for the board request for that extra expenditure of \$200,000 in 2015-16 over and above the annual appropriation. Have you written to the Treasurer?

**The Hon. I.K. HUNTER:** Let me give you some background information, but firstly, ministers who write to treasurers asking for money without having a strategy in place usually get rather terse responses. Our first priority has to be to develop a strategy, a well-planned and well-resourced



strategy that shows a timeline into the future and what that sort of investment might look like, if we are trying to persuade Treasury to part with some extra funds. So that is what we are doing.

In June 2015 I received a position paper from the Coast Protection Board raising concerns about the lack of resources available to meet future needs for coast protection, and this is right around the state and, of course, the metro coast. I have asked my agency to coordinate with local government to develop a 10-year strategic coastal management plan. The South Australian 10-year strategic coastal management plan will be prioritising the allocation of state government funding for coastal management. I am advised that in January 2016 the chief executive of the department wrote to all coastal councils inviting them to identify potential coastal liabilities for consideration as part of developing that plan.

I am advised that as of 12 July, 13 councils have responded to this request. It is important to note that the 10-year coastal management plan will not be a wish list of council projects, rather it is designed to help in identifying what will be required over the next 10 years to assist the state in identifying priority areas. All projects will be assessed against a strategic framework. This will ensure that the prioritised projects are those that provide the best long-term outcome for the South Australian community. This is, of course, against the backdrop of climate change and rising sea levels, which we will be facing over the next 30 years.

In some cases this may mean the department works with the councils to examine alternatives to a nominated project. For example, prior to investing in the construction of a seawall to address coastal hazards at a given location it may be appropriate to undertake a more strategic project that considers the costs and benefits of all adaptation options for the affected community. I am advised that the department is continuing to actively engage with coastal councils and the Local Government Association. Other stakeholders consulted include the Department for Planning, Transport and Infrastructure, natural resource management boards and the South Australian Fire and Emergency Services Commission.

This work is ongoing. It is being prepared using existing departmental resources. Once that work is done I will then go to the Treasurer and ask for some more money, but you do not put the cart before the horse and you do not go with a half-baked plan to the Treasurer because he will only send you back to do that work first.

**Mr WHETSTONE:** So the high-risk, unfunded coastal issues are obviously of concern. They have tallies of between \$20 million and \$30 million and you have talked about a number of initiatives, so when will you write to the Treasurer?

**The Hon. I.K. HUNTER:** When we have developed the plan. I just answered the question.

**Mr WHETSTONE:** Yes.

**The Hon. I.K. HUNTER:** You may want to go back and read *Hansard* afterwards to enlighten yourself on a process, but being in opposition so long you may not understand how it works—

**The CHAIR:** Steady on.

**The Hon. I.K. HUNTER:** —but, frankly, if you want to try to maximise your position with Treasury and the Treasurer you come armed with the best case you can possibly have. You just do not put your hand out and say, 'How about it?' That is what we are doing. We are developing a plan. We are developing a long-term, 10-year plan, in conjunction with our stakeholders, the local government and other players, and then we will approach the government for money in a budgetary process, as is the right way to do it.

**The Hon. P. CAICA:** My question refers to Budget Paper 4, Volume 2, page 153—and the minister mentioned this in his opening statement but just for some further information—will the minister outline for the committee the benefits that the Adelaide International Bird Sanctuary, through the creation of a national park, will deliver for the people of the Northern Adelaide Plains, as well as South Australians more broadly?

**The Hon. I.K. HUNTER:** Another exceptionally insightful question from the member for Colton, and I thank him for that. Throughout 2015-16 we have continued to progress a range of initiatives to encourage greater numbers of South Australians and tourists into our national parks.

These initiatives have resulted in an unprecedented level of engagement and partnership with local communities. A great example is the Adelaide International Bird Sanctuary stretching 60 kilometres north of Adelaide. We are investing \$1.7 million over four years to establish the bird sanctuary, including the creation of a new national park.

This will not only protect the vital habitat for migratory shorebirds but also create a wonderful leisure and tourism asset on the fringes of the Northern Adelaide Plains. This will generate economic growth for the region. It will create opportunities for local councils and community groups, and we also envisage that the bird sanctuary will create job opportunities for the local Aboriginal community.

A key factor in the bird sanctuary's success has been the involvement of the local community from the very beginning. This engagement has been led by a leadership group called The Collective, made up of representatives from key groups involved with and impacted by the sanctuary's development. The members of The Collective have been working to develop a vision for the sanctuary including clear goals covering safeguarding the sanctuary, creating opportunities for building the local economy, enhancing wellbeing through participation and engagement and expanding the impact across the East Asian-Australasian Flyway.

Throughout 2015-16, a number of highly successful events were held to raise awareness of, and involvement in, the bird sanctuary. We held Australia's first and only shorebird festival, the Adelaide Flyway Festival, and I am advised that it attracted over 2½ thousand people. It was great to see the participation of local food vendors, community groups, councils, Aboriginal artisans and storytellers, tourism operators and even local market gardeners.

In August 2015, we held a two-day ecology summit for the bird sanctuary. The summit was attended by over 250 people, including interstate visitors. In addition, over 65 local meetings, community conversations and presentations have been held over the last financial year for interested stakeholders, such as the Vietnamese farmers and the Kurna people. These meetings have been highly useful in generating interesting ideas about involving these communities in the bird sanctuary. Some are already being implemented, such as mapping Kurna language and cultural heritage throughout that sanctuary. We know that cultural tourism is a big driver for our tourism economy. People particularly travelling from overseas want to engage with our cultural tourism as part of a package, and this will be a big part of the sanctuary.

The state government is committing \$526,000 in 2016-17 towards proclaiming and managing the national park for the bird sanctuary, on-ground works and ongoing community and stakeholder engagements. The Adelaide International Bird Sanctuary is a successful example of combining robust science and data with genuine stakeholder engagement to create public value. I look forward to seeing how the bird sanctuary and the local communities transform the northern plains of Adelaide, and I am very pleased that the local councils are working with us very closely and that they find this a very exciting project for the north.

**Mr WHETSTONE:** Back to Budget Paper 4, Volume 2, page 184, minister, has DEWNR reassessed the damage from recent storms? You mentioned the cost of sand pumping and sand relocation, but what was the cost of sand loss in these recent winter storms?

**The Hon. I.K. HUNTER:** It is important to understand that the sand is designed to be lost. It is important to understand that the beach is an incredibly dynamic coastal system, with winter storms every year taking sand off the beaches and then, during the summer, there being a natural drift of sand northwards up the beaches. We find, however, that we do have to replenish the sand because, over the many years of Adelaide's development, we have actually built on top of the natural dune system that is in place to absorb the wave energy. It is washed away and then replenished.

Because we have built on it, we now need to interfere more thoroughly, at cost to the community, by replenishing that sand as I outlined earlier. That is part of the natural environment: sand will be lost every winter. The sand is replenished naturally through northern drift and also through our intervention through trucking and sand pumping. That is the cost to the community from our development, I suppose, on the sand dune systems historically in Adelaide over the last 100 years. So the costs are what I outlined earlier: the cost of pumping and the cost of replenishment. The natural loss of sand is part of that environment. We interfere in that by building on it. We now

need to replenish it. That comes at a cost to the community, and I think the community is very prepared to pay for it for the amenity of those local beaches.

**Mr WHETSTONE:** Minister, can you give me an estimate of the cost? It was not an annual event. It was not just another sand-blowing event or a storm event: it was a major storm that had a major impact on the beaches and the dunes and the coastline.

**The Hon. I.K. HUNTER:** Absolutely.

**Mr WHETSTONE:** It is a simple question with a simple answer.

**The Hon. I.K. HUNTER:** Well, it is not a simple question, and your questioning shows a total lack of understanding of the natural ecology of beaches. By way of comparison, a less severe storm in 1953, I am advised, caused over £1 million worth of damage on the Adelaide Coast (that is about \$33.6 million in 2015 dollars). That is what happened in 1953, causing much more damage to our coastal system than what we experienced this year, and that shows what we have learned over those many years about how to manage the coastal system. We had far less damage this year because we are managing the coastal dune erosion, sand erosion and replenishment in a much more effective way. That is why the costs are going to be annualised through sand pumping and sand carting. We will continue to do that to provide amenity to the state.

**Mr WHETSTONE:** Minister, you might have been around in 1953, but I am asking about what happened this year.

**The Hon. I.K. HUNTER:** Well, you have to understand the history of the place, otherwise you do not get to have good policy. Again, you have not been in government, so you do not understand the complexity of the systems. What you need to do is work with the experts in the field, the scientists, the people who have studied the systems over many years, and take their advice. That is how we have developed the Adelaide Living Beaches strategy in the past and that is how we will continue to develop that strategy into the future. We will continue to fund sand pumping and sand carting. We will continue to investigate options into the future, particularly working with local councils, to actually maximise the amenity of the area, but we know that this will have to continue ad infinitum into the future because we have already interfered with the natural dunal system.

The dunes are designed to absorb wave energy and be eroded and then they are replenished. That is what the dunes are there for. We have built on those dunes now, and now we have to interfere and place sand in front of them which we know will be eroded every winter during storms. Some years the storms are worse than others; some years will be more sand-eroded than others. We have to work with that system and replenish those beaches. That will be an ongoing cost to the community, but I believe the community wants us to pay that cost so they can have the amenity of those beaches.

**Mr WHETSTONE:** So you have not assessed the damage, then, and the cost of the damage this year, obviously. Moving on to additional fire prevention funding, I refer to Budget Paper 4, Volume 2, page 168, Sub-program 3.2: Mitigate Impacts of Bushfires, and Budget Paper 5, Budget Measures Statement, pages 42 and 43. Do the burning programs include fire-reduction programs on crown land or just in national parks?

**The Hon. I.K. HUNTER:** It includes all crown lands in general, but also lands that are held through an arrangement with Forestry and SA Water.

**Mr WHETSTONE:** Does that include road verges and transport department lands?

**The Hon. I.K. HUNTER:** Not as part of our program.

**Mr WHETSTONE:** Budget Paper 5, under budget measures, on page 42, includes a dot point: 'increasing...on-ground works [programs] of bushfire mitigation strategies...on both public and private property.' What private property does DEWNR anticipate it will need to burn off?

**The Hon. I.K. HUNTER:** We have already established a trial program in the Adelaide Hills, working with willing landowners. The important thing about fire is that, of course, it does not respect ownership and it does not respect land tenure. What we have been working towards for some time now is a program where we can actually burn based on risk. The risk is tenure-blind, so we will risk

assess the area and then we need to approach private landowners and ask them whether they are prepared to be part of this program and we can then help them burn off on their land.

We have done a trial up in the Adelaide Mount Lofty Ranges. I am advised that we have done some work already associated with private landowners whose land is associated with or next to national parks or SA Water land or Forestry land—willing partners in this process. The results have been good and we think it is timely now to roll it out more broadly.

**Mr WHETSTONE:** It is anticipated that this will be carried out through the employment of two specialist fire officers with operating support at a cost of \$900,000 per annum, which is an ongoing cost. What do you anticipate the shared cost will be with private landowners?

**The Hon. I.K. HUNTER:** At this point in time, we are not expecting any shared cost for private landowners. We are approaching them to be part of the process. We will run the process.

**Mr WHETSTONE:** And there will be no cost to private landowners?

**The Hon. I.K. HUNTER:** Not at this stage, no.

**Mr WHETSTONE:** First time for everything. Moving on to parks and park management, I refer to Budget Paper 4, Volume 2, Program 3: Parks and Public Assets. How many park rangers are currently employed across all South Australian reserves?

**The Hon. I.K. HUNTER:** I think last time I was asked this question in estimates, my answer was 88. I now remember that we have employed an extra five last year, so that takes us up to 93, I am advised.

**Mr WHETSTONE:** How much is spent annually on managing feral pest infestations such as olives and blackberries?

**The Hon. I.K. HUNTER:** It is probably very difficult to give you an answer in terms of blackberries and olives. The pest management is done across so many programs in DEWNR. It is done across our fire management programs, it is done across our specific targeting of pest plants and animals and it is done through NRM. It is also done with commonwealth money, in some instances. So it is very hard to give you a specific breakdown for olives and blackberries, I am afraid. If you want a total, I can come back to you with a rough approximation of how much of our departmental effort is put into this, but it is across so many of our programs. There is no one specific line that I can give you that says, 'This much is spent on olive removal and this much is on blackberries.' I could not do that.

**Mr WHETSTONE:** Certainly. I would appreciate it if you could give us a total.

**The Hon. I.K. HUNTER:** We will give you an in total approximation.

**Mr WHETSTONE:** Can that be broken down to both pest fauna and also things that are living? Does that come into the program? Feral pests, not just fauna?

**The Hon. I.K. HUNTER:** I will do my best. I am not quite sure whether I can, but we will have a look at the data and see how much we can break it down for you.

**Mr WHETSTONE:** Obviously, there is a cost for goat programs and wild animal programs as part of managing—

**The Hon. I.K. HUNTER:** There will be some programs that are targeted specifically, but that will not be the total picture. I know that, just through going up to Mount Lofty and Belair after the fire, our fire efforts were to address the fire, but we also utilised that experience to address some blackberry issues at the same time. How I divide that out through a program, I just do not know. Across so many of the DEWNR programs, we target pests. Some of them are ferals, of course, and some of them are not, but we target them across many programs and to try to break it down for you exactly like that is going to be very hard. I will try to give you an in total approximation and I will try to break it down on the data that we have available.

**Mr WHETSTONE:** Minister, when you refer to 'some pests are feral and some are not', what do you regard as a feral pest and what do you regard as just—

**The Hon. I.K. HUNTER:** The very clear ones are, of course, wild dogs and dingoes above the fence. They are not pests. They are not feral. They are protected. They are a native animal, but they are not feral; however, south of the fence, they are treated differently. We have a program across the whole state and we have to keep that in mind as well.

**Mr WHETSTONE:** I am moving on to recreational fishing, Budget Paper 4, Volume 2, page 166, in Highlights. Obviously, we have heard a lot of hoo-ha about the ongoing development of artificial reefs and the trial.

**The Hon. I.K. HUNTER:** It is \$600,000.

**Mr WHETSTONE:** Yes. When will that artificial reef trial be completed and when will we know whether it is a viable option for ongoing support?

**The Hon. I.K. HUNTER:** Let me give you some background about how exciting this is. The recent research has estimated that native shellfish reefs in South Australia have been lost across more than 1,500 kilometres of our coast. To support the restoration of our native shellfish reefs, \$600,000 of funding was allocated for a trial artificial reef. Primary Industries and Regions is leading the project, in partnership with the Department of Environment, Water and Natural Resources, so for an acute response you should refer that to minister Bignell, but I will give you some more advice.

This is being coordinated through an independently chaired working group including PIRSA, DEWNR, Department of Planning, Transport and Infrastructure, the EPA, South Australian Research and Development Institute, South Australian Tourism Commission, RecFish SA, University of Adelaide and The Nature Conservancy. We are bringing together many players.

With input from two rounds of community consultation, online surveys and stakeholder meetings, the location of the trial was selected at Rogues Point, located seven kilometres south of Ardrossan, I am advised. We are now working with the communities. We are scoping out the likely structure of the reef. It will be a various chain of three-dimensional cement constructions. Some of them will be balls and some of them will be different heights to try to encourage a stratum. Some of them will be pre-seeded, and some will not be, with spat.

We are also talking to non-government philanthropic organisations about how they might want to piggyback on the back of this and spend some of their own money to increase the size of the reef. That is just a heads-up. We have not had any confirmed partnerships yet, but it is very exciting. There are places around Australia where this has been done, but not to this size. I think Western Australia and also Victoria have had reefs like this put in place, but, most importantly, I think off New York, where they have really reseeded a large number of beds in the Hudson River with native shellfish.

The benefits to the waters and the gulf are incredible. They are our water filtration devices. They supply a substrate for which weeds and other life will grow and they will build up the biodiversity of regions, supplying a much better outcome for the gulf. Of course, there will be an area, we hope, for breeding recreational fishing species as well, but more than that, it will be a natural filtration system that used to be in the gulf and is a long-time gone and we hope to start to bring it back.

**Mr WHETSTONE:** I guess we will not get into the reason for the disappearance of those natural phenomena.

**The Hon. I.K. HUNTER:** They were fished. They were fished out, is my advice.

**Mr WHETSTONE:** So there is no responsibility for any of the urban run-off?

**The Hon. I.K. HUNTER:** No. The member for Colton might like to say something about this. The area that we are talking about is right up the gulf and so the urban run-off, whilst it impacted immediately here off the metropolitan area over the last 100 years or so, it has been reducing, of course, in recent years. We can talk about that in another part of the afternoon. Indeed, I am advised, the oyster reefs were just fished out.

**Mr WHETSTONE:** Treated wastewater, do you think might have had an impact?

**The Hon. I.K. HUNTER:** Not to my advice. It might have had some small impact. The reefs were large, they were right across the gulf and they disappeared because they were taken and eaten.

**Mr WHETSTONE:** Minister, also, are there any other projects that the government has for the recreational fishing sector in 2016-17?

**The Hon. I.K. HUNTER:** We all know, and the member for Colton certainly knows, that fishing is a favourite pastime for many South Australians, and we as a government understand this. We have committed \$3.25 million over three years, starting in 2014-15, to help increase opportunities for recreational fishing, including \$750,000 per year for three years for the recreational fishing grants program. We have mentioned the \$600,000 for an artificial reef trial, and \$200,000 per year for two years to provide fishing access for up to five off-line reservoirs across the state.

The government has created a grants program to support recreational fishing experiences, which will help to create economic opportunities for local communities and support regional growth. The South Australian recreational fishing community has embraced the grant programs, submitting 82 applications, worth over \$1.3 million, in the first round, I am advised. Following assessment, 48 projects, worth nearly \$750,000, received support, including recreational fishing infrastructure projects, fish stocking and habitat enhancement projects, as well as education projects, such as successful Come and Try Fishing days.

This investment in Come and Try Fishing days included 10 projects worth \$115,920 for over 30 family fishing days across the state. The projects received funding for over 30 family fishing days from St Kilda to Brighton, Port Lincoln, Port Broughton, Port Noarlunga, Aldinga, Rapid Bay, Limestone Coast and Hardwicke Bay. On average, I am told, 100 to 200 people attended each event. I am advised that people with disabilities and the disadvantaged Indigenous communities were well represented.

The second call for applications closed on 14 March 2016, with over \$2 million in project applications. Applications are currently being assessed, I am advised, and we hope to make an announcement of successful applicants later in the year. The completed projects will directly benefit recreational fishing in and around South Australia's 19 marine parks, increasing the number of people fishing, and in particular young people, whilst improving sustainable recreational fishing practices in this state.

**Mr WHETSTONE:** Minister, I move on to nature-based tourism: Budget Paper 4, Volume 2, Program 3, Parks and Public Assets. It refers to the continued delivery of wilderness trails, working in partnership with the industry to develop accommodation facilities. Can you elaborate on what parks will have accommodation available?

**The Hon. I.K. HUNTER:** I think I mentioned in my opening statement, Mr Chair, that the KI Wilderness Trail was one of our first priorities. Of course, there is accommodation on KI already, but we expect the trail will increase visitation to the island, and we are hoping to engage with the private sector to supply some of the services that trail users would like, at various levels—some will be pretty basic—and we are building at the end of the trail, the day trails, some camping sites. We expect the private sector will be able to avail itself of the increased visitation to provide more unique opportunities: perhaps pick-up and drop-off services; perhaps dropping off some rather fancy dinners, for example, and picnic baskets, a bottle of champagne perhaps for those who are so minded or some fruit juice for the others.

Really, we are opening ourselves up to the private sector to become involved and show them, 'Here is an asset; this is going to attract a lot more visitation to the island. They will need increased accommodation, at various levels, and what will you, the private sector, be able to work with us on to provide that?' So, KI and the walking trails in Flinders Chase are one of our key priorities, and of course as we assess that going forward, the other area that we would like to see a big increase in—but this will take some time—is up at Cleland, 25 minutes up the street from Adelaide.

We think if we can drive the koala centre of excellence to great heights, if we can drive the visitor experience at Cleland as being the place in Australia to come to in order to get up close and in contact with koalas, there will be increasing tourism interests. We know, for example, there are a huge number of people that go through Ocean Park in Hong Kong—I think there is something like 15,000 people a day going through the South Australian exhibit. The koalas there are all branded with—well, not branded directly—a lot of South Australian identity. The handlers all wear Cleland uniforms, and I am advised that as you wait in the queue there is a big five or 10-minute commercial

about South Australia. That is only going to drive and pique people's interest in coming to the South Australian state.

So we think there may be facilities needed up closer to Cleland, and we hope the private sector will avail themselves of those opportunities. For us, working on nature-based tourism, driving the inbound tourism, but the private sector will need to respond in terms of investment for accommodation of other services.

**Mr WHETSTONE:** Going on with the nature-based tourism, one of the 2015-16 highlights, talking about the Adelaide Gaol: when was the last audit or assessment done regarding work required to ensure the integrity of the gaol, noting that it is in very poor condition?

**The Hon. I.K. HUNTER:** It was in excellent condition when I was there for the blues festival. My advice is that there is an annual risk assessment for the site that is done in terms of the safety of the site to have visitation there, and for the workers, of course, on site. As to a more historic structural integrity or investigation of the building itself, I am not aware of any recent inquiry. As I say, the department is required to do an annual site assessment in terms of safety for visitation. As I say, it was in great nick for the blues festival. If you did not get there this year, you should come, it was fantastic. I think it is the biggest blues festival in Australia, bigger than in Darwin.

**Ms PITCHER:** Biggest we have ever had, in South Australia.

**The Hon. I.K. HUNTER:** No, let's punt—the biggest in the world is our ambition. No, certainly the biggest in South Australia, and we intend to grow it, year on year.

*Members interjecting:*

**The Hon. I.K. HUNTER:** Just goes to show how much pressure the Liberal opposition is putting me under today!

**The Hon. S.W. KEY:** My question is to do with nature-based tourism—and the member for Chaffey has already talked about the combination issue in Adelaide Gaol—and has the same reference, page 166, Budget Paper 4, point 3, Parks and Public Assets. Minister, could you talk to us about this industry? I was very pleased to represent you recently at a function that was looking at a relationship with China. I am just wondering how many jobs we figure will be created by working in this area?

**The Hon. I.K. HUNTER:** I thank the honourable member for Ashford for this very important question, and, of course, jobs is a key focus for the government. I think this has been a real change in thinking, from thinking of our national parks as assets that we need to lock up and protect to one where we can see them as being a huge resource for our state in terms of encouraging people into those national parks. There are two great reasons for it. One is, of course, increasing visitation means increasing economic uplift, particularly for regional communities. That is very important in job creation. The other thing is that having more people come into your parks and appreciate them means that more people will go away wanting to value them and see them protected in the future. So it really is a different way of looking at what the agency has been doing all along in terms of protecting our fantastic natural assets.

Seeing them as a big tourism driver, I guess there has not been real recognition—right across the state, really, and certainly across many people—that, in fact, these natural assets are not a drain on our community. They are actually a big driver for our community. They are, as I say, a big contributor to the economy; tourism is a big sector for our state, contributing about \$5.3 million to the economy, I am advised. I am told also that there are about 17,000 tourism businesses operating in the South Australian tourism industry, directly employing 32,000 South Australians. Our tourism sector relies heavily on the appeal of our state's unique natural attractions, most of them located in regional areas, and this is why around 44 per cent, I am advised, of tourism expenditure flows directly into regional communities.

Nature-based tourism supports thousands of our tourism sector jobs and brings \$1.1 billion into the state each year, and we believe there is strong potential to grow this further. We have talked about Kangaroo Island; also, the Eyre Peninsula and the Flinders Ranges have untapped appeal,

we think, for international tourism markets. To capitalise on this opportunity the state government has developed this new nature-based tourism strategy, to which we referred earlier.

It really aims—and this is the ambition—to create 1,000 new jobs and inject another \$350 million per annum into the state economy by 2020. An amount of \$25 million has been allocated to nature-based tourism projects, and projects that will help stimulate nature-based tourism. This includes the \$5.8 million we mentioned earlier for the Kangaroo Island Wilderness Trail. When it opens in October later this year—and you can make bookings now (in fact, I encourage you to make bookings now, because you do it online these days, and they are filling up)—the trail will provide a new internationally-competitive, multi-day walking experience along the south-west coast of KI. KI is our iconic tourism drawcard for this state, so enhancing the assets on Kangaroo Island is a big, important investment in driving tourism inbound.

It will help put South Australia on the international radar and will provide a major boost for Kangaroo Island. A report, I am advised, prepared by KPMG has estimated that the trail will contribute about \$4.4 million in total visitor expenditure per annum by 2020 (I think that is total visitor expenditure by 2020 and not per annum—I will have that corrected if that is wrong). It is also expected to generate 27 new jobs on KI and about 50 jobs elsewhere in the state. In addition, the project will stimulate investment on Kangaroo Island by providing opportunities for businesses to invest in eco-sensitive accommodation along the trail.

As we talked about earlier, businesses will benefit if they can take advantage of increased demand in transport services, for example, guided tours, obviously, and, of course, hospitality. Shark cage diving: the Neptune Islands Marine Park is another example of a unique and environmentally sustainable, nature-based tourism opportunity for our state. It attracts, as I said earlier, over 9,000 people per annum to the Eyre Peninsula, contributes over \$11 million to the state's economy and supports roughly 70 jobs, I am advised. The shark cage diving industry is growing at a rate of 10 per cent year on year, and the state government is working with operators to transition to a 10-year licence in order to provide that certainty that operators need to invest in their business.

This will attract more people towards Port Lincoln, which in turn will have significant flow-on benefits to other local businesses in the area. These are just two examples of the enormous potential we have in South Australia. We are also wanting to have the fantastic fossil sites up in the north of our state—the Ediacaran fossils, for example, around the Flinders Ranges—further protected. We think we might be able to drive a unique opportunity there with the focus by NASA, of all places, on those fossil beds. There is an amazing scientific investment by that NASA in those areas, and we think we can work with that to try to drive investment and further tourism expenditure and in-bound tourism around fossils.

So, it is not something you would automatically think of as being a big drawcard, but geological tourism, I am advised, is a growing business if we can package up some of the great geological offerings we have across this state. We have great fossil offerings on Kangaroo Island, fossils of course down at Naracoorte Cave, fossils in the Far West coast (although you have to be rather experienced to see most of those if you are going down caving), but also the fossils up at Flinders, which are very accessible. There are only about three places in the world where you can see these early, early fossils, which show the first signs of our ambulant activity, the first signs of sex—the first signs of many things—and most of them are just impossible to get to out in Siberia or Alaska, but here they are accessible and easy to get to. If we protect them and promote them properly they could be another big tourism driver for us, driving jobs in rural and regional communities.

#### **Membership:**

Mr Knoll substituted for Mr Duluk.

**Mr WHETSTONE:** Minister, I note your aspirational target of 1,000 jobs, so we will look with interest as that goes on.

**The Hon. I.K. HUNTER:** You can test us in estimates in 2020.



**Mr WHETSTONE:** I just want to follow on with the Ediacaran fossil site, in Budget Paper 4, Volume 2, page 165. It refers to the \$1.8 million expenditure to protect the Ediacaran fossil site in the Flinders Ranges. Minister, you have just elaborated on it. Can you rule out any of these fossils having been sold on the black market, and is DEWNR attempting to prosecute anyone for that offence?

**The Hon. I.K. HUNTER:** Not at all. In fact, I have been advised that they have been sold on the black market over many, many years. If you go to the Museum up on North Terrace, you will find a big fossil—I think it is *Dickinsonia rex*, from memory—which has been retrieved from the black market and reinstated on the Museum site. Fossil theft has been an ongoing problem in fossil beds right around the world.

We, as the owners, as a state, think this is an incredibly important fossil site. We need to protect it, and that is what the investment is there for. We do have an active program, I am advised, for tracking down black markets in fossils, and the success is the big fossil you will see at the Museum that is on display. It is a great story, and I encourage you to go and see it.

**Mr WHETSTONE:** Are you attempting to prosecute anyone for fossil theft, as we speak?

**The Hon. I.K. HUNTER:** My advice is that the Australian Federal Police and the commonwealth are the responsible agencies in that regard but we, of course, assist them. Any tip-offs from the community or the public are very welcome. In fact, the tip-offs usually give us the information that we need to track these down.

**Mr WHETSTONE:** So, can you answer that question?

**The CHAIR:** He just did, member for Chaffey.

**Mr WHETSTONE:** Are you attempting to prosecute anyone—

**The Hon. I.K. HUNTER:** I am advised—

**The CHAIR:** The commonwealth prosecutes.

**The Hon. I.K. HUNTER:** That is what I said at the beginning of the question.

**Mr WHETSTONE:** Is the commonwealth government attempting to prosecute anyone for fossil theft, as we speak?

**The Hon. I.K. HUNTER:** I do not know that. It is not in my budget line.

**The CHAIR:** That's right.

**Mr WHETSTONE:** So, you are not going to answer that.

**The CHAIR:** The minister has no reason to know that, so next question.

**The Hon. I.K. HUNTER:** We are here today to examine the budget papers. If you want to draw me out in that question in question time in the chamber—

**The CHAIR:** I am happy if you want to speculate for the next 20 minutes on the nature of the commonwealth prosecutions.

**The Hon. I.K. HUNTER:** —that is the appropriate place to do it, but I would have thought today was for the examination of the budget papers.

**Mr PEDERICK:** My question is in relation to Budget Paper 4, Volume 2, page 156, Sub-program 1.3, which involves animal welfare. I understand that sub-program 1.3 has been established to ensure the humane treatment of animals. Can the minister advise how this program is acknowledging and ensuring the humane treatment of the Ngarrindjeri's totems and other native bird life in the Coorong and Lakes, who are being pointlessly killed by the New Zealand fur seals?

**The Hon. I.K. HUNTER:** I just need to correct the questioner. The New Zealand fur seals he refers to are now called long-nosed fur seals. The New Zealand fur seals are long-nosed fur seals. They have been here for about 100,000 years, I am advised by our scientists. The Australian fur seals, on the other hand, seem to be an itinerant group of South African fur seals who have come

over in the last 10,000 years. So, the long-nosed fur seals, or New Zealand fur seals, are the original seals, I am advised, going back that far.

**Mr PEDERICK:** And what are you doing about the pointless death of Ngarrindjeri totems and other native bird life along the Coorong and Lakes by these fur seals? That was the question.

**The Hon. I.K. HUNTER:** My advice is that the agency has set up cameras and had volunteers monitor the pelican rookeries, for example, down in the Coorong. They have gone over 70 hours of filming time, checked it, and have seen absolutely no evidence of attacks on pelicans by long-nosed fur seals or any seals at all. So, we have gone to great lengths to monitor these colonies and to see if there are any interactions which need to be moderated, and my advice is there have been none that have been recorded on over 70 hours of monitoring from the CCTV recordings, or indeed seen by any of our staff, that I have been made aware of.

**Mr PEDERICK:** So, aside from the colonies and right across the length of the barrages, the Coorong and the Lakes, DEWNR staff would have to be the only people who have not sighted any dead musk ducks, fairy terns or pelicans—not one.

*The Hon. P. Caica interjecting:*

**Mr PEDERICK:** I'm asking the question.

**The Hon. P. CAICA:** Well, make it a good one.

**Mr PEDERICK:** Yes, well, he cannot answer it. Why don't you have a go, Paul? Have a look down there, mate. Ask Tammy Franks.

**The CHAIR:** Order! It is early days yet, member for Hammond.

**The Hon. I.K. HUNTER:** My advice is this: yes, you may see corpses of animals around the place. They are not infrequent in nature, things do die, but there has been no evidence that we have been able to ascertain that they have been caused by anything other than feral animals—cats, dogs, foxes, for example. SARDI, apparently, has checked seal scats and has found absolutely no evidence in those seal scats of any seabirds or sea creatures in their diet other than the fish that form a normal part of their diet. While you speculate, anecdotally, on seeing a corpse lying around, there is no evidence that I have available to me that the seals have been eating ducks or pelicans, and the scats checked through SARDI have confirmed that.

Here you are speculating, on your great scientific background, about seals rampaging through these places killing all sorts of animals, and you are not even thinking that other species, like foxes, cats or feral dogs, could be taking any of these species and eating them and leaving corpses. You just have this one view that the seals are the things that are killing them, with no evidence whatsoever, Adrian. You have no evidence whatsoever, no scientific evidence at all, and you are maintaining this line of inquiry without even thinking that maybe something else is actually doing this. Maybe something else, like a fox; maybe something else, like a feral cat. Where is your scientific information about that? Whereas I can tell you that SARDI has told me that they have checked the scats of seals and there is no evidence of pelicans or ducks as part of their diet in those scats.

**Mr PEDERICK:** Just like they do not find any evidence of little penguins which have been destroyed. Your department, from you down, has the Sergeant Schultz approach with regard to what impact these seals are having—

**The CHAIR:** The member for Hammond, there are no cameras here.

**Mr PEDERICK:** No, I don't care.

**The CHAIR:** The minister has answered the question.

**Mr PEDERICK:** I don't care. If he can make a point, I am going to make a point. I have communities that see these effects—

**The CHAIR:** Yes, but you are here to ask questions.

**The Hon. I.K. HUNTER:** Clearly, he does not care either.

**Mr PEDERICK:** —and yet—

**The CHAIR:** Order! Do you have another question, member for Hammond?

**The Hon. I.K. HUNTER:** This is the man who makes assertions with no evidence at all.

**The CHAIR:** No, minister, don't provoke the member for Hammond.

**Mr PEDERICK:** This is the department that uses the Sergeant Schultz approach, yet these communities and the Ngarrindjeri, whom I know the minister meets with, say these same things. Let him talk to the Ngarrindjeri and let him see when he gets round this approach whether they just want to have their heads in the sand.

**The CHAIR:** Do you have another question?

**Mr PEDERICK:** I will go to another question if I can, sir—

**The CHAIR:** Excellent, I would appreciate that.

**Mr PEDERICK:** —animal welfare, the same budget point. What are the next steps the government is taking to implement reforms following the passage of the Dog and Cat Management (Miscellaneous) Amendment Bill?

**The Hon. I.K. HUNTER:** My advice is that we are in the process of developing regs. That, of course, means we need to go out to stakeholders and consult on those, and then the education programs, which will be driven through largely the Dog and Cat Management Board. We will be working in consultation with them and, of course, local government, which are major stakeholders for this policy reform.

**The Hon. S.W. KEY:** My question refers to Budget Paper 4, Volume 4, Program 1: Agriculture, Food and Fisheries, Subprogram 1.6: Biosecurity, pages 25 to 27. I am interested to know what strategies the state government is employing with regard to wild dogs, to protect our livestock industry? The member for Chaffey has actually talked about this with pest control and management, but I am interested in the connection in the livestock industry.

**The Hon. I.K. HUNTER:** Fantastic question, Chair. Thank you very much, member for Ashford. The government takes the matter of wild dog management very seriously. Considerable investments are made in managing our wild dog populations. The best solution for wild dogs in the region is a long-term strategic approach that requires long-term federal funding arrangements with the state. That advice has come to me directly from the chair of the SAAL NRM board. Although short-term approaches to wild dog management are effective for that short period of time, I am advised, for example, in terms of the dogger, that it is incredibly expensive and does not leave you with any long-term improvement in the area.

I am advised that the SAAL board believes that the most successful arrangement for wild dog management comprises both service delivery and compliance and best practice activities in the communities. Wild dogs, including dingoes, have increased significantly in the area south of the dog fence in recent years, I am advised, which threatens our state's sheep industry. The dog fence, along with other associated measures, plays a vital role in both protecting this important industry and controlling other adverse effects of increased numbers of wild dogs.

The dog fence remains in effective working condition and is subject to continual improvement. The \$1.04 million annual budget has been significantly accelerated into 2015-16 through an additional \$400,000 investment of Australian government drought assistance funding from mesh netting along 90 kilometres of fence in the Lake Frome and Marree regions. Investment in wild dog management also remains a high profile issue for the South Australian Arid Lands Natural Resources Management Board. Indeed, the SAAL board has led initiatives to improve wild dog control in pastoral areas. The SAAL Biteback program is focused on wild dogs inside the dog fence.

The program is supported by the sheep industry and SAAL NRM and is boosted through additional Australian government funding from time to time, such as drought assistance programs. For example, \$400,000 in temporary drought assistance funding from the Australia government was used to trial a dog trapper service and a second Biteback officer during 2015-16. The 2016-17 consolidated available resources will enable the continuation of two Biteback officers working one on

one with landowners, additional bait supply services inside and outside of the dog fence, and trapper training workshops for the development of landholder capacity and skills.

Landholders can continue to engage a dog trapper at their own expense, with many also now trained in trapping themselves. As committee members will appreciate, we are talking about a very large area of the state involving very many stakeholders, and this means that good and effective collaboration is essential in an effective strategy. Many of these initiatives have arisen as a result of improved communication and coordination. For example, SAAL wild dog control staff work very closely with 22 local wild dog planning groups south of the dog fence to tackle wild dogs on a local scale.

The sense of collaboration has increased since the South Australian Wild Dog Advisory Group (SAWDAG) was established in 2013. SAWDAG has provided recommendations for priority action for South Australia as part of the state's implementation of the National Wild Dog Action Plan. Representatives from industry, natural resources management boards, the Dog Fence Board, biodiversity conservation, Aboriginal communities and government sit on the advisory board, chaired by Mr Geoff Power, a highly respected figure in the Australian wool industry and President of Livestock SA.

The group is close to finalising a state wild dog strategic plan which has been developed through extensive consultation with pastoral, conservation, Aboriginal and government stakeholders. Controlling wild dog populations and protecting our livestock industries is an important national challenge and we must ensure that we are using all the tools that are available for us to succeed in this, and having landholders, particularly south of the fence, working together as a community doing baiting on their land is a prerequisite to having a good long-term community-wide strategy.

**Mr PEDERICK:** My next question is to do with marine parks, Budget Paper 4, Volume 2, Program 3: Parks and Public Assets, page 167, Activity indicators. How many expiations, fines or prosecutions have resulted from compliance?

**The Hon. I.K. HUNTER:** I can offer this advice to the committee but bear in mind that we are in the very early stages and we are focusing still on education. Most people in the community want to do the right thing and they need to be given the knowledge and the information to make sure that they can and so, in terms of recreational fishers, for example, we are issuing warnings rather than fines and expiations. However, there were a number of incidents related to a historic shipwreck. I can advise that, as of July this year, there have been over 3,000 shore based, 280 vessel and 70 aerial compliance patrols. That has resulted in the issuing of 31 educational letters—again, focusing on our desire to educate the population first—240 formal warnings, six expiations and 23 prosecutions under the Historic Shipwrecks Act 1981.

**Mr PEDERICK:** So there were no expiations involved directly with marine park compliance?

**The Hon. I.K. HUNTER:** I cannot give you that exact information but I can tell you this: reread what I have just said that relates around the Historic Shipwrecks Act 1981. Regarding the activity around a ship, I cannot give you any further information about expiations, other than that there were six expiations and 23 prosecutions under the Historic Shipwrecks Act. The rest were educational letters and formal warnings. So, we are still working with formal warning processes to try to encourage best practice from people. Education, by far, will be our best way forward here, rather than issuing fines straight up.

**Mr PEDERICK:** I understand that, but you do not believe there has been any compliance notices in regard directly to marine parks?

**The Hon. I.K. HUNTER:** I have had no advice about that at this stage. If that changes I will come back to you.

**Mr PEDERICK:** How many patrol vessels are involved out there and how many hours a week do they operate?

**The Hon. I.K. HUNTER:** I do not have that level of detail with me. Of course, the first priority of those patrol vessels across various agencies is not actually expiation or education, but if they see someone doing the wrong thing they may, of course, expiate or warn or educate. I will see if I can dig through the data and come back with a more precise answer for the honourable member.

**Mr PEDERICK:** Those ships are PIRSA vessels essentially, are they?

**The Hon. I.K. HUNTER:** They would be DEWNR vessels, they would be PIRSA vessels and maybe marine and harbors vessels.

**Mr PEDERICK:** So you will come back with more information?

**The Hon. I.K. HUNTER:** Yes, I will see what I can get you.

**Mr PEDERICK:** I want to ask a question in regard to Budget Paper 4, Volume 2, Sub-program 3.3: Management of Public and Listed Assets, page 170, relating to Martindale Hall. What is the status of the two proposals submitted to you regarding Martindale Hall: one to convert it to an accommodation and day spa and one from the National Trust?

**The Hon. I.K. HUNTER:** I can advise the committee—and I will take you through one by one—that, in March 2015, an unsolicited proposal was submitted to the Office of the State Coordinator-General by the Martindale Hall Partnership, not strictly in my area but I will give Adrian some information that I have available anyway. The proposal includes developing a five-star resort and wellness retreat at Martindale Hall involving the surrounding properties, and it includes a number of options around the lease or purchase of the property.

The Unsolicited Proposals Steering Committee assessed the proposal against the stage 1 criteria and the guidelines for assessment of unsolicited proposals and recommended that the proposal should progress to stage 2. Consultation on the proposal concluded on 26 October 2015. It included a number of community information sessions attended by approximately 130 people. It was conducted online via the YourSAy website. The Department of Environment, Water and Natural Resources will shortly provide an assessment of all feedback received by government. I am advised that members of the public expressed interest in relation to ongoing public access and the future management of the hall's contents in particular.

A second unsolicited proposal was received in April 2016 from the National Trust. The National Trust proposes to redevelop the site as a heritage-based tourism attraction, utilising the buildings and the grounds to create a destination celebrating its cultural and agricultural heritage, and it has widely promoted this proposal through the media, I understand. The National Trust proposal is currently being considered for proceeding as a stage 1 submission under the guidelines for assessment of unsolicited proposals.

I am advised that, should the trust proposal be recommended to proceed to stage 2 of the unsolicited proposals process, the government will, on the advice of the Office of the State Coordinator-General, Mr Jim Hallion, consider how to manage the assessment of both the trust's and the partnership's proposals. If either proposal is to proceed, it will of course need to demonstrate that there are clear benefits to the local tourism industry, that members of the public are able to access the site and that heritage values are maintained. Both proposals will be assessed on their merits to achieve the best results for Martindale Hall and for the South Australian community.

**Mr PEDERICK:** Do you have any idea how long it will take to evaluate these proposals before we come up with a final outcome?

**The Hon. I.K. HUNTER:** As I hinted at earlier, this is not in my purview: it is now in the hands of the Coordinator-General, so I cannot answer that question.

**The CHAIR:** As we have reached the end of the agreed time, I declare the examination of the proposed payments be adjourned until later today. Thank you, minister.

*Sitting suspended from 10:30 to 10:45.*

#### **Departmental Advisers:**

Mr T. Circelli, Chief Executive, Environment Protection Authority.

Mr R. Jacka, Chief Financial Officer, Environment Protection Authority.

Mr A. Wood, Executive Director, Operations, Environment Protection Authority.

Mr K. Baldry, Director, Environment Protection Authority.

Mr P. Dolan, Director, Science Assessment and Planning, Environment Protection Authority.

Assoc. Prof. T. Hooker, Principal Radiation Adviser, Environment Protection Authority.

Ms L. Jensen, Ministerial Adviser.

**The CHAIR:** Welcome back, minister. You are now appearing in your capacity as Minister for Sustainability, Environment and Conservation. I declare the proposed payments reopened for examination and I refer members to the Agency Statements, Volume 2. I call on you, minister, to make a statement, if you wish, and to introduce your new advisers.

**The Hon. I.K. HUNTER:** If I could just ask the committee's permission to put on record some answers to questions I was asked a few minutes ago.

**The CHAIR:** Sure.

**The Hon. I.K. HUNTER:** In terms of the Adelaide Gaol, I am advised that the last survey and conservation works were done in 2002. I think that was the member for Hammond's question. The member for Chaffey asked a question about coast protection and this winter. To clarify, I am advised that, following a storm event, staff from the Coast and River Murray Unit of DEWNR undertake inspections after every storm, including liaison with councils.

Periodic surveys of the beaches are also done to assess the state of buffers and beaches and inform management decisions. The board resolved out of session, I am advised, to approve grant funding totalling \$78,250 to the cities of Holdfast Bay and Marion to assist with emergency repairs following the storm. That is a quick follow-up for you two.

Can I introduce the people who are with me today. I have Mr Richard Jacka, on my left, who is Chief Financial Officer of the EPA; Mr Tony Circelli, Chief Executive, EPA; and Peter Dolan, Operations Director, Science Assessment and Planning. Behind me are Andrew Wood, Executive Director, Operations and my Chief of Staff. Behind them are Professor Tony Hooker, Specialist Scientist, Radiation Protection; Lucy, my ministerial adviser; and Keith Baldry.

South Australia's unique natural environment is vital to our state's tourism, premier food and wine and mineral resources and energy sectors and to making South Australia an attractive and healthy place to live and to do business. The prosperity of our state depends on our ability to ensure the sustainable growth of industry without sacrificing our natural environment.

The Environment Protection Authority is South Australia's environment protection regulator. Its overarching aim is to protect, restore and improve the environment through the risk-based regulation of pollution, waste, noise and radiation. The work of the EPA has been nationally recognised and cemented our reputation as a clean, green state.

The 2015-16 financial year has seen significant reform in a number of sectors—for example, the significant reforms in the waste sector that we announced in the state budget. In addition, the Local Nuisance and Litter Control Act 2016, which was proclaimed by His Excellency the Governor in May 2016, will help communities resolve local environmental nuisances more efficiently through their local council. The EPA is working collaboratively with local government to ensure that the legislation is well implemented and delivers on its purpose of providing improved community outcomes relating to local nuisance, litter control and illegal dumping. The act comes into effect in July 2017.

In addition, the EPA is strengthening its focus on working with small and medium enterprises on how the EPA can assist in building capacity and capability in business. An online toolkit for business is also being developed to independently determine whether they require an EPA licence and, in an effort to stimulate discussion and exchange of ideas, the EPA is sharing stories and experience of a number of SMEs in the *EPA Monitor* newsletter.

The EPA is also continuing to build its community engagement capability and protocols for site contamination. It has signed a Working Together Agreement for Site Contamination with SA Health. This will underpin the future management and health-risk assessment of site

contamination for the protection of public health. As a result of receiving \$2 million in the last Mid-Year Budget Review, the EPA has been able to better resource testing and assessment of contaminated areas, as well as increase its community engagement capacity to better provide confidence to the community in dealing with these complex legacy issues.

The EPA has also undertaken its most ambitious IT modernisation project which will help to reform processes by speeding up turnaround times for environmental authorisations, improving functionality and capability, and expanding online forms and payment options. A further area of important reform is water quality. The Environment Protection (Water Quality) Policy 2015 came into effect on 1 January 2016 and provides direction for the management of water quality in South Australian inland surface waters, marine waters and groundwaters.

The 2016-17 financial year will hold many opportunities for the EPA to continue this reform process, including implementing the Local Nuisance and Litter Control Act 2016 and the Dob in a Litterer mobile application, which will allow illegal littering acts to be reported online. We will also continue to develop a regulatory framework to support innovation and investment in the resource recovery sector, while reforming the delivery of scientific services within the EPA. The EPA will continue to engage and assist industry transformation in the Upper Spencer Gulf region, including Nyrstar's transformation project in Port Pirie and Alinta's decommissioning of the power station in Port Augusta. I commend the EPA Board and staff on a very successful year of important reforms.

**The CHAIR:** Thank you, minister. Do you have a statement to open up proceedings, member for Chaffey?

**Mr WHETSTONE:** No, I will proceed with questions, thank you, Chair. Minister, I refer to the solid waste levy, Budget Paper 5, Budget Measures, page 46. How much was in the Waste to Resources Fund as at 30 June 2016?

**The Hon. I.K. HUNTER:** Off the top of my head, I think it was roughly about \$89 million, but I will check for you.

**Mr WHETSTONE:** How much was expended in the 2015-16 year?

**The Hon. I.K. HUNTER:** Whilst my advisers are trying to trawl through the data to give you that, I can say that, since 2003, approximately \$97 million of waste levy funds have been spent on programs and projects to encourage councils, businesses and community to reduce, recover, re-use and recycle waste. These projects, along with associated legislative reform and regulatory effort, have proved incredibly successful and have significantly reduced the amount of waste going directly to landfill and, through these efforts, South Australia has achieved its 2014 State Strategic Plan target of a 25 per cent reduction in waste to landfill since 2002-03 and is now working to meet the target of a 35 per cent reduction by 2020.

**Mr WHETSTONE:** Minister, did you say how much was in the Waste to Resources Fund as at 30 June?

**The Hon. I.K. HUNTER:** I did say off the top of my head that it was about \$89 million. I am advised now it is \$86.8 million.

**Mr WHETSTONE:** How much was expended from that?

**The Hon. I.K. HUNTER:** We are still looking for that. The expenditure on the waste levy is actually best addressed through the Zero Waste agency which has carriage of that. Whilst the levy comes in, the expenditure out, in terms of grant funding to council, goes out through Zero Waste, so we can ask them that question when they come in if you are happy with that. What was expended out of the existing fund is zero. What is expended comes out of the annual levy fund which goes through Zero Waste, so when we come to address Zero Waste's budget items, we can ask that question.

**Mr WHETSTONE:** Why then does the government believe that the solid waste levy needs to be increased so drastically if we look at what has happened since 2003 and we look at what was in the Waste Resources Fund as of 30 June? What is the justification?

**The Hon. I.K. HUNTER:** The justification, Mr Chair, through you, is simply this—we are creating a market for waste. If you do not have a price on waste, the cheapest way of dealing with it is dumping it into landfill. Obviously, that is not something we want to encourage and that is why we, and other states and jurisdictions, have a waste levy—to put a price on waste to encourage a more economic use of that waste, divert it away from landfill and to utilise, re-use or recycle it.

What we have seen from the experience interstate is as you increase the levy, you encourage less into landfill. So, the more you put a price on the waste, the more incentive there is not to dump it into landfill, to find another productive use for that waste, either composting, organic green waste for example, and utilising it for farmers or householders in terms of compost or recycling plastics, paper and metals. If you do not put a price on it, the cheapest way of dealing with it is to dump it into landfill and, of course, if you kept on doing that you would run out of landfill space. It is not environmentally sustainable anyway. What you want to do is create an incentive to recycle.

Now, what we have done, since 2002, with our landfill levy, is actually bring into place a new industry, an industry that is worth over \$1.1 billion I think, or \$1 billion in terms of turnover, about half of that for the gross state product, and it employs about 4,800 people in South Australia. This is because we have put a price on waste, stopping that waste being dumped into landfill and covered over and then trying to find new landfill sites. We are actually recycling. You can only do that by making it economic and that is what it does.

I am advised, in the days since the reforms were announced a leading player in the sector, ResourceCo wrote to the government and said:

I am writing to congratulate you on your government's recent announcement of a progressive increase to the waste levy in South Australia. We recognise this will provide a very significant boost to investment and industry in this state, also increasing jobs growth. Those of us who have been involved in the responsible management of waste for many years have seen what good outcomes...when government lays out a clear path forward for certainty for investors and clarity for the consumers.

So that is some advice from the industry about (a) laying out a pathway to future increases that gives business security to invest, because this is not a cheap business, recycling and re-use. Also it shows you that by creating an incentive to recycle and re-use, we are actually diverting waste away from landfill and having sustainably useful outcomes for our communities.

**Mr KNOLL:** In other committees the figure of 350 jobs has been quoted as coming out of this increase to the solid waste levy. Has any modelling been done on those businesses that are going to have to pay this increase in the solid waste levy and what potential job losses there are going to be in those industries, and I am thinking specifically of construction, but also I am thinking about householders who then have less discretionary income to spend on other consumption. Has the government actually modelled the other side of the equation about what this tax increase is actually going to mean on other sectors of the economy?

**The Hon. I.K. HUNTER:** As I said, the levy has provided a price signal to the market, diverting waste from our landfill into recycling and productive use, the levy underpins a billion-dollar industry, employing approximately 5,000 people—I said that earlier—and the solid waste levy will increase in stages from \$62 a tonne, 1 July 2016, to \$76 a tonne, 1 September this financial year, to \$103 a tonne by 2019-20.

The additional uplift of \$64 million raised over the four years will be reinvested into industry development to grow jobs, promote recycling and lower carbon emissions. All of this extra funding will be reinvested into waste, environmental management and climate change programs, including funding initiatives to help recycle waste to more valuable commodities, accelerating new business opportunities in the resource recovery sector and creating, I am advised, up to 350 jobs. Local government will receive additional funding for waste and resource recovery infrastructure, including organic waste and waste education—

**Mr KNOLL:** Sorry, minister, but—

**The Hon. I.K. HUNTER:** Sorry, I have not finished my answer yet.

**Mr KNOLL:** —the question specifically was around modelling.



**The Hon. I.K. HUNTER:** It may well be, but I am giving you the answer—waste education on household hazardous waste and innovative solutions for problematic waste. A higher price on waste will incentivise councils in the waste and resource recovery and restrict disposal of less to landfill, as well expand the sector and create new industries and processing and re-use. Similar reforms in New South Wales have seen an increase in employment in the sector and improvement in recycling and re-use of waste. The funding raised from the levy increase will include over \$14 million in programs to support local government infrastructure investment, waste education programs, household hazardous waste collection, innovative solutions for problematic waste, \$12.4 million towards a grant program—

**Mr KNOLL:** Chair, I would ask you to bring the minister back to the substance of the question, which is not to repeat the answer that he just gave previously, but to ask whether or not modelling has been done to look at the impacts of the solid waste levy on other sectors of the community. It was very specific.

**The CHAIR:** I think the minister is probably getting around to the crux of the answer.

**The Hon. I.K. HUNTER:** I am indeed, Mr Chair.

**The CHAIR:** He is contextualising, I think is what he is doing.

**The Hon. I.K. HUNTER:** There are many, many things that need to be said—\$12.4 million towards grant programs for the waste and resource recovery industry for infrastructure, investment and innovation, as well as levy rebates for scrap metal recyclers. It will provide \$15.7 million over four years for the Environment Protection Authority to deal with the management of contaminated sites, where no reasonable party is known, as well as assisting with compliance activities. That is what is relative to our discussion today—the EPA. There will be \$21.9 million for climate change and to transition the state's economy to a low-carbon future and make Adelaide a carbon-neutral city.

Most importantly, though, is to understand that this levy increase was championed by the compost king himself, the member for Dunstan, Leader of the Opposition—

**Mr KNOLL:** Chairman, this has got nothing to do with the question I asked—

**The CHAIR:** Member for Schubert—

**Mr KNOLL:** We have listened to two or three minutes of this and I am asking for a specific answer.

**The CHAIR:** Member for Schubert, relax. The member for Napier has been so patient. Minister.

**The Hon. I.K. HUNTER:** And, importantly, the levy can be avoided by not putting waste into landfill. That levy can be avoided. So there will be no necessary increase for householders, because their councils can avoid that by not putting that waste into dumps.

**Mr GEE:** I refer to State Budget Agency Statements Volume 2, Budget Paper 4, pages 136 and 137, and my question is to the Minister for Sustainability, Environment and Conservation: will the minister update the committee on the Environment Protection Authority's activities to monitor the state's air quality?

**The Hon. I.K. HUNTER:** I thank the honourable member for his most important question. One of the very important tasks the Environment Protection Authority undertakes is to monitor, evaluate and report on ambient air quality. The EPA also regulates industries that emit air pollution, using a range of tools including licence conditions that may require long-term monitoring around major facilities. The EPA has undertaken significant work to improve our understanding and the availability of information on the quality of our state's air.

A network for continuous air quality monitoring against the national air quality standards has been in place across Adelaide since around 2001. I am advised that the Greater Adelaide region experiences good air quality, when compared to standards in the National Environment Protection Measure for Ambient Air Quality (Air NEPM). However, it is acknowledged that at times particle levels are higher than desirable in some areas of Adelaide.

At a national level, the EPA actively participates in an initiative to create a National Clean Air Agreement, which was approved at a meeting of environment ministers on 15 December last year. The aim is to establish a consistent framework for cost-effective management of air quality within all Australian states and territories over the coming decades.

At a state level, the government has recently—in July this year—approved the Environment Protection (Air Quality) Policy 2016 (Air Quality EPP). The Air Quality EPP has been developed in accordance with the requirements of section 28 of the Environment Protection Act 1993 to improve the health of South Australians and the environment by bringing the regulation and management of air quality in line with contemporary practices.

The Air Quality EPP will also simplify the administration of air quality regulation by consolidating a range of air quality-related policies and guidelines into a single instrument, reducing red tape; set out requirements for the sale and installation and operation of solid fuel heaters and fuel; better protect the community from the impacts of smoke from open burning in built-up areas; allow the EPA to set localised air quality objectives for particular areas; and allow the EPA to take a risk-based approach in regulating and managing the impacts of activities on air quality.

Policy focuses on regulating industry air emissions and wood smoke sources, being solid fuel heaters and burning in the open. These are the major contributors to air pollution in South Australia alongside transport emissions. Wood smoke from burning in the open and poorly designed and operated wood heaters is a significant contributor to poor air quality in South Australia, particularly during the winter months where low temperatures make it more difficult for smoke pollution to disperse. Some of the health-impacting components of wood smoke that may be commonly known to people include volatile organic compounds, formaldehydes, benzenes, toluene, formic acid and sulphur dioxide. I am advised that many of the elements found in wood smoke are carcinogenic and also cause heart and respiratory disease.

Of greater concern is the fact that these elements that were found in wood smoke are of such a small size—many less than one micron—that they are able to be breathed deep into the lungs and into the bloodstream. A study by the Australian Institute of Health and Welfare estimates that each year more than 3,000 people die prematurely from urban air pollution in this country. Clearly, reducing air pollution in built-up areas should, as we are demonstrating with this policy, be a priority of all levels of government and the community. That is what the governments of all persuasions around the country are pursuing together through the National Plan for Clean Air.

This new policy will not prevent bushfire fuel reduction, but will ensure such burns are better managed, to not impact neighbouring properties and limit impacts on air quality. This policy allows for both permits and notices to regulate burning practices in townships and metropolitan Adelaide. Councils will continue to manage burning in their area, and will decide whether individual permits or general notice for burning in areas is required in prescribed circumstances. The permit and notice provisions are flexible, and can be provided for specific times of the year.

The EPA has undertaken comprehensive public consultation, I am advised, on the draft air quality EPP across industry, government and community sectors. In particular, this has included all authorities that regulate prescribed burning, such as Country Fire Services, Department of Environment, Water and Natural Resources, the Department of Primary Industries and Regions and local councils, including all fringe metropolitan councils, and specific consultation with the mining industry and timber processing industry in the South-East.

The EPA, in collaboration with other government agencies, is also developing a South Australian air quality framework to promote the inclusion of air quality principles into planning processes. The framework will provide overarching principles to guide long-term management of air quality within South Australia.

**Mr WHETSTONE:** Can you rule out any increases in illegal dumping as a result of the increase in the solid waste levy? Also, can you rule out the pressure to introduce fortnightly municipal waste collection?

**The Hon. I.K. HUNTER:** There are a couple of things to say about that. First, the parliament has already voted for weekly municipal (in terms of Adelaide) waste collection, so that is in your

hands, you voted for it—presumably you were there at the time. Legislation passed both houses of parliament, and that is the law.

In terms of increases in illegal dumping: we see increases in illegal dumping right around the country. Quite frankly, in Queensland where there is no levy, they still have problems with illegal dumping. I am advised that the issues with illegal dumping are more about opportunity than cost; it is about the opportunity to dump in an inappropriate way instead of going down the road to your transfer station. It has very little to do with the levy, as I understand it. New South Wales has a levy; there is no levy in Queensland, and there is illegal dumping in both jurisdictions, as there is here. Of course, we will be investing in a legal dumping compliance unit in the EPA to make sure that, where we do have information about illegal dumping, we track it down.

**Mr WHETSTONE:** The question was about illegal dumping. So, I am not worried about what happens in Queensland, New South Wales—

**The CHAIR:** No, member for Chaffey—

**Mr WHETSTONE:** What I am concerned about—

**The CHAIR:** Member for Chaffey, order! The question was barely in order, anyway. You are asking the minister to speculate about some criminal behaviour, over which he has no control. Do you have another question? I am happy for you to continue your line of questioning, but you are not going to badger the minister.

**Mr WHETSTONE:** Thank you for your guidance, Chairman. Minister, can you rule out any introduction of the fortnightly waste collection? I know it has been through parliament, but the government does have the numbers.

**The Hon. I.K. HUNTER:** I think I have already answered, Mr Chair, that the parliament has already passed legislation which requires metropolitan Adelaide councils to provide weekly waste collections: that's the law. If you are proposing to change that, by all means bring in a private member's bill—good luck to you.

**Mr WHETSTONE:** I asked you a question.

**The Hon. I.K. HUNTER:** And I just answered it.

**The CHAIR:** He has answered it twice now; let's move on.

**Mr WHETSTONE:** Minister, talking about your fund for climate change and disaster waste management initiatives: why should ratepayers in Port Pirie, Tea Tree Gully, Huntfield Heights or Birkenhead pay for your climate change programs in the CBD?

**The CHAIR:** Can I just say, member for Chaffey, your questions are provocative, so I have to allow the minister to range a little beyond the budget, as your questions do, and we—

**Mr WHETSTONE:** It is a pretty simple question—

**The CHAIR:** —cannot be upset when the minister bites back.

**Mr WHETSTONE:** —it is about your constituents paying for Adelaide's climate change policy in the CBD.

**The Hon. P. CAICA:** Which budget line?

**Mr WHETSTONE:** Budget Paper 5, Budget Measures, page 46.

**The CHAIR:** Member for Chaffey, I am making the point that your questions are full of comment, and we cannot be surprised if the minister bites back.

**The Hon. I.K. HUNTER:** I will moderate myself, Mr Chairman, as best I can.

**The CHAIR:** I hope you do, minister, for all our sakes.

**The Hon. I.K. HUNTER:** These processes before us are very important educative forums, and the member for Chaffey clearly needs to be educated in terms of climate change issues. Climate change—

*Members interjecting:*

**The Hon. I.K. HUNTER:** You do not draw a fence around climate change. The impacts of climate change are going to be felt right around the world—not just Port Lincoln, not just Adelaide, not even Antarctica, but right around the world—and your constituents in your electorate, as indeed will those in the member for Hammond's electorate, the member for Colton's electorate, and the member for Ashford's electorate, will all be visited with the negative impacts of climate change that are coming upon us.

This is why the Australian government—the federal Liberal government—signed an agreement in Paris last December to act on dangerous global warming. So, it is in the interests of every South Australian—every single South Australian—every community in this state which is going to be negatively impacted by global warming, which is coming, that we act as a government to, firstly, mitigate those impacts as best we can and plan to adapt to them as best we can. The member for Chaffey's electorate will feel these effects probably more than some others, and he should be welcoming the government's investment and action on climate change. If he does not understand it, I will find someone to teach him—the member for Colton, perhaps.

**Mr WHETSTONE:** He was a better minister than you will ever be

**The Hon. I.K. HUNTER:** That is true, absolutely true. I model myself on the member for Colton every single day. He has been my mentor.

**Mr WHETSTONE:** Minister, what advice did you receive that disaster events are not already covered by the state government's existing programs and insurance policies?

**The Hon. I.K. HUNTER:** I am advised that this question is best directed to me when we are examining GISA. Again, the honourable member has not got his question in the right forum today, but that is okay, that is understandable. This is one that is best directed to Zero Waste/GISA.

**Mr WHETSTONE:** Minister, what is the likelihood of a New Zealand-scale disaster, as you referred to in an interview on FIVEaa recently?

**The Hon. I.K. HUNTER:** Again, this is a waste of resources line. I am happy to take up the time of this committee, if you want me to, to go into another area of my responsibilities, but this is best directed towards Zero Waste/GISA.

**Mr WHETSTONE:** Minister, can you expand on your disaster management initiatives and provide some specific examples then?

**The Hon. I.K. HUNTER:** Again, Mr Chairman, the honourable member is really asking questions in another area of the portfolio. If he wants to waste the time of the committee, I will be guided by you but, in reality, it is best that he directs those to me in the appropriate part of the forum today.

**Mr WHETSTONE:** Site contamination, in Budget Paper 4, Agency—

**The Hon. I.K. HUNTER:** At last, here we go.

**Mr WHETSTONE:** Has any work been done with the Local Government Association on managing the legacy of site contamination?

**The Hon. I.K. HUNTER:** I am advised that, in fact, the EPA works with local government on pretty much a daily basis in terms of assessments that are required for new developments, for example, particularly where there are changed land use functions. I am also advised that the EPA has underway now an arrangement with the LGA or is working towards an arrangement with the LGA for a working heads of agreement in terms of how we utilise communities better to communicate with them the issues around particularly legacy site contamination and how government can work with local government and also the private sector in terms of rehabilitating some of these sites.

**Mr WHETSTONE:** Since the adoption, has the EPA engaged in any doorknocking for the purpose of communicating with the residents affected by site contamination?

**The Hon. I.K. HUNTER:** Since the adoption of what?

**Mr WHETSTONE:** The Local Government Association managing the legacy in site contamination.

**The Hon. I.K. HUNTER:** Mr Chairman, I am sorry, I am not quite sure what the member for Chaffey is trying to direct his question to. Would he expect the EPA to doorknock the community in regard to a document or an agreement we are trying to bring up with the LGA in terms of how we manage site contamination, or is he talking to a specific site contamination issue and how we deal with that on the ground?

**Mr WHETSTONE:** I am talking about constituents who have been affected by site contamination. Have the EPA or any of your departments been directed by you to doorknock and communicate with those affected?

**The Hon. I.K. HUNTER:** Standard practice is for the EPA to work very closely with local communities. That certainly involves talking to those householders who are impacted. We do that in a number of ways. We doorknock them; we talk to them directly on the front doorstep. We have community meetings, sometimes held in liaison with local communities or existing resident organisations, or indeed local government. We have community meetings where we have one-on-one, so they can make an appointment to come in and see an officer, and we have larger community meetings where they can come in and talk to a group more generally.

The EPA is incredibly focused on communicating with residents. They of course write to them, and drop leaflets into letterboxes to update them from time to time when there is new information, but more importantly also we have established a process now in these areas that we are working on of having a representative citizens group, a coordinating group which meets more regularly with EPA officers and gets more updates and advice about the local area. For example, that is what we have done in terms of Beverley, that is what we did in Edwardstown and that is also what we are doing in parts of Glenelg where there is an issue of TCA and groundwater, probably from a former drycleaners operation over many years.

**Mr GEE:** This is the same reference as the previous question. I know, minister, that you have touched on some of those things, but can you outline to the committee how the state government is reforming the waste sector and how this will benefit the waste industry and the state's economy as a whole?

**The Hon. I.K. HUNTER:** I thank the member for his most important question. We have, of course, some of the best recycling rates in the world here in South Australia, and that is no mistake. It comes about because of direct policy initiatives of the government. This has led to the expansion of our waste and resource recovery sector. As I said earlier, in other parts of our examination, it is worth around about \$1 billion in turnover as an industry. It contributes more than half of that to the gross state product directly and indirectly, and employs 4,800 full-time equivalent positions, roundabout 5,000 people if you take into consideration part-time work.

Consultation with industry and the community have shown that the full economic return of the sector has not yet been realised. There was still significant reliance on landfill for the disposal of waste, and South Australia lags behind in infrastructure to process and create new products from some wastes which are currently sent interstate or overseas as bulk commodities. This is why we are undertaking significant waste sector reform.

The solid waste levy will increase, as I said earlier. The additional \$64 million, the additional amount raised over the four years, will be reinvested into industry development, to grow jobs, promote recycling and lower carbon emissions. All of this extra funding will be reinvested into waste, environmental management and climate change programs, including funding initiatives to help recycle waste into more valuable commodities, accelerating new business opportunities in the resource recovery sector, and we expect, I am advised, to create about 350 new jobs.

Local government will receive additional funding for waste and resource recovery infrastructure, including organic waste. A higher price on waste will incentivise councils and the waste and resource recovery industry to dispose of less for landfill—that is the policy goal that we are after—as well as expand the sector and create new industries in processing and re-use. As I mentioned previously, similar reforms in New South Wales have seen an increase in employment in

the sector and an improvement in recycling and re-use of waste. The levy applicable for disposing of asbestos will also be halved in recognition of the fact that asbestos cannot be safely recycled or burned and the only safe option is landfill disposal. The levy applicable will be \$31 per tonne for metro Adelaide in 2016-17 from 1 September, and, I am advised, half of that rate in regional areas for asbestos.

Everyone in the community benefits from this investment. This will be through access to new or improved recycling services; the creation of jobs to construct, operate and maintain new and expanded reprocessing and sorting facilities throughout the state; and industry focused programs resulting in less waste produced and reduced operating costs. If local councils choose to pass on the full cost of the levy increase to households through their council rates, the impact is expected to be modest. For businesses, the increase in the solid waste levy in 2016-17 is expected to be around about \$14 per year, rising to about \$44 in 2019-20. That is waste to landfill.

It is important to note that the solid waste levy only applies to the disposal of waste. It is not charged for waste that is not sent to landfill and is instead recycled. Dumping charges, excluding the levy, are set by the operators, of course at their discretion. In the days since the reforms were announced, I have read into the transcript earlier a glowing set of praises from ResourceCo about the government's policy position. These are very important reforms that will grow jobs in the industry, boost investment and help transition our South Australian economy to one that is more sustainable for the future while significantly improving environmental outcomes for all citizens of our state.

**Mr WHETSTONE:** I refer back to Budget Paper 4, Agency Statements, Volume 2, Highlights, page 136, regarding protecting public health. At what stage does the EPA supply SA Health with the findings of assessments? Is it before or after they are publicly released to the affected residents?

**The Hon. I.K. HUNTER:** My advice is that in order to get the advice from Health for the public we need to provide the assessment to Health, obviously, first. It then gives us the public health advice that we act on.

**Mr WHETSTONE:** Do you release that publicly before you advise residents?

**The Hon. I.K. HUNTER:** My advice is that that is included in the advice that we provide to residents. There is no point, I suppose, giving out public advice, particularly that goes to health impacts, without actually asking Health first, and then there is no point in not giving that to residents, so that is why we do it. My advice is that the Health advice is included in the information that we provide to residents.

**Mr WHETSTONE:** What I am referring to: is that public advice through residents' groups or those local affected groups or is it an individual approach?

**The Hon. I.K. HUNTER:** All of the above.

**Mr WHETSTONE:** I refer to Agency Statements, Budget Paper 4, Volume 2, Financial commentary. Minister, can you provide a breakdown of how much is being spent on environmental assessments by location?

**The Hon. I.K. HUNTER:** Sorry, Chair, but I need to ask the member for Chaffey to be a little bit more distinct in his question. Are you asking for planning assessments or are you asking for—

**Mr WHETSTONE:** Environmental assessments.

**The Hon. I.K. HUNTER:** Environmental assessments for contaminated sites?

**Mr WHETSTONE:** By location. Obviously, for residential properties and industrial properties.

**The Hon. I.K. HUNTER:** Just remind me what line you are looking at there?

**Mr WHETSTONE:** We are looking at 'Financial commentary', page 136.

**The Hon. I.K. HUNTER:** Yes, 'Highlights', 'Financial commentary'.

**Mr WHETSTONE:** Estimated Result.

**The Hon. I.K. HUNTER:** For a breakdown based on location we will have come back to you and take that on notice.

**Mr WHETSTONE:** And when you come back with that breakdown, how many residential properties had indoor testing and at what locations, and how many industrial properties have had indoor testing?

**The Hon. I.K. HUNTER:** We can come back to you with that information as well. It is important to understand—and perhaps I am straying out of my area of expertise—that indoor testing is not the most reliable indicator and that is why we do fairly intensive modelling. Indoor testing can be affected by multifactorial issues—whether someone has opened a window, closed a door, whether the place has been inhabited for a week or not—and so those results are not the best test for environmental issues. The best test can be from modelling—did I stray too far away? No, that is correct. Apparently the Statutory Authorities Review Committee (SARC) of the parliament has considered these issues as well, if the honourable member wants to check up on its findings, too.

**Mr WHETSTONE:** What work has been done to locate the liable parties of what they call orphan site contamination?

**The Hon. I.K. HUNTER:** I will ask Tony, my chief executive, to take you through this process.

**Mr CIRCELLI:** As part of any process to assess and define a particular site that we are investigating, of course our first priority is to look at whether there are any potential public health concerns. We work with SA Health on those specific issues. The results of our assessments also look to where the actual contamination is sourced from and they give us advice in terms of where to look from a historical perspective for who may be responsible for the areas that show to be the sources of these contaminations. That is very much part of our assessment. Often it is not clear at the start of these assessments who might be the responsible parties; that can only come through quite detailed and quite complex assessments that my team undertake.

The other issue also is that, when we do the historical assessments, often these contaminants occurred many, many decades ago in the majority of cases. Often what we find is that responsibility falls to entities that are no longer in existence, so they then, by definition, become what we deem orphan sites.

**Mr WHETSTONE:** Minister, I want to touch on research that is being done on investigating remediation and mitigation possibilities. What are the details around overseas research trips that have been undertaken?

**The Hon. I.K. HUNTER:** What sort of details are you after: how many trips, who has gone, what issues have been investigated?

**Mr WHETSTONE:** I think I just outlined that, to investigate the remediation and mitigation possibilities here in South Australia. I am looking for what has been spent on overseas research trips and whether any of these mitigation or remediation-type initiatives have been implemented here in South Australia.

**The Hon. I.K. HUNTER:** My advice is that, happily, we have an MOU with the Republic of Taiwan in terms of these issues of remediation and mitigation. Two technical officers travelled to Taiwan for research-related purposes in April this year. My advice is also that that was funded by the government of Taiwan.

In relation to other trips, if this is where the questions are heading, the chief executive travelled to Singapore from 16 to 18 November last year at a cost to the EPA of approximately \$3,838. He was invited to attend and present at the INTERPOL United Nations Environment Program, Environmental Compliance and Enforcement Conference, as Chair of the Australasian Environmental Law Enforcement and Regulators network. The EPA chief executive also travelled to the USA from 21 May to 5 June at a cost to the EPA of approximately \$15,121. He attended the 10<sup>th</sup> International Conference on Remediation of Chlorinated and Recalcitrant Compounds in Palm Springs. He also attended a total of 25 meetings, primarily with senior officers of the US EPA in Washington and San Francisco.

**Mr WHETSTONE:** I want to move on now to the reform of the waste sector, Budget Paper 5, page 47, Waste Reform and Compliance. Minister, you mentioned a new information technology

system. Can you give us a bit of guidance as to what the timeline for the implementation will be, and does that require legislative amendment?

**The Hon. I.K. HUNTER:** Over the four-year period of the budget, or over the next three years, is the time line for this work. We are looking at translating our mass balance reporting, which is what happens in New South Wales, to a mass balance regulation. That may well mean that some changes will need to be made to the system. Whether or not that needs legislative reform I am not yet clear, but we will come back with that.

**The CHAIR:** It has been agreed that we move on now to Zero Waste/Green Industries SA. Is that still our intention?

**The Hon. I.K. HUNTER:** Yes.

#### **Departmental Advisers:**

Mr V. Levitzke, Chief Executive, Office of Green Industries SA.

Mr I. Harvey, Director, Operations, Office of Green Industries SA.

Ms C. Yin, Management Accountant, Office of Green Industries SA.

Mr J. Wheeler, Acting Manager, Government Business, Office of Green Industries SA.

Ms B. Marsden, Chief of Staff.

Mr S. Kandola, Ministerial Adviser.

**The CHAIR:** I invite the minister to introduce his new advisers and then, perhaps, make a short statement, if he wishes.

**The Hon. I.K. HUNTER:** Thank you very much, Chair. To my far left is Mr Ian Harvey, Director, Strategy and Policy, Zero Waste SA and to my left is Mr Vaughan Levitzke, Chief Executive, Zero Waste SA. To my right is Ms Catherine Yin, Finance Officer, Zero Waste SA. Behind me, I hope and trust, is Josh Wheeler, Acting Manager, Government Business, Zero Waste SA, next to my Chief of Staff, Bel. Finally, in the rear is Shobaz on his own.

Significant state government reforms in the waste sector continued over the past financial year with Zero Waste SA transitioning to the Office of Green Industries SA, known as 'GISA'. GISA was established by proclamation from 1 July 2015, and will eventually be governed by its own legislation and by a skills-based board. In the meantime, the agency continues to administer the Zero Waste SA Act 2004, and the board of Zero Waste SA has been reappointed to provide oversight and advice relating to the establishment of GISA.

Since the state government established a dedicated waste and recycling agency in 2003, we have gone from being a state reliant on landfill to one that leads the nation in community attitudes and behaviours towards recycling and resource recovery. The waste management and resource recovery sector now has an annual turnover of approximately \$1 billion, I am advised. It contributes more than \$500 million to gross state product directly and indirectly and employs approximately 4,800 FTEs. These are great results that we can all, as a state, be proud of.

But we know there is potential to do better. In 2015-16, we began shifting the focus to strategies and programs that recognise the benefits of resource-efficient economies. We did this through the release of the state's third waste strategy covering the next five years to 2020 that will help establish a solid policy platform for investment decisions and the importance of an enabling culture for implementing zero waste practices.

Building on the many successes of Zero Waste SA, GISA's focus has been in encouraging innovation and economic growth through the green economy. During 2015-16, GISA used its Industry Program to help businesses implement sustainable resource efficiency measures and increase their productivity. GISA is also administering the state government's new \$5.29 million Trade Waste Initiative.



Through this program, we will work closely with the manufacturing industry to improve its environmental performance and reduce the amount of waste and contaminants discharged by sewer or other means. The program will also support the food and beverage industry to improve the way trade waste is managed, reduce operating costs and increase productivity by improving the way material, energy and water are used.

In addition, funding was awarded under GISA's new Innovation Grants program for three projects that will create jobs in the state's green economy and help to create new jobs in the waste and recycling sector for solutions to growing problematic new waste streams. GISA is also undertaking important work requiring cross-agency collaboration, such as the state-based disaster waste management plan and the development of a strategic waste management infrastructure plan.

In August 2015, it was announced that the United Nations Centre for Regional Development would hold its seventh Asia and Pacific Regional 3R Forum in Adelaide in 2016. The 3R (Reduce, Recycle and Reuse) Forum will provide an opportunity for South Australia to showcase its internationally recognised expertise in the green economy and demonstrate how resource efficiency is a driver for economic success. This conference will help us work internationally to build capacity and capability in government and industry to respond to export and overseas opportunities in the South Australian government's prioritised markets.

This is one of the many ambitious goals we have set ourselves for the 2016-17 financial year, including encouraging innovation and economic growth through the green economy with a focus on initiatives that will make lasting changes. An important foundation for this will be a major project to define and map South Australia's green industry sector. This will help us identify research and market development opportunities, including commercialisation of innovation. It will help us maintain a strong role in waste sector policy development, advocacy and implementation, and collect data and measure progress in developing South Australia's first waste infrastructure investment plan for the next 30 years. These strategies will help us realise the full potential of the green economy, helping keep South Australia at the forefront of green innovation.

I would like to finish by acknowledging the efforts of GISA, a dynamic and agile state government agency, which I am confident will continue to strengthen the state's national and international environmental credentials.

**The CHAIR:** Thank you, minister. Are there any questions?

**Mr WHETSTONE:** Minister, GISA (Green Industries SA)—when are we expected to see this legislation in parliament?

**The Hon. I.K. HUNTER:** Is there a budget line you are referring to here? A page number?

**Mr WHETSTONE:** There certainly is.

**The Hon. I.K. HUNTER:** Excellent, that will help.

**Mr WHETSTONE:** Budget Paper 4, Volume 3, pages 9 to 19, Overview, page 12.

**The Hon. I.K. HUNTER:** Excellent.

**Mr WHETSTONE:** Do you need any more information?

**The Hon. I.K. HUNTER:** That will do us for now. Surprise, surprise, Mr Chairman, the bill is already before parliament. It is in the budget papers.

**Mr WHETSTONE:** And you did not know that?

**The Hon. I.K. HUNTER:** I was drawing you out.

**Mr WHETSTONE:** You had to seek advice? I refer you to a previous question I asked of you, minister—

**The Hon. I.K. HUNTER:** You did not know it, obviously, otherwise you would not have asked the question.

**Mr WHETSTONE:** What advice did you receive that disaster events are not already covered by the state government's existing programs and insurance policies?

**The Hon. I.K. HUNTER:** What existing programs and insurance policies are you referring to?

**Mr WHETSTONE:** I am referring to Budget Paper 5, Budget Measures, page 46.

**The Hon. I.K. HUNTER:** But you are referring to existing programs and insurance policies. Which ones are they?

**Mr KNOLL:** The government has a whole host of insurance policies, including for terrorism issues, as well as insurance for buildings and public liability. It has a whole host—

**The Hon. I.K. HUNTER:** But the member for Chaffey does not know that, clearly. He can't answer the question. I am indebted—

**Mr WHETSTONE:** I do not answer the questions; I ask the questions.

**Mr KNOLL:** So, minister, is there an answer?

**The Hon. I.K. HUNTER:** I am indebted to the member for Schubert for filling in for the member for Chaffey—

**Mr KNOLL:** Is there an answer, minister?

**The Hon. I.K. HUNTER:** —who has not got a clue as to the background of his own questions. I wonder who drafted them for him, Mr Chairman. Mr Chairman, I advise you not to take any advice from the member for Newland. He is usually someone who tries—

**The CHAIR:** I learnt that lesson years ago, thank you.

**The Hon. I.K. HUNTER:** —to lead committees like this astray. My advice is—and I stand to be corrected for other agencies as I can only speak for what I am receiving advice on now—that the government is not insured for natural disasters. In fact, we go to the federal government in terms of natural disasters for natural disaster relief, but that only provides for usually somewhere between 50 to 75 per cent of the funding that is required and only usually for some of the programs that need to be supported, so essentially the government is self-insured in this relationship and, quite frankly, departments are asked to find this out of their own budgets.

We believe that there is an advantage, in fact, in having a sinking fund in place for when natural disasters hit. We can replace infrastructure very quickly for communities without having to wait for the long drawn-out processes of going through the federal government.

**Mr WHETSTONE:** Is the government considering establishing a disaster waste management task force?

**The Hon. I.K. HUNTER:** Natural disasters, particularly large-scale natural disasters can generate large quantities of waste, which exceed the normal waste management capacity of the affected area and threaten public health, hinder reconstruction and impact environment. The review of the South Australian Waste Strategy 2011-15 identified disaster waste management as an important area of policy development for the state. The Office of Green Industries is undertaking a multiphase disaster waste management contingency plan project. The first phase of the project included the scoping study for disaster waste management contingency plans. A final report on the scoping study was produced in September 2015. The next phase of this project is to develop a disaster waste management support plan, under the State Emergency Management Plan. GISA is currently assessing the feasibility of this.

And sir, as you would understand, disaster waste management affects almost every aspect of an emergency response, as well as the long-term recovery of a disaster affected area. If planned in advance, and managed effectively, the risk to the environment and health can be prevented or minimised. Waste generation can become a useful resource in the disaster recovery and rebuilding process and can have a positive effect on social and economic recovery.

Waste planning is critical prior to disasters, yet few regional or local governments in Australia, or even globally, do so. The current South Australian emergency management framework and plans do not provide clear guidance and there is lack of clarity regarding roles and responsibility of disaster

waste management. Disaster waste management was also identified as an important area of policy development for the state in the review of South Australia's waste strategy, as I said earlier.

The Office of Green Industries has successfully received a grant funding of \$40,000 under the commonwealth government's Natural Disaster Resilience Program to undertake phase 1 of the disaster waste management contingency plans project. This project, I am advised, is the first of its kind in Australia.

**Mr WHETSTONE:** Minister, I refer to the Waste to Resource's Fund financial commentary, page 14. How much is currently in the fund for intergovernment transfers from the EPA for higher solid waste levy receipts?

**The Hon. I.K. HUNTER:** I think I gave the answer earlier this morning: as at 30 June 2016 the balance in the Waste to Resources Fund was \$86.8 million approximate.

**Mr KNOLL:** Budget Paper 5, page 50, in relation to this Trade Waste Initiative, can the minister outline what is the purpose of this initiative, as in what has given the impetus for the government to invest in trade waste?

**The Hon. I.K. HUNTER:** In December 2015, I think I mentioned in my opening remarks, funding of \$5.2 million, over two years, was approved to enable the Office of Green Industries to deliver the South Australian government Trade Waste Initiative. The aim of the South Australian government Trade Waste Initiative was to help South Australian food and beverage producers improve the way trade waste is managed, focusing on volume reduction, quality improvement and to help businesses reduce operating costs and increase productivity by improving the way materials, energy and water are used.

By reducing the amount of waste and contaminants discharged by sewer, or by other means, the Trade Waste Initiative should improve operating costs and environmental outcomes for food and beverage producers participating in the initiative. Removal of treatment of trade waste at the source reduces the risk of contaminants impacting on re-use options or the receiving environment. By looking at trade waste in conjunction with the broader operations of the business, and use of other resources, further opportunities for improving performance and productivity may be uncovered.

The Trade Waste Initiative will be offered by matched grant funding to eligible businesses in two ways. Resource productivity assessment grant funding to cover up to 50 per cent, to a maximum of \$10,000, GST exclusive, per business to undertake a resource productivity assessment of the business by qualified consultants. Resource productivity assessments will identify opportunities for improving the way trade waste energy, materials and water are managed and will recommend areas for improvement to enhance productivity and performance. To be eligible for grant funding, businesses must meet SA Water's trade waste volume and load-base thresholds, or be a licensed food or beverage producer or processor under South Australia's Environment Protection Act 1993. I am advised that approximately 220 businesses have been identified as being eligible.

The second way is the Food and Beverage Implementation Grants, which will be available to food and beverage producers and manufacturers that are connected to or are planning to connect to the SA Water trade waste network within 24 months of application. Grants will be available to cover up to 50 per cent—to a maximum of \$300,000, GST exclusive—per business for implementation activities that are expected to lead to reductions in trade waste, volume, and/or improvements to trade waste water quality.

Eligible activities include supply and installation of new equipment, upgrades or additions to existing equipment, shared infrastructure and complementary staff training and education. Funds can be requested for implementation activities that are intended to occur on a new or an existing site. Only SA Water trade waste food and beverage customers that meet volume- and load-based thresholds for trade waste can apply. I am advised that about 60 businesses have been identified as being eligible for that grant line. To be eligible, these businesses must have completed an approved resource productivity assessment or equivalent assessment that identifies the trade waste management solutions best suited to the business site.

Businesses that have undertaken on-site trials of trade waste management solutions can also apply. Those funding guidelines are available on the Green Industries SA website. The

allocation of the trade waste grant funding will commence in 2016-17, I am advised. A budget of \$1.011 million for resource productivity assessments and \$1.138 million for food and beverage implementation grants applies for 2016-17.

**Mr KNOLL:** Can the minister confirm that the reason for this trade waste initiative comes, I suppose, as a result of a 90-day project that has been undertaken, and that the reason a 90-day project was requested was because of significant increases in the cost of trade waste for food and beverage businesses in South Australia?

**The Hon. I.K. HUNTER:** Mr Chairman, I just read out into the record the reasons why we are doing this. It is to make businesses more productive, much more efficient and, hopefully, they go on to greater things and employ more South Australians.

**Mr KNOLL:** If I can rephrase the question, then: can the minister confirm that there have been significant increases in the cost of trade waste for South Australia's food and beverage businesses?

**The Hon. I.K. HUNTER:** Mr Chairman, that does not apply to this line of questioning, it applies to a later line of questioning. Later, the member might like to bring it up in SA Water's examination.

**Mr KNOLL:** The minister talked about the fact that this initiative is designed to reduce trade waste from SA's food and beverage businesses into the treatment plants. Can the minister identify what, if any, savings there are to the government from the reduced inflows of trade waste from these businesses?

**The Hon. I.K. HUNTER:** Again, Mr Chairman, that is a question best asked at another line and into SA Water's investigation.

**Mr KNOLL:** So the minister is not aware of why this initiative is being implemented, only that it is being implemented?

**The CHAIR:** No. Member for Schubert, if the minister, who understand his portfolio better than I do, says that this comes under SA Water, then he should be afforded the advice of his specific SA Water advisers when he is answering these questions.

**The Hon. I.K. HUNTER:** Mr Chairman, what is happening here is that the members asking questions do not really understand the budget estimates process. They do not understand that we are examining a section of the budget—

**Mr KNOLL:** This is pathetic.

**The Hon. I.K. HUNTER:** —and they should direct their questions to the appropriate examination during the day. If they want to range freely across the whole of my portfolios, we can arrange to have everybody come in, Mr Chairman, but they should be applying the rules just like the rest of us have to.

**The CHAIR:** That would be a waste and the member for Schubert does not like waste. So let's have another question.

**Mr KNOLL:** The minister outlined who chooses the grant recipients and what the total monetary value of the grants are—he has outlined the total, but certainly the breakdown.

**The Hon. I.K. HUNTER:** Chair, my advice is that there is a panel established, comprising representatives from GISA, PIRSA, EPA and SA Water. They will analyse the applications that come through, assess them and make a judgement and a recommendation on that.

**Mr KNOLL:** Sorry, the total value, as in the breakdown of the maximum grants available to each individual business?

**The Hon. I.K. HUNTER:** I have already read that into the record. Again, the honourable members are not listening to the answers, Mr Chairman.

**The CHAIR:** The member for Colton. Sorry?

**The Hon. I.K. HUNTER:** The honourable members do not listen to the answers supplied to them. I do not know why we go through this process.

**The CHAIR:** I am sure the member for Colton will, intently.

**The Hon. P. CAICA:** I agree that I do not know why we go through this process. I refer to Budget Paper 4, Volume 3, under the program 'Waste reduction and resource recovery'. Will the minister provide an update about how the government plans to support the infrastructure needed in waste and recycling across the state?

**The Hon. I.K. HUNTER:** I thank the honourable member for his most important question. The review of South Australia's waste strategy 2011-15 identified that waste and resource recovery infrastructure planning and investment would play a critical role in supporting future industry development and economic growth. As a result, the state government is developing a statewide waste and resource recovery infrastructure plan.

The infrastructure plan takes into account the 30-Year Plan for Greater Adelaide and expected population growth. It provides strategic direction and evidence to inform planning and investment decisions, and to ensure that sufficient and adequate sites are identified for waste and resource recovery activities over the next 30 years.

To support the development of the infrastructure plan, a number of studies are being conducted. These studies will provide an understanding of current waste management and resource recovery infrastructure across the state. They will also identify new investment opportunities, resource recovery and remanufacturing within the South Australian economy, and assess waste flow projections and the resulting economic impact.

For example, the infrastructure economic study uses the best available demographic and economic data to model the impact of future waste flow for 10 and 30-year time spans, based on three landfill diversion scenarios, that is: business as usual; moderate additional diversion; and, high additional diversion. It is concluded that the waste sector will require significant investment in new and additional infrastructure to deal with future waste generated in the state, including new technologies not commonly seen in South Australia at present, such as covered composting facilities, energy from waste, such as anaerobic digestion and combustion, vacuum collection systems for high-rise buildings, for example, high-tech processing facilities and mechanical biological treatment facilities.

The waste flow projection and economic impact assessment study, on the other hand, looked at the total economic impact of the infrastructure options in the 10 and 30-year periods under different scenarios. It found that the impact on the gross state product in the 10-year period would vary between \$97.8 million under a 'business as usual' approach, and \$287.3 million in high additional diversion scenarios.

For the same period, the number of full-time equivalent positions would range from 933 to 2,053 FTEs. So, over the coming 30 years the impact is expected to range from \$380.7 million to \$656.3 million in gross state product, while the impact on full-time equivalent positions would be between 3,323 and 4,719.

So, as can be seen, these background studies provide a sound basis to inform and support the development of the infrastructure plan. During the 2016-17 financial year Green Industries SA will consult with our key stakeholders on the plan, and when complete the waste and resource recovery infrastructure plan will provide a clear guide for future waste and resource recovery infrastructure needs and, importantly, support a resource-efficient economy in South Australia. At the end of the day we want a sustainable economy, sustainable industry and more jobs for South Australians.

**Mr PEDERICK:** On the same budget line, in regard to the plan, how long will it take before that plan is finalised, and what will be the budget split and amounts you foresee being spent by the government and the ratio you believe private investors will need to invest in this plan and in the infrastructure?

**The Hon. I.K. HUNTER:** I understand that the forward estimates have the figure for you, and you can look at that in the budget paper. We expect the work to be done by the end of this calendar year. In terms of the amount of private sector investment per leverage, we do not have a final figure for that just as yet, but we will wait for the end of the year to see whether we can finalise that.

**Mr PEDERICK:** Will it be finalised by then?

**The Hon. I.K. HUNTER:** End of the financial year is our ambitious target to do that, and I will be flogging the agency to make sure they do that.

**Mr PEDERICK:** I am sure they are looking forward to that. In relation to targets and providing financial support to local government, I am looking at page 15 of the same budget paper, under Other. How much and what is the criteria in regard to resource recovery programs impacting on local government?

**The Hon. I.K. HUNTER:** The Office of Green Industries, formerly Zero Waste SA, and the Local Government Association of SA have a successful partnership in reducing waste to landfill. Since 2003-04, grant funding of approximately \$32 million has been provided by Zero Waste for the benefit of local government. Under a service level agreement between the organisations, annual funding is provided to the LGA to employ a person who gives waste management support to local councils. I am advised that \$35,000 has been allocated for 2016-17.

The 2016-17 budget measure to increase the waste levy over four years will provide the Office of Green Industries with \$26.4 million over that four years to invest in local government and industry waste and resource recovery infrastructure, innovation and job creation. Over half of the funding for waste and resource recovery infrastructure will be provided to local government—more than \$14 million over the four years.

**Mr PEDERICK:** In relation to the same budget paper, South Australia will be holding the seventh regional forum, which involves Asia and the Pacific, in regard to recycling and resource recovery. How much funding is the government allocating to hosting the forum?

**The Hon. I.K. HUNTER:** My advice is the agency has provided \$240,000 for this year to fund the conference.

**The Hon. P. CAICA:** I refer to Budget Paper 4, Volume 3, Waste Reduction and Resource Recovery. How is the state government assisting businesses to tackle their more difficult resource efficiency challenges and helping them to reduce both their costs and their environmental footprint?

**The Hon. I.K. HUNTER:** I thank the honourable member for Colton for his very important question. He obviously listens to my opening remarks and scribbles down questions on the basis of it, so I am very pleased to offer him this response. The Office of Green Industries SA works very closely with individual businesses and industries to encourage greater resource efficiency.

For example, we continue to run the industry program which was started by Zero Waste in 2007. The program's objective is to provide tangible environmental, cultural and financial benefits to South Australian industry by linking environmental sustainability to productivity improvements. It provides in-house advisory services as well as funding support to help South Australian businesses improve resource efficiency, reduce costs and improve environmental performance.

The aim of the industry program is to help businesses improve their bottom line and build ongoing business value. It provides local industry with options to improve their productivity and international competitiveness through reducing waste materials, energy and water use. It works with local businesses at three levels: the individual business level, the industry sector level and geographically-located clusters.

Since the industry program began in 2006-07, the state government has invested over \$10 million, I am advised, to support more than 250 organisations across 700 sites. This includes partnerships with 15 sector-based industry groups to encourage resource efficiency and waste improvements at the industry sector level. Businesses and organisations can take advantage of expert advice and assistance in identifying and implementing eco-efficiency, waste reduction and lean production methods.

The program also works with key industry associations, such as the South Australian Wine Industry Association, to collaborate on targeted education and behavioural change programs. In 2015-16, the industry program provided over \$50,000 in grant funding to the wine industry—both the SA Wine Industry Association and individual wineries—to assist in the adoption of lean production practices.

This funding supported nine wineries to identify cost saving and resource efficiency measures, and one of the participating wineries has confirmed savings of between 30 and 50 per cent across labour, water, wastewater and energy-specific processes as a result of the program. That is a fantastic achievement, and a little bit of government investment has improved the bottom line of our businesses so they can go on and become more efficient, more productive and employ South Australians.

A similar project has now commenced with a large South Australian vineyard owner and operator, I am advised. Over \$58,000 was allocated to other businesses in 2015-16 to investigate higher-value uses of waste and provide alternative options for waste avoidance, increased productivity and the circular economy pathways.

In addition to the industry program, the Office of Green Industries SA is responsible for delivering the government's new trade waste initiative. This initiative is available to businesses, as we mentioned earlier, with a high trade waste volume of load. I will not read onto the record again the eligibility criteria, as the member for Schubert asked me to, because it is in the original answer I gave earlier.

This plan was developed in consultation with business to ensure that what is being proposed will be considered practical and is achievable by business. The success of these programs is in the collaboration that we enter into, and this close working relationship, through the agency and the business, means that we can actually help them set their goals, achieve them and, as I say, make huge savings, as we saw in that business case earlier. We ensure maximum economic and environmental benefit from a little bit of our government investment. It is a great outcome.

**The CHAIR:** Thank you, minister. I declare the examination of the proposed payments be adjourned until later today.

*Sitting suspended from 12:01 to 12:59.*

#### **Membership:**

Mr Treloar substituted for Mr Knoll.

#### **Departmental Advisers:**

Ms S. Pitcher, Chief Executive, Department of Environment, Water and Natural Resources.

Ms M. Griffiths, Chief Financial Officer, Department of Environment, Water and Natural Resources.

Mr T. Goodes, Group Executive Director, Strategy and Advice, Department of Environment, Water and Natural Resources.

Mr B. Bruce, Group Executive Director, Customer and Corporate Services, Department of Environment, Water and Natural Resources.

Ms J. Grant, Executive Director, Water and Climate Change, Department of Environment, Water and Natural Resources.

Mr A. Geytenbeek, Senior Accountant, Department of Environment, Water and Natural Resources.

Mr R. Faunt, Technical Regulator, Department of State Development.

Ms B. Marsden, Chief of Staff.

Ms G. Lewis, Ministerial Adviser.

**The CHAIR:** Welcome back, minister, in your capacity as Minister for Sustainability, Environment and Conservation. I declare the proposed payments reopened for examination, and I refer members to the Agency Statements, Volume 2. I do just want to clarify that we have an hour session split across the River Murray and SA Water which, I am advised, require different sets of advisers, so I propose to go to the River Murray for half an hour and SA Water for half an hour and then following that, climate change. Is everyone happy with that?

*Mr Whetstone interjecting:*

**The CHAIR:** I did not devise the timetable. I assume that there was some negotiation.

**Mr WHETSTONE:** No.

**The CHAIR:** No negotiation? I am wrong then; I do not care. Minister, do you have a statement, and would you like to introduce your new advisers.

**The Hon. I.K. HUNTER:** Thank you very much. I have no opening statement. I want to get straight into it today. Can I introduce Michelle Griffiths, Chief Financial Officer—welcome back, Michelle; we missed you—Sandy Pitcher, Chief Executive, and Tim Goodes, Group Executive Director to my right. Behind me is Rob Faunt from the Technical Regulator—it is about time the Office of the Technical Regulator got a question; that would be fantastic—and Ben Bruce, Group Executive Director, Customer and Corporate Services. Behind them is Andrew Geytenbeek and my Chief of Staff. Julia is here too, and Genevieve.

**The CHAIR:** Minister. Do you have an opening statement?

**The Hon. I.K. HUNTER:** Not this time, no.

**The CHAIR:** Excellent. Are there any questions for the minister regarding the River Murray? The member for Chaffey.

**Mr WHETSTONE:** I refer to Water planning and management costs, Budget Paper 4, Volume 2, page 158, Financial commentary. How much revenue does DEWNR receive from water licensing and permits?

**The Hon. I.K. HUNTER:** Sorry, what page are you on?

**Mr WHETSTONE:** Page 158.

**The Hon. I.K. HUNTER:** And the question was?

**Mr WHETSTONE:** How much revenue does DEWNR receive from water licensing and permit issue?

**The Hon. I.K. HUNTER:** I cannot untangle what I am about to tell you, because it is a combination of water licensing and fauna permits, but this is the information that I have. As at 30 June 2016, the water licensing and fauna permits program had collected \$1,240,988 in water licensing revenue from 2015-16 from water licence and permit-related applications budgeted for full year revenue of \$1.6 million.

**Mr WHETSTONE:** Last year, you advised estimates that in 2016-17 water planning and management costs would be full cost recovery to the NRM boards.

**The Hon. I.K. HUNTER:** Sorry, what line are you questioning?

**Mr WHETSTONE:** It is Budget Paper 4, Volume 2, page 158, Financial commentary. Last year, you advised estimates that in 2016-17 water planning and management costs would be full cost recovery to the NRM boards. Can you give me a list of programs that the NRM boards will have to cut to implement your cost shifting?

**The Hon. I.K. HUNTER:** Chair, I apologise for the member for Chaffey. He should have asked NRM questions during the NRM session this morning. We are now dealing with the Murray.



**Mr WHETSTONE:** You have stated that cost recovery is in line with the National Water Initiative. What is the commonwealth's attitude to the way that the South Australian government has implemented this?

**The Hon. I.K. HUNTER:** Again, Mr Chair, the member for Chaffey is asking questions on a different budget line that goes to this morning's session. I think we had 1½ hours available for questioning on that. We have half an hour now for River Murray questions. I invite you to encourage him to stick to the budget papers we are examining.

**The CHAIR:** I accept that advice.

**Mr WHETSTONE:** South East Flows Restoration Project.

**The Hon. I.K. HUNTER:** Excellent!

**Mr WHETSTONE:** I refer to Budget Paper 3, page 114: DEWNR Major Projects, South East Flows Restoration Project. Its expected completion date is June 2017 at a cost of \$43 million. What are the costs to the South Australian government to manage this project?

**The Hon. I.K. HUNTER:** A point of clarification to find the correct answer for the honourable member: is he talking about operational costs after commissioning post 2016-17 or is he talking about the cost to deliver the project through the commonwealth partnership?

**Mr WHETSTONE:** I am sure you get your fair lick out of managing the project. What contingencies have been made to manage maintenance on the completion of this project?

**The Hon. I.K. HUNTER:** A different question. My understanding is that the project is to upgrade I think about 80 kilometres of pipeline (but do not hold me to that) and then to lay another 12 kilometres or so of pipeline. That will be, in fact, a huge investment—refurbishing that existing pipe—it is not a pipeline, it is pipe and drainage, of course.

**Mr WHETSTONE:** It is a channel.

**The Hon. I.K. HUNTER:** Some of it is channel. That will then be handed over to the South-East drainage board to manage, along with the NRM board in cooperation, as they have been working very closely together so far.

**Mr WHETSTONE:** Who is going to pick up the cost for management and maintenance of the project?

**The Hon. I.K. HUNTER:** That will be an ongoing asset. As I said, about 85 per cent of it is existing drainage system, which will be upgraded hugely and will benefit the local community. We have taken the existing drainage system, investing in that through a partnership with the federal government, as they are providing most of the funds for this, of course, and that is a massive upgrade of the existing infrastructure which probably would not have happened without this input of commonwealth money.

**Mr WHETSTONE:** Yes, and the question was: who will pay for ongoing maintenance and operations for that project?

**The Hon. I.K. HUNTER:** As I said to you, roughly 85 per cent of it is an existing infrastructure, existingly managed by the South-East drainage board—existingly. There is about 12 kilometres (we will correct this later on) of new drainage to be connecting the southern lagoon through to the existing drainage system. So, existingly, it is already paid for in terms of maintenance by the South-East drainage board, and that will continue.

**Mr WHETSTONE:** With the upgrade of the restoration project will there be any potential damage to local properties in case of high flow?

**The Hon. I.K. HUNTER:** Any required increased flows would have to be managed through some sort of approval process, be it easement, be it through some other negotiated instrument with the landowners. We are going through that process right now.

**Mr WHETSTONE:** So you are going ahead with the project but you do not know who is going to look after damage if there are high flows?

**The Hon. I.K. HUNTER:** That is just completely wrong. Why would the member draw this inference from my answer? He has not even asked me who would look after the damage from high flows. We have not gone to that area. If there is a need for higher flows than currently that would have to be organised via an easement or some other negotiated instrument with the landholder. We are doing that work right now.

**Mr WHETSTONE:** So you are installing the project without actually doing the due diligence for people who are impacted on high flow.

**The Hon. I.K. HUNTER:** Landholding negotiations and detailed design are progressing and the project is expected to award a construction contract in spring 2016. As I said, the honourable member has absolutely no clue about how this system works. Most of this drain that is going to be impacted is already under the care and protection of the South-East drainage board. We are spending a huge amount of money to upgrade that infrastructure and there will be a small extra section built, but the majority of that drainage system is already under the management, care and control of South-East drainage board.

If there needs to be inundation on lands that are connected through this drainage system, that will have to be negotiated with landholders either through easements or some other agreed negotiating outcome.

**Mr WHETSTONE:** Will the water that is going to be part of the restoration project be part of the state's commitment of 183 GL towards the Murray-Darling Basin Plan through the adjustment mechanism?

**The Hon. I.K. HUNTER:** My advice is no. The 183 is actually gap-bridging water, that is, water actually recovered. The program itself will be assessed as an SDL adjustment, i.e., as the supply water, the down water, as part of the 450 gigalitres.

**Mr WHETSTONE:** Was the water from that project not negotiated with the then assistant minister for water, Senator Simon Birmingham, that the South East Flows Restoration Project would be part of the adjustment mechanism?

**The Hon. I.K. HUNTER:** Not from my understanding. I think we were invited to submit it for assessment as an SDL adjustment, as a supply measure.

**Mr WHETSTONE:** So you are saying that you are looking for that total 183 to come out of the irrigators' allocation rather than it being the state's responsibility to contribute?

**The Hon. I.K. HUNTER:** Just for the honourable member's information, the 183 gigalitres is, as I said, gap bridging, that is, water recovery. The supply measure, the 650 gigalitres, which will come about through eligible projects being accessed as SDLs, essentially has the potential to reduce the amount that needs to be found from irrigators through gap bridging. So, the 650 is the down water, I suppose. It is what can reduce the amount of water to be recovered because we are getting environmentally equivalent outcomes with less water. It actually has a beneficial effect for irrigators because it makes sure that we give up less water to get the same environmental recovery.

**Mr WHETSTONE:** That is so not the case. Minister, the 183 is coming from irrigators, is that correct—irrigators, buyback, infrastructure upgrade?

**The Hon. I.K. HUNTER:** Through infrastructure upgrade, from licences and some buyback, that is right, and then that can be reduced by the 650 SDLs. So if you find up to 650, then you can reduce the amount of water that needs to be recovered from irrigators.

**Mr WHETSTONE:** I will touch on that a bit later. Do you intend for this project to be part of a project that is notified next year, on the 30 June, with the federal government?

**The Hon. I.K. HUNTER:** My advice is that it was part of the first notification process to government.

**Mr WHETSTONE:** And was it accepted?

**The Hon. I.K. HUNTER:** Yes.

**Mr WHETSTONE:** Irrigators spill water, Budget Paper 4, Volume 2, page 159, Highlights. Minister, we are talking about the River Murray annual operating plan, the water allocation framework. We all know that critical human needs water is a priority. In regard to private carryover purposes, when will you negotiate vertical storage in our upstream storages?

**The Hon. I.K. HUNTER:** I have raised it at meetings in the past at the senior ministerial level, with ministerial colleagues particularly from New South Wales and Victoria and also the commonwealth government. It is fair to say that there was not a lot of appetite from those other jurisdictions to meet South Australia's interests in this area.

**Mr WHETSTONE:** Will you better negotiate South Australia's storage rights?

**The Hon. I.K. HUNTER:** I have already raised this issue. I have mentioned it previously in public, I have mentioned it with ministers at the ministerial council level and I have raised it with federal ministers as well and, as I said to you, there has not been a lot of interest in opening up this line of conversation.

**Mr WHETSTONE:** Are you going to progress it?

**The Hon. I.K. HUNTER:** The honourable member should be very careful what he is asking for. If we are wanting to take something away from interstate interests—New South Wales and Victoria, in particular—in terms of rights to water that is in those storages and change from a horizontal storage right to a vertical storage right, if we are asking them to give that up, they are going to want something back. What are you going to proffer up on behalf of irrigators?

**Mr WHETSTONE:** Minister, your—

**The Hon. I.K. HUNTER:** What are you going to proffer up?

**Mr WHETSTONE:** Your government gave up our storage rights.

**The Hon. I.K. HUNTER:** That is not quite right, either. You have to understand that when we are negotiating our basin plan, as we have now done, it is a compromise outcome, where the states come together with the commonwealth and agree on a plan and a way forward. That means everybody has to compromise. The plan we have before us has this component of storage being horizontal rather than vertical. That means that SA Water spills first, should there be a need to spill water over the storage levels.

That is something we prefer not to be the case, but do you think we are going to go to New South Wales and Victoria and say, 'Hey, how about it? Why don't you change this structure which is against your interests, against the interests of your state and your irrigators, and give us vertical storage?' They are going to say, 'Okay, what are you going to offer up? What's the quid pro quo for us?' Be very careful, member for Chaffey, what you are suggesting. Be very careful about what you might be suggesting we sacrifice to get that change, and we need to make absolutely sure that, if we do that, it is actually going to be net beneficial to the state.

**Mr WHETSTONE:** Minister, with all due respect, you should be very careful about what you have negotiated away from South Australia's storage rights. We used to have vertical storage rights. We gave those storage rights up—

**The CHAIR:** Order! Do you have a question, member for Chaffey?

**Mr WHETSTONE:** I am not getting answers.

**The CHAIR:** I realise that again the minister was being provocative, but arguing about policy is wasting everybody's time, particularly yours. This is your time to ask questions about the budget, member for Chaffey.

**Mr WHETSTONE:** Alright. In regard to sale of water entitlements, I refer to Budget Paper 4, Volume 2, page 158. Minister, we had a one-off payment of water entitlement of \$8 million. Can you elaborate on that?

**The Hon. I.K. HUNTER:** I am advised that, as a result of negotiations from PIRSA for an irrigation delivery project with the commonwealth, that negotiation was somewhat lengthy. To meet the first milestones, the state provided funding to offer up that water to the commonwealth. It has

been done over two financial years, so it looks like there has just been a sale but, in fact, that funding has been reinstated, I think, back to us via Treasury, I should say.

**Mr WHETSTONE:** What class of water was it that you sold?

**The Hon. I.K. HUNTER:** We will have to take that question on notice and bring back an answer.

**Mr WHETSTONE:** What volume of water was sold for that \$8 million?

**The Hon. I.K. HUNTER:** We will include that—

**Mr WHETSTONE:** You do not know how much water you sold for \$8 million?

**The Hon. I.K. HUNTER:** We are examining budget papers here, member for Chaffey. If you want to ask me a question about that, I am very happy to answer it and take it on notice. That level of detail is not in the budget papers, and I do not have that advice immediately at hand.

**Mr WHETSTONE:** You don't? While you are looking for those answers—

**The Hon. I.K. HUNTER:** No, I am taking it on notice.

**Mr WHETSTONE:** —what class of water was it? Who was the sale to? How much water was it? Was that water tagged? Do NRM levies still apply to that water? And who was the broker who was used to sell that water?

**The Hon. I.K. HUNTER:** A ream of questions there, Mr Chairman, and we will take those on notice.

**Mr WHETSTONE:** They are pretty simple questions, really.

**The Hon. I.K. HUNTER:** And the complicating factor is, of course, we were dealing with this as a broker for PIRSA, really, so the answers will have to come to from PIRSA. But we will undertake to take those questions on notice and bring back an answer.

**Mr WHETSTONE:** So, minister, you have sold \$8 million of a state asset and you do not know who you sold it to and you do not know how much it was sold for?

**The CHAIR:** The minister has undertaken to answer these questions on notice.

**Mr WHETSTONE:** Maybe we should ask the cardboard cut-out. He might have the answer.

**The Hon. I.K. HUNTER:** He would certainly be more pleasant to you than I will be.

**Mr WHETSTONE:** At least he turns up. I refer to the Goyder Institute, Budget Paper 4, Volume 2, page 159, Financial commentary. The Goyder Institute is having reduced grant expenditure of \$3 million. Can you tell me what the cost of Goyder is to run and does Goyder's state funding completely cease?

**The Hon. I.K. HUNTER:** The Goyder Institute for Water Research provides high-quality independent science underpinning water policy management in South Australia, helping our state secure and manage its water future. The state government invested \$25 million from 2010 to 2015 in the Goyder Institute, with an equivalent financial investment from research partners, including the CSIRO, The University of Adelaide, Flinders University and the University of South Australia. This cooperative approach and support enables the Goyder Institute to successfully fulfil its role. Due to the success of the Goyder Institute, the state government committed further coinvestment funding of \$2 million per annum for four years, which is \$8 million in total from 2015-16 to 2018-19.

In 2015-16, I am further advised, the International Centre of Excellence in Water Resources Management (known as ICE WaRM) made a commitment to join the Goyder Institute research partnership. ICE WaRM is an Adelaide-based organisation that provides an international gateway to Australia's expertise on water resource management training, education and research. Attracting ICE WaRM as a new partner is to strengthen the strategic alliance of the Goyder Institute with the water sector in South Australia. So that is the answer. We provided through 2010 to 2015 that amount of money I mentioned and, further, in a new funding period, we are providing \$8 million from 2015-16 through to 2018-19.

**Mr WHETSTONE:** The Goyder Institute—are you confident the organisation will be able to continue in its current form, particularly without government support?

**The Hon. I.K. HUNTER:** That is a matter for Goyder. We are contributing the amount of money that I just laid out to the committee. It is for them to run their business as they see fit, but we are a contributing partner, along with those other organisations that I just read into the record.

**Mr WHETSTONE:** So the Goyder will be now be totally reliant on outsourcing their funding?

**The Hon. I.K. HUNTER:** I just read into the record how much we are providing over the next four years. I think it was \$8 million for four years.

**Mr WHETSTONE:** Do we have a total budget of what the Goyder costs to run?

**The Hon. I.K. HUNTER:** I am not responsible for the management of the Goyder. It is an independent organisation with funding partners, including the CSIRO, various universities and other bodies, and so that is a matter for Goyder. I am responsible for giving them that \$8 million over four years.

**Mr WHETSTONE:** Do you have an understanding of what the government's contribution to the Goyder Institute will present, as in, day-to-day operations, or will it be there for specific project funding?

**The Hon. I.K. HUNTER:** My advice is that the contribution that we provide in cash is basically there to leverage current investment of the research partners, which I mentioned earlier, and that is the leveraging up of that funding to do certain important works around research around water and, indeed, climate change. My understanding is that about \$300,000 of that is roughly utilised for the running of the institute itself.

**Mr WHETSTONE:** I am now moving on to flood warnings, Budget Paper 4, Volume 2, page 159, Highlights. You talk about commencing works for installing a flood warning and hazard management information system. What is this program going to cost?

**The Hon. I.K. HUNTER:** My advice is \$3.7 million was committed in the 2015-16 state budget over four years to enable DEWNR to implement these outcomes for flood warning and flood hazard management. The Department of Environment, Water and Natural Resources is the designated hazard leader for flood in South Australia under the State Emergency Management Plan and because of its involvement DEWNR has a close working relationship with SES, the designated control agency for flood. As the flood hazard leader, DEWNR is currently focused on three main activities: stakeholder engagement, collaborating with the State Emergency Service to improve the state's predictive capability for flood incidents, and finally actioning the recommendations of the flood reform task force.

**Mr WHETSTONE:** Minister, have you had a collaborative approach to this program with outside companies or have there been any outside companies involved in the implementation of this information system?

**The Hon. I.K. HUNTER:** Companies?

**Mr WHETSTONE:** Businesses, NGOs.

**The Hon. I.K. HUNTER:** Well, the Bureau of Meteorology is a key partner for us, but they work very closely with SES and DEWNR, of course. Are you talking about private enterprise?

**Mr WHETSTONE:** Yes, I am.

**The Hon. I.K. HUNTER:** The answer is: not that I am aware of.

**Mr WHETSTONE:** So it is a totally government-funded—

**The Hon. I.K. HUNTER:** That would be appropriate for flood warning and flood hazard management, I would imagine.

**Mr WHETSTONE:** Will it help to identify localised flooding from SA Water pipe breaks?

**The Hon. I.K. HUNTER:** Mr Chairman, that is an absolutely ridiculous question, and really points up the ideological approach this man has taken in this questioning today. We are talking about flood management and hazard management for the whole state, and more people die in floods, I am advised, than do in fire; you only have to look at Queensland for this. This is a very important, very important line, for this department to pursue, to improve the management by government of flood hazard and to trivialise it with a pipe break is just quite obscene.

**Mr WHETSTONE:** There is no trivialisation—

**The Hon. I.K. HUNTER:** You are trivialising it—

**Mr WHETSTONE:** —when you have water running through your house—

**The Hon. I.K. HUNTER:** You are trivialising a very important program—

**Mr WHETSTONE:** —and you do not show a presence, which shows—

**The Hon. I.K. HUNTER:** —and you are just trying to get a cheap joke out of it.

**Mr WHETSTONE:** —just how see-through you are.

**The CHAIR:** Order, order! Do you have any more questions, member for Chaffey?

**The Hon. I.K. HUNTER:** The member for Chaffey should be apologising to the committee.

**Mr WHETSTONE:** You have no empathy for the people who are affected by flood, none.

**The CHAIR:** Member for Chaffey, do have another question?

**Mr WHETSTONE:** I certainly do. Minister, will the cardboard cut-out keep a presence in South Australia?

**The Hon. I.K. HUNTER:** What line is he referring to, Mr Chair?

**The CHAIR:** This is ridiculous. Do you have a proper question? Do any of your colleagues have a question?

**Mr WHETSTONE:** I refer to Budget Paper 4, Volume 2, page 160, Targets, the Integrated Urban Water Management Plan. Which agencies are involved in this plan?

**The Hon. I.K. HUNTER:** My advice is that the agencies involved are DEWNR, SA Water, DPTI and PIRSA, and the EPA.

**Mr WHETSTONE:** What is meant by 'improvement'? Is this water efficiency? Is this cost savings?

**The Hon. I.K. HUNTER:** Mr Chairman, before I answer that question I might answer a question I took on notice earlier. In a range of questions, the member for Chaffey asked about class of water entitlement, etc. In May 2016 DEWNR sold 3,200 megalitres of South Australian Class 3a entitlement to the commonwealth at \$2,500 per megalitre for the purpose of bridging the gap to the sustainable diversion limit target. No broker was used, I am advised.

As a result of significant investments over the last decade, Adelaide now has access to six sources of urban water: water from the catchments in the Mount Lofty Ranges, water from the River Murray, desal sea water, groundwater, stormwater and wastewater. There is significant opportunity to build on the reforms of the past, particularly those from our water security plan, Water for Good, by developing a new plan for urban water for Adelaide, one that will ensure that we maximise the social, economic and environmental opportunities that our diverse water mix provides. A constructive consultation process is still occurring as the urban water plan for Greater Adelaide is being developed. At this stage, a draft plan will be released for another formal process of engagement later this year.

I note that I announced, at the start of the engagement process in late 2014, that an initiative paper available on the department's website has been released to engage stakeholders in the community on the possible scope and priority of the plan. I have written to councils, industry associations and other not-for-profit organisations to invite them to comment on the issues paper and participate in the preparation of the plan. Given the significant interest of the community into how

our urban water resources are managed, it is critical we develop the plan through a strong process of engagement. This is why the draft plan will be released for another formal process of engagement, as I said, later this year.

**Mr WHETSTONE:** Excuse me, Chair, if I may, through you: minister, you have just given me an undertaking that it was Class 3a water that was sold back to the commonwealth. We still do not know the amount of water but can you give us some clarification—was that sale of water to contribute to South Australia's SDL in the Basin Plan?

**The Hon. I.K. HUNTER:** Mr Chair, I will just read back into *Hansard* what I said earlier, for the honourable member's benefit. In May 2016 DEWNR sold 3,200 megalitres of South Australian Class 3a entitlement water to the commonwealth at \$2,500 per megalitre for the purpose of bridging the gap; that is, the 183 gigs we were talking about earlier. No broker was used.

**The CHAIR:** Is the committee now of a mind to pivot to SA Water? I am sure members have questions for SA Water.

#### **Departmental Advisers:**

Mr R. Cheroux, Chief Executive, SA Water.

Mr J. Hollamby, General Manager, Business Services, SA Water.

Mr D. Percevault, Senior Manager Finance, SA Water.

Mr R. Faunt, Technical Regulator, Office of the Technical Regulator.

Ms B. Marsden, Chief of Staff.

Ms G. Lewis, Adviser.

**The CHAIR:** Minister, could you please introduce your new advisers?

**The Hon. I.K. HUNTER:** Indeed. Je vous présente Monsieur Roch Cheraux, Chief Executive of SA Water; to his left is Darren Percevault, Senior Manager Finance, SA Water; to my right, Jamie Hollamby, GM Business Services, SA Water; behind me, Mr Rob Faunt, Technical Regulator, Office of the Technical Regulator; my Chief of Staff; and Genevieve.

Mr Chairman, SA Water is responsible for providing safe, reliable and affordable water and sewerage services to over 1.5 million people. This is a crucial service for the health, amenity and sustainability of communities and businesses within the state. There were many important achievements in the 2015-16 financial year, in particular SA Water's extensive program of improving services and customer relations and increasing efficiencies in operations and capital expenditure. During this period, following ESCOSA's second determination, we have seen another reduction in water prices for South Australians. The average metropolitan household has received a 6.7 per cent reduction to their water and sewerage bill. That is a saving of about \$87 on an average bill.

Reductions in water usage and sewerage prices have also delivered benefits to non-residential customers across the state. This shows that the reforms we have undertaken, including the independent regulation of prices, is working and is benefiting customers. There has been an increased focus in recent months on burst water mains. We heard that earlier today. While burst water mains will remain a fact of life—especially considering that we have over 27,000 kilometres of water reticulation mains, coupled with Adelaide's highly reactive clay soils—it certainly does not mean that SA Water is not proactive about addressing this from a number of angles, including customer service, maintenance and monitoring.

We understand that the bursts can cause real suffering and inconvenience to people. It is an imperative that SA Water responds quickly and effectively to ensure that people affected can get their lives back to normal as quickly as possible. To that end, SA Water has established an improved response for people affected by bursts. They have established a community support team which ensures, when required, that affected customers have access to packaged water. It also provides

information about when customers will be reconnected and assists customers in coordinating clean-up crews and reimbursement for out-of-pocket expenses.

I am pleased to say that the feedback from customers about the level of support offered by this team has been positive. SA Water has also redeveloped its website to give customers the opportunity to provide feedback and apply for a range of services more quickly and easily, and this will also assist in the reporting of and responding to bursts. SA Water will also continue its extensive capital investment plan, with an average of around \$370 million to be invested every year over the forward estimates. This includes renewal of trunk mains, such as the recent works carried out on Hackney Road, North East Road, Waite Road, Cross Road and Marion Road mains. SA Water is also investing in technologies and processes to predict bursts before they happen.

While to date there is no 100 per cent proven method to foresee accurately where and when water mains will fail, SA Water is involved with national and international research projects to develop a greater understanding of a combination of pipe failure factors. Additionally, SA Water is currently investigating pressure modulation to lower pressures within the network. SA Water is also investing in a range of capital works, including Kangaroo Creek dam upgrade project, the Darlington upgrade, the north-south corridor project, and the relocation of the Murray Bridge Wastewater Treatment Plant to facilitate continued growth in the region.

Innovation is another area resulting in better outcomes for customers, our economy and, of course, the environment. For example, the coded digestion trial, undertaken at the Glenelg Wastewater Treatment Plant in 2011-12 has been very successful, with on-site gas production fuelling generators to provide up to 84 per cent of the plant's electricity requirements. While SA Water's customers have benefited from the increase in self-generated electricity, local food and beverage customers with high-strength organic waste have benefited from reductions in pretreatment and sludge disposal costs.

A study is now underway to assess the feasibility of establishing a codigestion facility at Bolivar. These capital investments, as well as the price reductions in 2016-17, will help strengthen the state economy, create jobs and help make South Australia a more competitive place to undertake business. I commend the work of the SA Water Board and all the staff for continuing their program of reform and improvement and increasing responsiveness to their customers.

**Mr WHETSTONE:** Thank you minister; welcome to the executive. I refer to Water resources: Budget Paper 3, page 77, table 5.7, net contributions. Minister, can you give me the numbers as to what inflows into the Adelaide Hills dams we have had this year?

**The Hon. I.K. HUNTER:** I advise that we do not have that information before us—we will have to take that question on notice. Can we get clarity on what period you require that information—was it for the last financial year or the calendar year previous?

**Mr WHETSTONE:** For 2015-16. What volume has been pumped into the storages from the River Murray this year?

**The Hon. I.K. HUNTER:** My understanding of our pumping program is that we have a very finely tuned model that essentially plugs in predicted forecasting. We make sure we maintain a minimum in our dams so that, should there not be rain over winter, we will have sufficient resources for, I think, a period of three months to provide for our customers, which gives us time to then pump further. So, a minimum is always kept over winter, but we run down our dams over winter so that we can take the benefit of increased rainfall. In terms of the pumping done this year, I am not sure we have the figures before us. Again, we would have to take that question on notice—we can probably do it for the last financial year.

**Mr WHETSTONE:** So, as far as the inflows into our dams, it is a contribution by natural run-off, by River Murray pumping? Is there a contribution to the dams from the Adelaide Desalination Plant?

**The Hon. I.K. HUNTER:** My understanding is that, no, the water is not pumped into the dams: it is pumped through a treatment process, which adds certain chemicals to give it taste, flavour, etc., because desal water is not very palatable on its own—you need to put in some of the minerals that you get through the natural processes—and then that is fed straight into the pipeline. I think that



is the process at Happy Valley. Desal water is not actually stored in dams—it is fed straight into the distribution system, having had those extra things added to it.

**Mr WHETSTONE:** Can you give the committee a bit of information? At the moment, the Mount Bold Reservoir is showing at 99 per cent capacity.

**The Hon. I.K. HUNTER:** No, I think it is 105 at the moment.

**Mr WHETSTONE:** At 105?

**The Hon. I.K. HUNTER:** I think so.

**Mr WHETSTONE:** I believe, on the website—it is very hard to get hold of at the moment—that it shows it is down to 95 per cent now. Has there been any spill out of the reservoir?

**The Hon. I.K. HUNTER:** My understanding is there has been spill from Mount Bold and it has been captured in the Happy Valley Reservoir.

**Mr WHETSTONE:** So, there has been no spilt water that has actually gone out of the system?

**The Hon. I.K. HUNTER:** My advice is some of it has, but I do not have any volumes for you. The spill from Mount Bold then proceeds down to Happy Valley is my advice.

**The Hon. S.W. KEY:** My question, minister, refers to Budget Paper 4, Program 1: Sustainability. What I would like to know is how the state government is tackling the problem of blue-green algae in the Torrens Lake.

**The Hon. I.K. HUNTER:** Fantastic question! I thank the member for Ashford for her really important question. I am surprised I have not had this question before in question time. It is a great story.

**The Hon. S.W. KEY:** That is why.

**The Hon. I.K. HUNTER:** Exactly. Because the Torrens Lake is predominantly a sedentary river and lake system, it is susceptible to a build-up of nutrients during the warmer months, and we have all experienced that over many years. These nutrients are naturally produced. They are washed in from the river's urban and rural catchment, and they result in the growth of blue-green algal blooms under high temperatures and low river flow conditions.

Since the late 1990s, Torrens Lake has suffered blue-green algal blooms over summer, forcing the lake to be closed to rowing and boating activities. As well as being aesthetically displeasing, blue-green algae emits an unpleasant odour and poses a public health risk in high concentrations. The state government has trialled a number of methods to tackle this pest, including dilution flows, aquatic revegetation of the lake, carp eradication, installation of gross pollutant traps, water-sensitive urban design initiatives and source pollution control measures, including improving grazing and vegetation management practices along the upper River Torrens.

The Adelaide and Mount Lofty Ranges Natural Resources Management Board has trialled the use of dilutions flows over the last couple of years. This approach has been refined over time, and high-intensity flows from upstream reservoirs have been successfully used over the past two summers, resulting in no lake closures of Torrens Lake. However, we recognise that there are limitations to the use of dilution flows and it is necessary to have multiple strategies available to us. This is why we have been trialling hydrogen peroxide.

A common ingredient in many everyday household products, hydrogen peroxide also occurs naturally in the environment and is known to have algacidal properties. During 2013-14, the CSIRO conducted laboratory tests to assess the effects of hydrogen peroxide on blue-green algae and aquatic animals. Following these trials, hydrogen peroxide was trialled in small swimming pools filled with water from Torrens Lake in 2014-15. This has helped determine the best dose concentration that would kill blue-green algae while resulting in no or minimal harm to other aquatic organisms.

The trial was successful, and it was recommended to progress to in-lake trials using a dose concentration of two milligrams per litre. The next stage of the hydrogen peroxide trial commenced on 27 January 2016 with the first in-lake test. Hydrogen peroxide was applied in a small, contained

area of the lake near the city weir. Water samples were taken prior to, during and the day after the chemical dosing to help assess the impact of the hydrogen peroxide on blue-green algae and other aquatic life.

Although significant rainfall interrupted the collection of data, which is a bit of an irony, sufficient data was collected to demonstrate a significant reduction in algal bloom within 24 hours with no impact from the hydrogen peroxide on other aquatic life. These are very positive results which will likely influence the method of tackling blue-green algae during the summer of 2016-17.

The aim of the River Torrens water quality project is to develop a series of methods that can be used to control blue-green algae in the river and lake. There is no one silver bullet. Working together with a range of management practices seems to have it under control. I do not think we have had a blue-green algal outbreak in the River Torrens for very many years, perhaps going back to 2013, but that is stretching my memory.

If the current hydrogen peroxide trial is successful, then hydrogen peroxide could join dilution flows, revegetation and other pollution control measures as one of the ways we control algae in the lake, and that has a very important flow-on effect of course for our local city economy during some of the warmer months. You only need to think about all of the festivals that we enjoy. The lake and the river, of course, are the focus of the city in the warmer months. We really want to get this under control. I congratulate all of those who have been involved. It is a very big project involving a lot of partners, but it looks like we have finally cracked it.

**Mr WHETSTONE:** I want to come back to Adelaide storages, and Mount Bold in particular. Can you tell me what the capacity of Mount Bold is?

**The Hon. I.K. HUNTER:** I am advised that it is on our website. I will have someone look it up and see if we can get it before estimates close.

**Mr WHETSTONE:** Actually, if you look at the SA Water website, it has been removed. The information has been removed.

**The Hon. I.K. HUNTER:** We will check that and we will get back to you with an answer, hopefully before the end of the day.

**Mr WHETSTONE:** So you do not know what the capacity is, you do not know the run-off is, you do not know how much is pumped into Mount Bold?

**The Hon. I.K. HUNTER:** Hold on; it is on the website right now. Here it is:

Capacity 46,180 megalitres.

If this reservoir supplied the whole state, how long would this last? About 79 days.

Area of water spread: 308 hectares.

Open to the public? Yes. Access to the dam wall.

When can I visit? This reservoir is open 9.00 am to 4.00 pm, year-round.

How full is this reservoir? For current volume please click on the map below. Please note Mount Bold is closed to the public during 'pre-release' events

This is up on the website right now, SA Water, Customer Service, South Australian Water Corporation.

**Mr WHETSTONE:** It is amazing where you can get answers from, isn't it?

**The CHAIR:** If only the member for Schubert were here, we could have saved so much time.

**The Hon. I.K. HUNTER:** It is the first time that flat thing has ever been useful to me.

**Mr WHETSTONE:** We now know what the capacity of Mount Bold is. We still do not know how much run-off it contributes. We do not know what is pumped in.

**The Hon. I.K. HUNTER:** What is your point, member for Chaffey? We can find these answers for you.

**Mr WHETSTONE:** When did pumping from the River Murray cease in this current operation?

**The Hon. I.K. HUNTER:** I have already outlined to the committee that we have a very high intensity modelling process that goes through at a very high level in SA Water to model how much water we need to pump to make sure we have a minimum amount in our dams to provide to Adelaide, but we pull down on our dams going into the winter months in the hope and faith that there will be water falling into catchments and we can capture that at best value in our dams.

But imagine for a moment, if you would, that we did not maintain a minimum in those dams, there was no water to provide to the community and there was no rain in winter. The member for Chaffey would be the first person after me here saying, 'Why did you not pump water into the dams to provide that safety buffer?' That is exactly what we do, but we keep that to our modelling system so that we can maximise the amount of inflow into the dams at the cheapest possible price to the consumer. If you want to suggest another way forward to drive up cost to SA Water customers, go right ahead, but do not think I will be there behind you. You are the one who is running the scare campaign. Let's hear about it.

**Mr WHETSTONE:** It is not a scare campaign. I am asking you some really simple questions.

**The Hon. I.K. HUNTER:** And I am giving you the simplest answers I can.

**Mr WHETSTONE:** When did pumping cease in Mount Bold from the River Murray? Simple question. Please, a simple answer.

**The Hon. I.K. HUNTER:** I am telling you. We have a very complicated high modelling system—

**Mr WHETSTONE:** Give me an answer.

**The Hon. I.K. HUNTER:** —that provides for a pumping regime in our reservoirs. It is not a simple answer; it is a complicated question. This is the problem with people like you, who want to go out to the public and scare people with these approaches that really do not go to the complexity of these issues. If you are trying to manage a water system with the sixth access to water that we have in this state now—

**Mr WHETSTONE:** Just give me the answer. I do not want your rhetoric.

**The Hon. I.K. HUNTER:** —you need to model that appropriately and make the best—

**Mr WHETSTONE:** Just give me the answer.

**The Hon. I.K. HUNTER:** —and most efficient choices. This is what we do with our modelling system. We project into the future, we look at the Bureau of Meteorology projections, we look at the existing levels of reservoirs, and our experts, our scientific advice makes a judgement about when we need to pump, where we need to pump and what levels we need to keep the water at. There is no simple answer to this. It is a complicated water dynamic process.

**Mr WHETSTONE:** We have had water spill out of Mount Bold, so that could potentially be River Murray water.

**The Hon. I.K. HUNTER:** Into Happy Valley.

**Mr WHETSTONE:** You have admitted that water has spilled out of Mount Bold. That potentially would be River Murray water that has spilled out of Mount Bold. Is that correct?

**The Hon. I.K. HUNTER:** It would be a spill because there has been more natural inflow into the reservoir. Are you suggesting that we do not actually keep a capability in the reservoir to provide water to Adelaide? Is that what you are suggesting?

**Mr WHETSTONE:** No, I am not suggesting that at all.

**The Hon. I.K. HUNTER:** Well, it sounds like you are to me.

**Mr WHETSTONE:** Do not put words in my mouth, minister.

**The Hon. I.K. HUNTER:** It sounds like that is what you want.

**Mr WHETSTONE:** Do not put words into my mouth.

**The Hon. I.K. HUNTER:** You want us to run down the reservoir—

**The CHAIR:** Order!

**The Hon. I.K. HUNTER:** —run down—

**The CHAIR:** Order!

**The Hon. I.K. HUNTER:** —and increase the risk to SA Water customers.

**Mr WHETSTONE:** It is a really simple question I have asked you. Could that potentially be River Murray water that has spilled out of Mount Bold and has been lost? Give me an answer.

**The Hon. I.K. HUNTER:** The water that has spilled out of Mount Bold—

**Mr WHETSTONE:** Give me an answer: yes or no.

**The Hon. I.K. HUNTER:** —came through the inflow through the catchments. If you want a simple answer, that is it. Increased inflow from catchments means that the reservoir has been over the top and that flows down to Happy Valley. There is a simple answer for you. Even you should be able to understand that.

**Mr WHETSTONE:** So you should be able then to use modelling

**The Hon. I.K. HUNTER:** Even you should be able to understand that.

**The CHAIR:** Order! I am going to go to the member for Ashford. I trust the member for Ashford will not interrupt the minister when he is answering.

**The Hon. I.K. HUNTER:** Feel free.

**The Hon. S.W. KEY:** I will try not to upset anybody. I refer to Budget Paper 3, page 76, Capital investment program. Would you give the committee information about infrastructure programs and projects that SA Water has invested in during the last regulatory period?

**The Hon. I.K. HUNTER:** Thank you to the member for Ashford for this very important question. The state government is committed to ensuring that South Australians are provided high-quality water at an affordable price without compromising the quality of water and sewerage services. This is why we are investing in a significant amount of infrastructure programs and projects. In the first regulatory period between 2013-14 and 2015-16, SA Water is estimated to have spent approximately \$864.9 million on capital infrastructure works.

Within this infrastructure spend there are four major categories of works: asset renewal, growth, external obligations and corporate. Between 2013-14 and 2015-16 SA Water invested \$411.6 million in asset renewal. Of this amount, \$150.6 million was spent on the renewal of water and wastewater pipe networks, I am advised. In this period, SA Water renewed 207 kilometres of water and wastewater mains across the SA Water network. It is estimated that 59.6 kilometres of pipe was renewed in 2015-16, and calculations have not yet been finalised any more over that calendar year. This is 9 per cent above the average for the last four years, I am advised.

In addition, SA Water has also invested in major asset renewal projects, including \$32.8 million for the Bolívar pre-aeration concrete rehabilitation, \$22.2 million was also invested in the Glenelg Wastewater Treatment Plant inlet screen upgrade during the first regulatory period with an estimated total cost of \$24.2 million and, finally, \$11.3 million for the Queensbury Wastewater Pump Station upgrade with an estimated total cost of \$17.1 million.

SA Water also invested substantially in growth programs to increase the capacity of our assets to allow for growth in demand. In the first regulatory period this investment amounted to approximately \$165.1 million, including \$104.3 million for extensions to the water and wastewater networks. SA Water also completed major growth projects including \$12 million spent on the Port Wakefield water supply upgrade during the first regulatory period with an estimated total cost of \$15.8 million, and \$15.4 million was spent on upgrading the Christies Beach Wastewater Treatment Plant with an estimated completion cost of \$218.1 million.

In addition, SA Water has a range of external obligation projects that are needed to comply with externally set standards for things such as environmental improvement, safety and water quality

management. In the first regulatory period, SA Water is estimated to have spent a total of \$223.3 million on major external obligation projects. SA Water invested \$4.6 million in the Hawker Desalination Plant during the first period and the total cost of the project, I am advised, was \$5.6 million. SA Water also invested \$13.7 million for the safety upgrades of Kangaroo Creek dam. The project is expected to cost \$94.7 million when complete. Finally, SA Water invested \$64.8 million in corporate projects—this includes things such as \$56.9 million for projects relating to information systems.

Each of these investments will ensure that South Australians continue to pay an affordable price for high-quality reliable water and sewage services into the future. SA Water will continue to find efficiencies in its services to provide the best infrastructure it can to drive down prices for our consumers into the future.

**Mr WHETSTONE:** We will just touch on the desalination plant, Budget Paper 4, Volume 2, page 157, Program 2: Water. Now that you have ruled out using the Adelaide Desalination Plant to reduce reliance on the River Murray, when will the government determine when the desal plant is used at higher levels and what are the government's trigger points in actually hitting the activate button for production or sustainable production? I know it is running at minimal production at the moment.

**The Hon. I.K. HUNTER:** Ten per cent.

**Mr WHETSTONE:** What I am asking is: do you have a green button to get that plant into full operation for a \$1.8 billion investment? Have you found the green button yet?

**The CHAIR:** The question was clear, member for Chaffey.

**The Hon. I.K. HUNTER:** Let me go through the first point raised by the member for Chaffey. The Marsden Jacob independent cost benefit study found that River Murray allocation prices are not at a level that would make running the Adelaide Desalination Plant a cost-effective way of boosting allocations for irrigators in 2016-17. It is very important that we understand this because what the member for Chaffey is suggesting is that we drive up the water cost to SA Water consumers to provide water to irrigators—

**Mr WHETSTONE:** Rubbish, absolute rubbish.

**The Hon. I.K. HUNTER:** That is exactly what he is suggesting. We all know that desal water is the most expensive water. We know that the cheapest water is what falls into our catchments and stored in our reservoirs.

**Mr WHETSTONE:** It is about driving up the price of food. That is what it is about.

**The Hon. I.K. HUNTER:** Second most is the water that we pay electricity to pump over the ranges—

**Mr WHETSTONE:** That is what you want to do, drive the price of food up.

**The CHAIR:** Member for Chaffey, do you want to hear the answer? I do.

**The Hon. I.K. HUNTER:** What we have done is gone out to an independent study by Marsden Jacob to look at the cost benefit of turning on the desal plant to provide water for irrigators, essentially to reduce pumping from the river and to utilise desal water instead into our distribution systems for Adelaide consumers and make more water available for irrigators.

The honourable member is playing a game of dice here. He does not want to talk to you about costs. He does not want to talk to you about the relative cost of water. He thinks, switch a green button on—this is the limit of his understanding—put desal water into the Adelaide distribution centre and, lo and behold, there is more water in the river for irrigators. But at what cost? Water from the river is the second cheapest option for us in terms of the catchment being the cheapest. Desal water, we know, was always going to be the most expensive, and we built the desal plant to be an insurance policy in times of drought. We came very, very close in the millennium drought in this town to having to supply SA Water consumers with packaged water. We came very close indeed.

Let's face it, it was their idea as well to have a desal plant. There was absolutely no skerrick of difference between Labor and Liberal in terms of having a desal plant, except for the size. It was their policy to have a desal plant in the first place as well. We joined them and we actually did it properly. Just like the one-way road to the south they built, the one-way South Road Superway, they also wanted half a desal plant. These guys are in the business of short-changing SA Water customers and short-changing SA Water taxpayers. We decided to do it the proper way by making sure we had the infrastructure in place to supply SA Water customers in Adelaide with water in times of drought. Now we have this bloke coming in here with his big, green buttons, that he wants us to push, that automatically and magically give irrigators cheap water, but who is going to pay for the expensive water?

**Mr WHETSTONE:** Point of order, Mr Chair.

**The CHAIR:** Hang on, minister, we have a point of order.

**Mr WHETSTONE:** Bring him back to the substance of the question. He is just waffling now. He is just gurgling in his jar.

**The Hon. I.K. HUNTER:** There is no substance to your question.

**Mr WHETSTONE:** You are gurgling in your jar. I asked you a specific question and you are—

**The CHAIR:** You are wasting your time, member for Chaffey.

**Mr WHETSTONE:** No, I am not.

**The CHAIR:** You are, you are wasting your time. Your question was politically charged; you have to expect this kind of answer from the minister. He is very easily provoked.

**Mr WHETSTONE:** I get more answers out of a cardboard cut-out than I do out of the real thing. The member for Flinders would like to ask a question.

**The CHAIR:** Have you finished your answer, minister?

**The Hon. I.K. HUNTER:** Sanity at last. No, I have a lot more to say, but I am sure he does not want to hear it.

**Mr TRELOAR:** I refer to Budget Paper 3, page 115. Under 'major projects', there is funding allocated for the Tod River Dam Safety work. I understand that that is a safety upgrade.

**The Hon. I.K. HUNTER:** Yes.

**Mr TRELOAR:** My understanding is that, after this work is carried out, the capacity of the reservoir will be reduced to just 8 to 10 per cent of its otherwise full capacity. How does this add to the ongoing water security of the supply in Eyre Peninsula?

**The Hon. I.K. HUNTER:** An excellent question from an excellent local member. I understand that the level will be currently what it is. I think that we propose to keep it at about the same level it is now, but I will just take you through a bit of important information. The Tod River dam was identified for a potential upgrade in SA Water's 1998 dam portfolio risk assessment. Recent work has confirmed that the dam does not comply with the ANCOLD safety guidelines and that an upgrade or decommissioning will be required to make it compliant.

SA Water's most recent portfolio risk assessment (in 2014) indicates that the Tod River dam is among SA Water's highest risk dams. Accordingly, the upgrade will begin in the financial year 2016-17. The Tod Reservoir has been off-line since 2002, I am advised, due to the high level of salinity and other water quality issues. SA Water has confirmed that the treatment requirements and the lack of reliable catchment run-off has made the reservoir a lower priority augmentation source for the water supply system. Tod River is not in fact there to be a backup for water supply. The major issue that we need to attend to is the safety improvements to maintain the integrity of the dam wall and retain its availability for future opportunities, should they arise.

A risk assessment has been completed to assist with decisions regarding upgrade options. Four options were considered by SA Water: a full safety upgrade of the dam wall and spillway, a

phased upgrade and full or partial decommissioning of the dam. A phased upgrade was selected as a preferred option, and design work is complete, essentially. A total of \$1.592 million has been spent on the project to date, the overall project budget being about \$14 million.

The dam upgrade work is scheduled to be completed by June 2018, with relatively minor expenditure for revegetation in the following years. The project is still being considered by the Development Assessment Commission, I am advised, and once approved, it will go to the Public Works Committee, so the larger plan capital outlays have not yet been made. They are expected to commence in 2016-17.

We are actively exploring beneficial uses for the offline reservoirs that could generate extra revenue and support local economic development in the region. Taking this into account, the government is open to a possible commercial arrangement, of course, for supply of water from the Tod River Dam, but that will depend on third parties approaching us for access to that water.

**Mr TRELOAR:** I refer to Budget Paper 4, page 157, Program 2: Water: 'Ensure good quality, sustainable water supplies...' What is SA Water doing to improve the quality of the water that is being supplied from the southern basins to reticulated customers on Eyre Peninsula?

**The Hon. I.K. HUNTER:** Is this our last question today on this subject?

**The CHAIR:** It is.

**The Hon. I.K. HUNTER:** I might let the chief executive out for a run, then.

**Mr TRELOAR:** By way of explanation, Chair, the common complaint is that the water, of course, is high in calcium, having come from the southern basins, and it causes problems through the reticulated pipelines.

**Mr CHEROUX:** We have a number of initiatives ongoing in terms of water quality. As you know, water is the most regulated product in the world. It is regulated to the level of each physical or chemical component, so we are making sure that, first, we comply with the Australian Drinking Water Guidelines. That is a must, and we do. In addition to that, we are trying to improve the aesthetic quality of the water, so we are working on a number of issues.

It can be simply working on the way we manage the filters at the different water treatment plants and how we manage the cleaning of the filters. We change the media that we use. We change the chemicals. We flush pipelines. We clean the tanks. That is all the day-to-day operations of what we are doing. In addition to that, we have a number of research and development projects ongoing. Algae is one of them because algae will create a lot of disinfection subproducts and will have an impact on the taste of the water.

The quality in terms of calcium carbonate and all the products that will make the water hard is something also that we are working on. There are a number of projects, but it is very much our day-to-day activity to make sure that it is not only compliant with Australian Drinking Water Guidelines but also has good aesthetic qualities.

**The CHAIR:** Thank you. As per the agreed timetable, we will move on to examining the Minister for Climate Change.

#### **Membership:**

Mr Knoll substituted for Mr Treloar.

#### **Departmental Advisers:**

Ms S. Pitcher, Chief Executive, Department of Environment, Water and Natural Resources.

Ms M. Griffiths, Chief Financial Officer, Department of Environment, Water and Natural Resources.

Mr T. Goodes, Group Executive Director, Department of Environment, Water and Natural Resources.

Ms J. Grant, Executive Director, Water and Climate Change, Department of Environment, Water and Natural Resources.

Mr A. Geytenbeek, Senior Accountant, Department of Environment, Water and Natural Resources.

Ms B. Marsden, Chief of Staff.

Mr S. Kandola, Adviser.

**The Hon. I.K. HUNTER:** Chair, we have the same officers as we had before, I believe. Tim Goodes is on my right, with Sandy Pitcher and Julia Grant. Welcome to the table, Julia Grant. Executive Director of Water and Climate Change, Michelle Griffiths, takes a back seat today. The Chief Financial Officer, my adviser and my Chief of Staff are there, and Mr Andrew Geytenbeek is there with management accountancy responsibilities.

Mr Chairman and committee members, I would like to briefly provide an update on the very important steps this government has taken this year to address the challenges the state faces as a result of global warming. In November 2015, we released South Australia's Climate Change Strategy 2015-2050. It outlines our priorities for tackling global warming and how this government will ensure South Australia continues to be a national leader in this space.

Underpinning our work is our goal of achieving zero net emissions by 2050. This is an ambitious target and South Australia is the first Australian jurisdiction to commit to it. I am sure we will not be the last. We underpin this commitment by South Australia becoming a founding signatory of the Under 2 MOU at the conference of parties at the United Nations Framework Convention on Climate Change meetings in Paris in December of last year. We now see other states, like Victoria, following our lead and I commend them for their action, of course. They now see what we, in South Australia, have long recognised to be the case, that tackling action on global warming is necessary for the environment, but it also creates a real boost for economic growth and job creation. Within our climate change strategy, we lay out a plan for achieving this, which includes attracting \$10 billion in low carbon investment and achieving 50 per cent renewables by 2025.

We have also committed to make Adelaide the world's first carbon-neutral city, a showcase for renewables and clean technology in partnership with the Adelaide City Council. The Carbon Neutral Adelaide initiative is important from both an economic and environmental perspective. We want everyone, people who work, live and play in the city, as well as those with innovative ideas and businesses, to play their part.

Together with the Adelaide City Council, we released a vision framework to guide this work. We want Adelaide to be a place where innovation is tested and then applied further. We are already exploring things like smart technologies to save energy, more energy efficient transport, energy storage options to expand the use of renewable energy, and reducing waste even further. Through the carbon-neutral challenge, we are seeking out the best entrepreneurial minds and ideas to identify novel ways and technologies for reducing our carbon footprint, creating sustainable industries and a greener economy.

However, we also want to lead by example. It is why we have committed to improving energy efficiency of government buildings by 30 per cent by 2020 and turning our government car fleet to a low or zero emissions fleet. In addition, the state government has committed \$1.9 million over four years to establish and operate a building upgrade finance mechanism in South Australia. This is a voluntary mechanism to assist building owners overcome barriers to accessing commercial loans to improve the energy, water and environmental efficiency of existing commercial buildings. The legislation that enables the introduction of this mechanism was assented to by His Excellency the Governor in December 2015.

We have seen a very productive 12 months in the climate change portfolio. We have laid out the foundations for real change that makes a real difference to our state's economy and to our regional communities. I look forward to the coming 12 months as we start to see the positive effects of these targets and our strategies.



**Mr PEDERICK:** My first question is in regard to Carbon Neutral Adelaide, low carbon transport, investment, climate knowledge and innovation community. I am referring to Budget Paper 4 and the three programs are on pages 42, 60 and 70. They are all being funded from the solid waste levy. Are these programs all supported by the Premier's Climate Change Council?

**The Hon. I.K. HUNTER:** My advice is that the Premier's Climate Change Council considered these issues and was happy to support them all.

**Mr PEDERICK:** What company undertook the Carbon Neutral Adelaide report?

**The Hon. I.K. HUNTER:** It was the government that produced the report, but pitt&sherry is the company you are referring to who gave us some advice.

**Mr PEDERICK:** And South Australia, supposedly the leader in carbon reduction. Is not pitt&sherry based on the eastern seaboard, particularly in Launceston?

**The Hon. I.K. HUNTER:** My information is that they are based in Tasmania, but have offices elsewhere in the country.

**Mr PEDERICK:** So there is no-one from South Australia that could have done this report?

**The Hon. I.K. HUNTER:** I think the advice was that pitt&sherry have a track record in this area and were probably the leaders in terms of experience in giving advice to government in this carbon-neutral space.

**Mr PEDERICK:** I refer to Budget Paper 5, page 42. In regard to Carbon Neutral Adelaide, do you have any means of measuring how effective this program will be, and will it be verified under the Australian National Greenhouse Accounts national inventory systems?

**The Hon. I.K. HUNTER:** My advice is yes and yes, and in fact we have been recognised internationally in terms of our ability not only to demonstrate what has been achieved but it has been demonstrable based on the most rigorous of assessments possible. The Carbon Disclosure Project, an international project, has recognised South Australia as being an absolute leader in this regard.

**Mr PEDERICK:** Do you have means—and this is the first part of that question—of measuring how effective this program will be?

**The Hon. I.K. HUNTER:** My advice was, yes.

**Mr PEDERICK:** What are those means? What criteria do you have in place and what are you using as benchmarks, etc.?

**The Hon. I.K. HUNTER:** I will ask Julia Grant, the executive director of this area, to respond to you.

**Ms GRANT:** All the data and inventory is gathered in partnership with the Adelaide City Council, and they control the inventory for the City of Adelaide and they abide by global protocol, which is the international inventory and modelling, and then we have an annual inventory that measures the emissions from the City of Adelaide, and that is what we submitted as part of our reporting and our obligations under the international agreements that we have signed up to.

**Mr PEDERICK:** How many tonnes of carbon emissions do you believe this program will prevent from entering the atmosphere, or will be abated?

**The Hon. I.K. HUNTER:** Lots.

**Mr PEDERICK:** I want a bit more serious answer than that, minister. What is the target?

**The Hon. I.K. HUNTER:** I am advised that data from 2012-13 indicates that the City of Adelaide generated nearly one million tonnes of greenhouse gas emissions from electricity and gas consumption, transport and waste. That is a lot. Stationary energy and transport were the primary sources of emissions, contributing 60 per cent and 35 per cent respectively. In addition, waste that was disposed of to landfill generated 5 per cent of the city's emissions. We are working with the city council to achieve this ambitious goal and have formalised our partnership through a sector agreement under the Climate Change and Greenhouse Emissions Reduction Act 2007. There are a range of programs I could talk about, but it would take up the whole time. My understanding is

that, at least by 2020, we will be looking to reduce that emissions profile of the City of Adelaide by at least 30 per cent.

**Mr GEE:** I refer to Volume 2, page 155, Sub-program 1.2: Preparing for Climate Change. Minister, will you explain to the committee how the state government is partnering with the Adelaide City Council to make Adelaide the world's first carbon-neutral city and how the wider community is being involved?

**The Hon. I.K. HUNTER:** Thank you, member for Napier. You are cutting the lunch of the member for Hammond. He is one of our climate champions in this place. Tackling global warming is something that we must all take very seriously, as all members of the committee do, I am sure. It will require innovative and creative thinking and the courage to work together in new ways. The partnership between the state government and the Adelaide City Council to make Adelaide the world's first carbon-neutral city is a perfect example of this.

The partnership is underpinned by the Carbon Neutral Adelaide sector agreement under the Climate Change and Greenhouse Emissions Reduction Act 2007. It allows us to pool our resources and our experiences to make a real difference to the City of Adelaide, its residents, businesses and visitors. Carbon Neutral Adelaide is part of our target to reach zero net emissions by 2050. That was discussed in detail in South Australia's Climate Change Strategy 2015-50.

In November 2015, the South Australian government and Adelaide City Council jointly released the shared vision for Carbon Neutral Adelaide. We are working with the Adelaide City Council to develop a carbon-neutral Adelaide action plan, which will be released later this year. The importance of the unique partnership between the Adelaide City Council and the state government has been acknowledged at the COP 21 United Nations meeting in Paris in December of last year. Our emissions inventory data indicates that the City of Adelaide's annual greenhouse gas emissions from electricity and gas consumption, transport and waste is about one million tonnes, as I said earlier.

Stationary energy and transport are the primary sources of emissions, producing 60 and 35 per cent, respectively. As I said earlier, waste and landfill generates around 5 per cent of the city's emissions. The Carbon Neutral Adelaide initiative aims to drive emissions reductions by increasing demand for renewable energy and resource efficiency, building the state's green industries, improving waste management and facilitating the transition to cleaner modes of transport. There are clear environmental and economic imperatives in transitioning to a low-carbon economy, but it will require creativity, research, technology and innovation, as well as the involvement of all city users—as I said earlier, those who work and live in the city, those who work here in businesses and those with innovative ideas.

This is why the state government is a proud contributor to the Adelaide City Council Sustainable City Incentives Scheme. Our joint investment of \$300,000 has already leveraged more than \$1.7 million of investment in sustainability upgrades since July 2015 from the private sector. These include improvements in energy storage and energy monitoring systems. We are also increasing renewable energy production by installing one megawatt of solar PV panels, including 150 kilowatts at the Adelaide Zoo.

We are improving lighting efficiency by replacing over 800 halogen downlights with LEDs in homes and small businesses. We are also engaging widely with the community to ensure high levels of participation. For example, we jointly held a workshop at the end of June that attracted over 170 participants, generating great debate and ideas, such as using technology to encourage people to leave their cars at home by using an app to book free bikes. The possibility of developing carbon-neutral streets or precincts is a first step.

In addition, pop-up information sessions are being held throughout the city in July and people can share their ideas any time through the yourSAy website. In the 2016-17 financial year the state government will provide funding towards mobilising the community around this initiative. The Adelaide City Council and the state government will continue to provide assistance to business and community support, making Adelaide the world's first carbon-neutral city.

**Mr PEDERICK:** How much is the Adelaide City Council contributing? I think you said that the total cost is \$300,000. Is that a fifty-fifty—

**The Hon. I.K. HUNTER:** That was for one program. That is for the innovation of battery storage and PV uptake. We are putting in 150 and they are putting in 150 but, as I said, that has already leveraged about \$1.17 million in private investment.

**Mr PEDERICK:** What have you budgeted for the total program and is the Adelaide City Council a fifty-fifty partner in the whole program as far as funding goes?

**The Hon. I.K. HUNTER:** We are still working on the plan. It is in development. The ongoing investment that I talked about earlier will be ongoing, year on year. Depending on the funding opportunities that arise from that planning, some of the funding will come from state government, obviously, some might come from the city. In terms of transport, for example, if there is a bike project that we will be working on together, that will be a shared cost or shared investment. In other parts of the plan, of course, it will be more appropriate for the government to expend its moneys on that. So it will really depend on the funding opportunities that arise as we go forward and further develop that plan.

**Mr PEDERICK:** I refer to the same budget line. Minister, you talked about battery storage. There are a lot of people off grid or in other situations reducing their link to the grid and using battery storage. Have you done any work on the future disposal of lithium batteries, which I believe will be quite an issue into the future?

**The Hon. I.K. HUNTER:** Excellent question. I am advised that this question probably should go to the Minister for Energy. However, we have a—

**Mr PEDERICK:** You are going to have to deal with the waste, minister.

**The Hon. I.K. HUNTER:** We will have to deal with the crossover here. Perhaps the member for Hammond has an idea about how we could be involved in the future growth industry for the world in terms of recycling batteries and how they might be re-used. It is a great suggestion, member for Hammond, and I will give you all credit for being a climate champion in this regard.

**Mr PEDERICK:** I have plenty of PV panels, sir. You have no more on that?

**The Hon. I.K. HUNTER:** No, this is an area on which the Minister for Energy would be most appropriately questioned. We have crossover interests. We will talk to him about that. The interest for me is the potential industry we could create in South Australia in terms of recycling these lithium batteries. It is a great idea; I give you full credit for it.

**Mr PEDERICK:** Thank you, sir; rare praise indeed—I will highlight that.

*Members interjecting:*

**Mr PEDERICK:** Okay. I have only so little time, that's enough. I am not used to love in either of these chambers—you do get it occasionally, I will admit that.

**The Hon. I.K. HUNTER:** But outside, Adrian, outside.

**Mr PEDERICK:** I refer to Budget Paper 5, page 60, the Low carbon transport investment program. What sort of vehicles is the government and the council looking at to be part of this program?

**The Hon. I.K. HUNTER:** I am advised again that this area goes to the portfolio of the Minister for Transport. I can advise the committee that we are looking at really trying to drive down emissions as the first point of call, so low emission vehicles, whatever they might be—obviously the top-end, full electric vehicle and electric hybrids fall into the category of being utilised already in fleet as I understand—but low emission vehicles in general. If we can take out high emitting vehicles and replace them with lower emission vehicles we are contributing to the outcome we want. At the highest level, full electric is something we would like to seek regarding the maximum penetration for the fleet.

**Mr PEDERICK:** Just expanding on that, minister, have you looked at hydrogen-powered vehicles?

**The Hon. I.K. HUNTER:** I have, member for Hammond. I think it was Hyundai that picked me up at the Sydney airport last year and drove me into my meeting in Sydney in a hydrogen vehicle. It was fascinating; you can not tell the difference between a hydrogen-powered vehicle and

a petrol-powered car. They tell me that they have a demonstration fuel model, which essentially is a box sitting in the streets of Sydney; it utilises solar power from a solar PV, which is fantastic in that it takes water that it condenses out of the air (not supplied through pipes) and splits it up into hydrogen and oxygen and uses that to fuel the vehicle. It is a fantastic technology.

Of course, for that to go ahead you would need to have these frequent fuel stops, which provide the hydrogen. Either it can be something futuristic like that, or of course just bottled hydrogen from regular petrol stations. That is something to be taken up. I understand from Hyundai that they will be introducing a left-hand drive vehicle into the Australian market in 2017; that was their plan at the time, with similar models as they have in the UK right now.

**Mr PEDERICK:** I understand from the 2015-16 budget there was a reference in the 2015-16 targets to a review of the Climate Change and Greenhouse Emissions Reduction Act 2007, which does not appear to be in this year's budget papers. Am I correct in the belief that this review has not taken place?

**The Hon. I.K. HUNTER:** I will ask Sandy Pitcher to respond to the member for Hammond.

**Ms PITCHER:** Initially, in the last budget year, the South Australian government employed an expert panel made up of John Hewson, Anna Skarbek from ClimateWorks and Frank Jotzo from the ANU. They provided a range of advice to the government on our climate change strategy. Their advice was that we could commit South Australia to net zero by 2050, which we then did in our strategy that the Premier launched at the Paris Conference of the Parties in December last year.

That was the first phase of the review. There were a number of things that the expert panel recommended to South Australia that we will be implementing. We are now, I suppose, almost at stage 2 of that review, looking at the recommendations that the government accepted from that expert panel, which of those we need to put into the climate change legislation and what opportunities are there to reform the legislation in light of all of the different initiatives we have in place at the moment. The Premier's Climate Change Council will have also been looking at the opportunity to review the legislation and giving the minister some advice on opportunities to do so. So, they are both at, I suppose, the first stage, but there are a number of stages to continue.

**Mr PEDERICK:** From that answer, minister, it is an ongoing review.

**The Hon. I.K. HUNTER:** It is a work in progress. We have started it, and the advice coming back from the expert panel has been very encouraging.

**Mr PEDERICK:** On the same budget line for the Climate Change and Greenhouse Emissions Reduction Act 2007, when was the last time that your government commissioned and received an update from the CSIRO, as is required by the act?

**The Hon. I.K. HUNTER:** In an abundance of caution, we might take that on notice. We think it was two years ago, but we will check the date and bring back that advice.

**Mr PEDERICK:** Thank you. I refer to Climate Knowledge and Innovation Community, which is in Budget Paper 5, page 70. How will the government measure the effectiveness of this program?

**The Hon. I.K. HUNTER:** My advice is that this is the Climate KIC proposal, which will be a partnership with other state government jurisdictions along with the private sector insurance company, I suppose, Suncorp. They will be managing their budget and their program of research and connecting the universities together. We will be a partner in that. We will measure that as we go, and see if we can get value for money from that, but our primary goal here is to actually attract some of that investment in terms of research to South Australia.

**Mr KNOLL:** The omnibus questions are:

1. Will the minister provide a detailed breakdown of expenditure on consultants and contractors above \$10,000 in 2015-16 for all departments and agencies reporting to the minister, listing the name of the consultant, contractor or service supplier, cost, work undertaken and method of appointment?

2. In the financial year 2015-16 for all departments and agencies reporting to the minister, what underspending on projects and programs (1) was and (2) was not approved by cabinet for carryover expenditure in 2016-17?

3. For each department and agency reporting to the minister, please provide a breakdown of attraction, retention and performance allowances, as well as non-salary benefits, paid to public servants and contractors in the years 2014-15 and 2015-16.

4. For each year of the forward estimates, please provide the name and budget of all grant programs administered by all departments and agencies reporting to the minister, and for 2015-16 provide a breakdown of expenditure on all grants administered by all departments and agencies reporting to the minister, listing the name of the grant recipient, the amount of the grant, the purpose of the grant and whether the grant was subject to a grant agreement as required by Treasurer's Instruction 15.

5. For each year of the forward estimates, please provide the corporate overhead costs allocated to each individual program and subprogram administered by or on behalf of all departments and agencies reporting to the minister.

6. For each department and agency reporting to the minister, could you detail:

- (a) How much was spent on targeted voluntary separation packages in 2015-16?
- (b) Which department funded those TVSPs?
- (c) What number of TVSPs was funded?
- (d) What is the budget for targeted voluntary separation packages for the financial years included in the forward estimates (by year), and how these packages are to be funded?

7. What is the title and total employment cost of each individual staff member in the minister's office as at 30 June 2016, including all departmental employees seconded to the minister's offices and ministerial liaison officers?

**The Hon. I.K. HUNTER:** I thank the member for Schubert for his most excellent questions. They should keep 20 or 30 people very busy for a number of months.

**The CHAIR:** I want to thank you, minister, and your advisers for coming in today. I declare the examination of the proposed payments for this department completed.

At 14:30 the committee adjourned to Tuesday 2 August 2016 at 09:00.