



# ***HEALTH AND ENVIRONMENT COMMITTEE***

**Members present:**

Mr AD Harper MP—Chair  
Mr SSJ Andrew MP  
Ms AB King MP  
Mr R Molhoek MP  
Ms JE Pease MP  
Dr MA Robinson MP

**Staff present:**

Dr J Dewar—Committee Secretary  
Ms A Groth—Assistant Committee Secretary

## **PUBLIC BRIEFING—MEETING WITH THE DEPARTMENT OF ENVIRONMENT AND SCIENCE**

### **TRANSCRIPT OF PROCEEDINGS**

**MONDAY, 22 MARCH 2021**

**Brisbane**

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**The committee met at 11.16 am.**

**CHAIR:** Good morning. I now declare this public briefing of the Health and Environment Committee open. I want to start by acknowledging the traditional owners of the land on which we are meeting today and pay my respects to elders past, present and emerging. I want to introduce members of the committee. I am Aaron Harper, member for Thuringowa and chair of the committee. Other committee members here with me today are Mr Rob Molhoek, member for Southport and deputy chair; Mr Stephen Andrew, member for Mirani; Ms Ali King, member for Pumicestone; Ms Joan Pease, member for Lytton; and Dr Mark Robinson, member for Oodgeroo, who will be joining us shortly.

The purpose of today's briefing with the Department of Environment and Science is to assist the committee with its oversight of the environment, science and youth affairs portfolios. The committee would appreciate the department providing an overview of the department and management of its portfolio responsibilities. The committee then proposes to examine the department's annual report. Before we begin I remind everyone that today is a formal proceeding of the parliament and is subject to the Legislative Assembly's standing rules and orders. Hansard will record the proceedings and you will be provided with a copy of the transcript. The hearing is being recorded and broadcast live on the parliament's website.

**CONNOR, Mr Andrew, Acting Deputy Director-General, Environmental Services and Regulation, Department of Environment and Science**

**HUSSEY, Dr Karen, Deputy Director-General, Environmental Policy and Programs, Department of Environment and Science**

**JACOBS, Dr Mark, Deputy Director-General, Science and Technology, Department of Environment and Science**

**KLAASSEN, Mr Ben, Deputy Director-General, Queensland Parks and Wildlife Service and Partnerships, Department of Environment and Science**

**MERRICK, Mr Jamie, Director-General, Department of Environment and Science**

**CHAIR:** I now welcome representatives from the Department of Environment and Science. Thank you all very much for being here. This is a new part of the health committee—the former health committee had different aspects to it in the previous term—and I think it is exciting that the health committee gets to look at aspects of science and the environment. We really look forward to hearing your briefing today before we ask questions. Mr Merrick, would you like to start with an opening statement?

**Mr Merrick:** Yes, thank you, Chair. Can I also acknowledge the traditional owners on whose land we gather, the Turrbal and Jagera peoples, and pay my respects to elders past, present and emerging. I am very pleased to provide the committee with an overview of the important work delivered by the Department of Environment and Science. The department contributes to the Queensland government objectives for communities through our leadership in terms of protecting the environment but also through other significant contributions, notably in supporting jobs and growth in our regions and safeguarding the community's health. We have been very committed to contributing to Queensland's economic recovery following the COVID-19 pandemic. We are helping to build the resilience of the Queensland economy by enabling growth of emerging industries and markets and leveraging our greatest natural assets—our environment and national parks—to help drive local tourism growth. You will hear more on this from my colleagues this morning.

In terms of an overview of the department, the department administers 22 acts in total, 15 directly by the department and seven jointly with other government agencies. As per the 2020-21 state budget, the Department of Environment and Science had an operating budget of \$897.8 million

and a capital budget of \$91.3 million. As at March 2021, the department has around 2,700 active and paid full-time equivalents and we operate from 140 sites across Queensland. Approximately half of DES staff are located outside of the Greater Brisbane area and the department has six major divisions: Queensland Parks and Wildlife Service and Partnerships; Environmental Services and Regulation, which is the environmental regulator for the state of Queensland; Environmental Policy and Programs; Science and Technology; Corporate Services; and Youth Affairs.

Over the last three years the department's achievements have been significant. Turning first to waste, we continue on our path for Queensland to become a zero waste society by 2050. The ban on single-use lightweight plastic shopping bags has seen a 70 per cent reduction in plastic bag litter, equivalent to about 11.2 million plastic bags. Since commencement, more than 3.79 billion containers have been returned through the container refund scheme. That has provided the equivalent of some \$379 million in returns to Queenslanders and charities across the state, helped to create around 700 jobs and reduced litter of beverage containers by 54 per cent. New laws, as I am sure you are aware, have been introduced to ban single-use plastic items such as straws, cutlery, plates and stirrers from 1 September this year, and the waste levy has helped to grow the recycling resource recovery sector and reduce the amount of waste going to landfill. Indeed, interstate waste is down over 60 per cent—I think 63 per cent to be precise—between 2018-19 and 2019-20, and we have also seen very significant falls in construction and demolition waste and an overall increase in recovery rates of just over five per cent.

In terms of the Great Barrier Reef, we continue to make significant gains in our efforts to secure the health and resilience of our iconic Great Barrier Reef. The Queensland government has committed more than \$400 million to protect the reef since 2015. In particular, the Queensland Reef Water Quality Program, which the department leads, has provided \$270 million in funding for projects to support industry, agricultural producers and communities improve water quality. We have also introduced reef regulations to reduce nutrient and sediment run-off from agricultural industrial sources. More recently, we have launched and we are delivering the \$10 million Reef Assist program, which is funding 11 environmental projects creating over 130 jobs in regional Queensland.

The department is also leading the development of the Climate Action Plan 2020-2030. The plan will set out a range of actions to seize export opportunities and create jobs in high-growth clean technology markets and natural capital markets at the same time as reducing emissions. We have funded 31 local councils under the QCoast<sub>2100</sub> Program and 44 councils under the Queensland Climate Resilient Councils program to plan for and respond to the impacts of climate change. We have also produced downscaled climate projections for all of the regions of Queensland which the deputy director-general of science and technology may say more about.

More than 1,100 small to medium businesses have participated in the ecoBiz program, which we support, reducing their energy by 27 per cent, their water by 25 per cent and their waste by 37 per cent. That goes to the bottom line of many small businesses across Queensland. The Land Restoration Fund has funded 18 projects across Queensland with a total value of \$92 million in its first investment round, helping to create new long-term, sustainable and local jobs and deliver carbon credits and other environment, biodiversity and social benefits. As mentioned, we are also the state's environmental regulator and we continue to take strong enforcement action against those who do the wrong thing, none more so than the high-profile case around Linc Energy, which has been fined \$4.5 million for wilfully and unlawfully causing environmental harm, the largest environmental case in Queensland's history. Queensland and Andrew particularly have led nationwide work that has led to the ban on the use of PFAS and firefighting foams.

We have also introduced new laws requiring improved rehabilitation outcomes from mined lands, including progressive rehabilitation of large mine sites, and later this year we anticipate the appointment of Queensland's first Rehabilitation Commissioner and the establishment of the Office of Better Rehabilitation to support and provide advice on world-leading, best practice rehabilitation on mined land. We strive to be efficient, transparent and provide certainty to proponents through robust science based assessment and approvals processes. In the recent period we have averaged around 19 weeks to complete REIS assessments, against the statutory time frame of 30 weeks, without compromising the rigour and whilst upholding rigorous environmental standards.

Turning now to protected areas, Queensland has more national parks and World Heritage areas than any other state. These contribute greatly to the health of our environment and biodiversity and of course are a very major tourism drawcard. The department manages more than 13 million hectares of protected areas and forests, an area equivalent to the size of Greece, and 344,000 square kilometres of Great Barrier Reef and state marine parks. Since 2015, protected areas in Queensland

have increased by more than 1.2 million hectares and we are now delivering the new Protected Area Strategy, released last October. The strategy was accompanied by an initial \$60 million investment to expand the protected area estate. Queensland is the first state in Australia to create a new class of protected area—special wildlife reserves—and in 2020-21 we have invested more than \$12 million in the Indigenous Land and Sea Ranger program to support more than 100 rangers caring for country. The government is committed to a very significant expansion of the number of land and sea rangers over the forward estimates period.

A further \$8.9 million is being invested in the National Parks Works and Jobs Boost Program as part of Queensland's economic recovery plan, delivering a range of infrastructure and visitor facilities across parks and forests. The department also led work on the South East Queensland Koala Conservation Strategy, which has provided the strongest protections for koalas in the state's history. It provides for new and increased levels of protection for koala habitat across the South-East Queensland region. In partnership with Bundaberg Regional Council, we have also invested \$22.2 million in the redevelopment of the Mon Repos Turtle Centre to support ongoing turtle conservation programs and provide a world-class ecotourism experience. Some \$7.5 million has been provided over the past five years to support the South-East Queensland wildlife hospital network, which has seen very significant increases in demand, not least from the recent bushfire seasons.

In terms of science, science and research is critical to protecting the health of Queenslanders and conserving and managing the natural environment. It is also critical to productivity and job growth in Queensland. The department's air quality monitoring network and website provides hourly updates on air quality, helping Queenslanders manage health concerns during periods of poor air quality, including during bushfire seasons. Indeed, in the 2019-20 bushfire season there were more than 400,000 visits per day to the website. We have also led work to reform the Biodiscovery Act, which now requires biodiscovery entities to seek agreement with First Nations peoples before using their traditional knowledge for biodiscovery but also ensuring that Queensland is consistent with the Nagoya protocol which will enable international investment into biodiscovery within Queensland. The department is also investing \$25 million into eight world-class research infrastructure projects and we provide over 12½ thousand reports a month to the public, local government, landholders and industry through our MapsOnline service to assist with property planning, self-assessment and vegetation management, and more than \$1.2 million has been provided in grants across 43 citizen science projects through the office of the Chief Scientist.

Turning finally to youth, youth engagement joined the department in December last year, bringing with it the Office for Youth and the Safer Schoolies portfolios of work. We continue to deliver initiatives that support young people to thrive and help them engage in Queensland's economy and society and, indeed, in their local communities. The annual Youth Week event, to be held in April, provides an opportunity to celebrate the achievements and contributions of young people aged 12 to 25. This year young people are being encouraged to share their ideas on what a future Queensland would look like. We are bringing young Queenslanders to the table to listen to their ideas on how to shape government business and government services through programs such as the Queensland Indigenous Youth Leadership Program, the YMCA Queensland Youth Parliament and the new Youth Speakout events, which will begin this year during Youth Week, and the Queensland Youth eHub provides a safe electronic platform for young people to have their say on matters that affect them. Thank you.

**Mr Klaassen:** I acknowledge the traditional owners of the lands on which we meet and elders past, present and emerging. I am going to give you a brief overview of Queensland Parks and Wildlife Service and Partnerships. As the director-general just advised, QPWS is Queensland's largest public land manager, managing protected area and forestry estates as well as human interactions with our native wildlife.

The QPWS managed estate is approximately 13 million hectares of terrestrial reserve including national parks and forestry areas, 72,000 square kilometres of state marine parks—we jointly manage the Great Barrier Reef Marine Park—1.2 million hectares of fish habitat areas and approximately 500 protected area islands. QPWS supports conservation outcomes and also commercial activities in partnership with other government agencies, scientists, local businesses, volunteers, First Nations partners, not-for-profit organisations and park user groups and businesses. QPWS also partners with private landholders through the Private Protected Area Program, which encourages landholders to protect the conservation values of their land through the declaration of nature refuges or special wildlife reserves, with over 4.4 million hectares protected.

The key functions QPWS performs include increasing the protected area estate to achieve conservation outcomes as guided by targets in the Protected Area Strategy and managing fire across 13 million hectares of land, including a well-developed planned burn program for hazard reduction and extensive capability for wildfire response as required in collaboration with Queensland Fire and Emergency Services. We manage pests and weeds across the estate, with targeted programs in priority locations including feral pigs and cats, wild dogs and noxious weeds.

We recognise the contributions of our First Nations partners in the management of our protected areas, including joint management of Quandamooka country in Moreton Bay and 28 national parks in Cape York. As the director-general mentioned, we are expanding the very successful Indigenous Land and Sea Ranger program, with a further 50 rangers to be approved to commence in the 2021-22 financial year and another 50 to join in subsequent years.

We manage Queensland's threatened species through the delivery of programs that support recovery, habitat restoration and all feral animal control. For example, the Raine Island Recovery Project represents a five-year collaboration between the Queensland government, the Great Barrier Reef Marine Park Authority, BHP, the Great Barrier Reef Foundation and traditional owners to protect and restore the island's habitat and ensure the future of green turtles and seabirds in one of the most important turtle habitats in the world. Providing management and oversight of Queensland's World Heritage listed areas is also a key function that we perform.

The QPWS is a significant contributor to Queensland's tourism industry, with research demonstrating \$2.64 billion in national park generated spending contributions to our economy. Many of the iconic destinations that are under QPWS management are critical to the success of a strong Queensland tourism product, such as the Daintree, K'gari or Fraser Island, Bribie Island, Boodjamulla Lawn Hill, and Noosa and Lamington national parks to name a few.

The QPWS is also a large provider of tourism experiences, with over 560 campgrounds across the state which will have thousands of visitors over the Easter period. This financial year we have already had over one million campers visit our parks and forests. Our work to support Queensland as a premier ecotourism destination has also achieved positive outcomes, with the new Spicers Scenic Rim Trail opening last year and the transition of the QPWS campground in the Green Mountain section of Lamington National Park to O'Reilly's. We continue to work on priority projects, including the Cooloola Great Walk and the Wangetti Trail.

The work of our wildlife officers is also of great significance, whether that be responding to problem crocodiles, assisting injured wildlife, working to protect koalas or preventing illegal wildlife trade. I would like to acknowledge the efforts of all Queensland Parks and Wildlife Service and Partnerships staff, rangers, wildlife officers, conservation officers, planners, project officers and administrative staff. These people work tirelessly to protect and conserve the many unique places and diverse species that make Queensland world renowned for our biodiversity. I will hand over to Dr Hussey.

**Dr Hussey:** Thank you for the opportunity to talk to you today. I am going to give you an overview of the Environmental Policy and Programs division, which is essentially the division that provides the policy advice and programs that deliver the government's objectives for the protection of the environment and our heritage.

The division includes policies and programs for the Great Barrier Reef, heritage places, recycling and resource recovery, conservation and environmental planning and protection, and climate change and sustainable futures. Our work does not just safeguard Queensland's pristine environment; it also makes a significant contribution to the Queensland and Australian economies. To give you an example that you are no doubt very familiar with, Queensland's iconic Great Barrier Reef is world renowned and its outstanding universal value is an economic, social and environmental asset estimated to be worth about \$56 billion, providing around 64,000 jobs and contributing about \$6.4 billion to the Australian economy.

The programs of the division include market based solutions like the Land Restoration Fund, which offers landholders long-term income diversification opportunities whilst simultaneously restoring and enhancing our environment. The Land Restoration Fund, for example, has committed almost \$92 million across 18 carbon-farming projects throughout the state. As you heard from the director-general, the effort is the first of its kind in Australia and will sequester around 1.8 million tonnes of carbon, protect threatened species and ecosystems, support healthier waterways and also generate additional income for landholders and connect First Nations peoples with country.

Another prime example of our policy work was the delivery last year of the South East Queensland Koala Conservation Strategy 2020-2025, which was designed to better coordinate habitat protection, restoration and threat mitigation. As you heard, it is the strongest conservation framework for koalas the state has ever seen.

We also ensure that our legislative framework meets the needs of Queenslanders including, for example, launching a world-leading residual risks framework, delivering strengthened reef protection regulations, delivering the Queensland government's transshipping policy and supporting heritage protection. To drive an ambitious waste reform agenda structured around circular economy principles, we have reintroduced a levy on waste disposed to landfill, introduced a ban on single-use lightweight plastic shopping bags and single-use plastic items, and launched the container refund scheme. Our efforts to restore the environment also include the delivery of the Disaster Recovery Funding Arrangements program to repair coastal and riparian areas hit by the floods in North Queensland in early 2019.

We are also the coordinating agency for the government's climate change policy and, consequently, as the director-general mentioned, we are responsible for developing the Climate Action Plan 2020-2030. The Climate Action Plan will build on, for example, the work done to develop a comprehensive climate science platform to inform decision-makers about future climate change impacts, as well as programs such as ecoBiz, which is designed to support small and medium sized enterprises in Queensland to reduce their energy and water footprints while simultaneously reducing their carbon footprint.

Finally, underpinning many of EPP's policies and programs is the legislation that we have stewardship of—the major ones being the Environmental Protection Act, the Nature Conservation Act, the waste and resource recovery act, the Environmental Offsets Act, chapter 3 of the Water Act and the Heritage Act. I am happy to take any questions that you might have.

**Mr Connor:** Thank you for the opportunity to appear before the committee to outline the responsibilities and activities of the Environmental Services and Regulation division. ESR is Queensland's environmental regulator, with primary responsibilities under the Environmental Protection Act. The division delivers targeted, consistent and transparent regulation supporting sustainable development and protecting communities and the environment. We also have regulatory responsibilities under a range of other acts, including the Waste Reduction and Recycling Act, the Queensland Heritage Act, the Coastal Protection and Management Act and schedule 3 of the Water Act.

The division is decentralised, with 13 offices across the state from Cairns to Emerald to Robina. We have specialised business centres responsible for assessing proposals for environmentally relevant activities under the Environmental Protection Act and setting environmental performance standards for industry through the enforceable conditions of environmental authorities, as well as a range of other activities under the waste and coastal acts. Assessment activities are undertaken at our minerals business centre at Cairns, our coal business centre at Emerald, and our waste and development, energy and extractive, and environmental impact assessment business centres at Brisbane.

As at the end of the 2019-20 financial year, there were 8,043 environmental authorities regulated by the division. In the 2019-20 financial year, we implemented a number of measures to support environmental authority holders during the COVID-19 response, with a more flexible risk based approach to compliance and available payment plans for those in financial hardship. We also mobilised staff when needed to support priority COVID response initiatives like contact tracing.

Environmental Services and Regulation has compliance teams at all 13 of our office locations throughout Queensland. These teams are responsible for monitoring industry compliance and responding to contraventions, addressing community concerns raised about environmental compliance and maintaining a 24-hour environmental incident response service. Local governments are important co-regulators of the legislation administered by the division, with delegations of regulatory powers provided for environmental nuisance, water contamination, and litter and illegal dumping. A key partnership is the litter and illegal dumping partnership program, which currently involves allocation of \$4 million worth of grants to 27 councils to employ 31 new field officers across the state to respond to illegal dumping and undertake targeted interventions to reduce dumping in known hotspot areas.

For the 2019-20 financial year, our compliance teams undertook 1,658 compliance inspections and issued 268 warnings, over 3,000 penalty infringement notices and over 96 other enforcement

notices and orders. Our division also provides formal investigation and litigation services across the department, supporting prosecution actions for serious offending. For the 2019-20 financial year, we achieved 21 successful prosecutions and one restraint order outcome from which over \$740,000 in fines were handed down and almost \$75,000 awarded for legal and investigation costs. Thank you for the opportunity to brief the committee.

**Dr Jacobs:** Thank you for the opportunity to appear before the committee and to make a short statement about the value of science to Queensland. Science makes a significant contribution to Queensland in a number of ways. I will outline the work of the division in terms of how it underpins a strong economy by tapping the potential of emerging knowledge intensive industries that create jobs and a healthy environment through the provision of applied science—for example, water quality monitoring and modelling to assist in protecting the reef, species modelling to help conserve our biodiversity, and modelling water allocations for new water infrastructure and to sustainably manage our water resources. Science also safeguards Queenslanders through disaster response and recovery. We maintain statewide networks of both wave monitoring stations and air quality monitoring stations right across the state.

Science contributes to strengthening Queensland's economy. By developing applied science and improving the translation of research, emerging opportunities in knowledge intensive industries are supported. Queensland has well-developed and integrated science and innovation capabilities, with DES working closely with Queensland universities and our research institutes and centres across the state. The Queensland Chief Scientist, for instance, chairs a quarterly round table of deputy vice-chancellors of research. Last year DES developed a digital web tool to visualise Queensland's strengths and capabilities in seven emerging industries with global growth potential. That visualisation tool is available on the DES website.

The science division also provides scientific knowledge and information and advice to DES as well as other government agencies and external stakeholders. Our in-house science is used to manage and develop solutions to environmental challenges and to respond to emerging issues. Science and research is crucial to the Queensland government's efforts to improve the Great Barrier Reef's resilience and to improve the water quality entering the lagoon. DES scientists work with a range of partners to develop solutions to environmental challenges facing the reef, and they work closely with landholders through a range of innovative tools to support more sustainable farming practices in reef catchment areas.

DES scientists play an important role in the government's efforts to protect koala habitat. The Queensland Herbarium developed cutting-edge mapping techniques using the best available science, advanced modelling and improved satellite imagery. By harnessing our scientific capability, we are supporting disaster recovery and resilience throughout the state. A key element of this is protecting Queenslanders' health. As the director-general referred to, DES scientists working with Queensland Health have developed an improved air quality website to help protect Queenslanders from exposure to bushfire smoke. That website shows hourly average readings for fine particles, known as PM2.5, which are a key concern for public health. It also provides nationally consistent health messaging on how to minimise exposure based on the smoke concentration.

Using leading-edge scientific knowledge and information, we are providing climate projections to help develop adaptation strategies and to help strengthen disaster resilience to protect Queenslanders against bushfires, cyclones, flooding and droughts. DES recognises the important contribution science makes to both Queensland's economy and environment and the everyday lives of Queenslanders. I am happy to take any questions as well.

**CHAIR:** Before we go to questions, I want to thank everyone involved in your department in terms of all of the work that is going on in the background looking after those 13 million hectares of land, our Great Barrier Reef and all the aspects of that. There is a lot of information that has just been put to us, but we are already interested in the sea rangers project. We would not mind hearing a little more about that. I will start with youth. I just make a comment around whoever gave the background on the youth part of the portfolio. On Saturday, my first youth engagement advisory panel was launched in Thuringowa. We look forward to the activities in April. There is no doubt that we need to be listening to our young people. We are looking forward to that. You mentioned 11 environment projects around river systems. Can you unpack what that might look like?

**Dr Hussey:** Essentially, as part of the government's economic recovery program we were afforded \$10 million to invest in projects that essentially were going to do two things: principally generate jobs but also provide an environmental outcome or dividend. We provided funding for 11 projects, which generated around 130 jobs. Those jobs were specifically in land management and

remediation, gully restoration and plantings, as you would expect, but there was also an element of being able to employ First Nations peoples in those projects. It was really designed to provide an immediate fiscal stimulus in the context of COVID but also, if you like, generate those environmental and First Nations social outcomes at the same time.

**Mr MOLHOEK:** I am probably not going to be able to ask all of the questions that I want to. I might have to throw a couple in at the end on notice. According to recent reports, the tip of Cape York has been closed. Can you confirm if that is the case?

**Mr Merrick:** For clarity, I might invite the deputy director-general for the Queensland Parks and Wildlife Service to say more on this. It is true that the traditional owners who manage the Pajinka area have been concerned around, frankly, poor behaviours and damage to the environmental and cultural values of that area. It is an area that has not been and is not a protected area. It had a different tenure status. It may have been unallocated state land or another tenure and was transferred from the former department for natural resources and mines to the traditional owners. The traditional owners have been clear that they want to work with operators to allow people to access the areas but they want a clear framework that ensures the values of that area are not further deteriorated or damaged.

**Mr Klaassen:** It is not land that is under the direct control of DES; it never has been. Those matters regarding access need to be worked through with the local council and the traditional owners in terms of the normal processes for any landholder.

**Mr MOLHOEK:** Is there a plan in play at this stage to provide additional resources and facilities to the traditional owners to have that reopened at some point?

**Mr Klaassen:** As I just said, that is not something DES has responsibility for. That is a matter you would need to raise with another portfolio.

**Mr MOLHOEK:** Which portfolio would that be?

**CHAIR:** I do not know, but I think he has answered the question.

**Mr MOLHOEK:** With regard to the water quality report card 2019, it would appear there has been some great progress made. Is there a more recent report than 2019 on progress towards our water quality targets? The report does not actually mention the specific targets; it just talks about broad goals and what we have achieved. I would be interested to know what those targets are. Maybe that could be provided to the committee on notice. Is there a more recent report than the 2019 water quality report card? How are we going with water quality since this report card was produced?

**Mr Merrick:** Certainly, we are very happy to provide more detail.

**Dr Hussey:** We are happy to table the next version of the report and detailed analysis of the targets on notice.

**Mr MOLHOEK:** Thank you.

**Ms KING:** Director-General, can you please provide us with a more detailed update on the impact that the recent ban on single-use plastic items is expected to have on Queensland's ecosystems, in particular our waterways?

**Mr Merrick:** I will invite the deputy director-general for environmental policy and services, to talk to that. Obviously it was canvassed extensively through a regulatory impact statement. It will deliver very significant benefits both environmentally and in terms of creating markets for new recyclable and other products.

**Dr Hussey:** To put the single-use plastics ban into context, it sits under the overarching Waste and Resource Recovery Strategy, which has some very ambitious targets that in turn are, if you like, nested under the national waste targets. The purpose of the single-use plastics ban is essentially to avoid those single-use plastic items, which include stirrers, straws, plates, cutlery and of course the recently added EPS products, ending up in our waterways. The process by which the ban came about, as the director-general said, involved extraordinary levels of consultation. We had the stakeholder advisory group, which of course consisted of peak bodies including the National Retailers Association. The disability and health sectors were also well represented, because of course those sectors rely quite heavily on single-use plastics for personal needs. We also had 20,000 responses in the consultation process. I think 98 per cent of the 20,000 responses, give or take, were very much in favour of a single-use plastics ban. In terms of the impacts, it is really about being able to take those products off the shelves which in turn means that they do not end up in landfill or, as importantly, in our waterways and coastal catchments. That is the purpose of the ban. As I say, it is nested under that strategy. In future years there is a possibility, through regulation, to add products or goods as and when the need arises.



**Ms KING:** I was hoping to hear something about the risks that some of those products pose, in particular to wildlife, if they are allowed to continue increasing in number in our waterways and in our ecosystems.

**Dr Hussey:** There are several ways in which single-use plastics are problematic for the environment. One way is, of course, the ingestion of those products not only in whole but also if they break down into microplastics which we are increasingly understanding to be a problem for wildlife. It is also a classic litter problem in that it clogs up waterways. As you can imagine, that is a problem for species that may be travelling from A to B to the extent that they are able to. It is about being able to reduce the impact of those products that are readily replaced so that you are in turn reducing the impact they have on those waterways and those species.

**Mr Merrick:** There is also growing scientific evidence around the indirect impacts through the food chain through bio-ingestion of microplastics which, of course, is deleterious to a number of our key industries within Queensland. There are clear environmental benefits, but it is also of economic importance. The cost of clean-up is very significant as well. Globally we are looking at about \$17.3 billion, or north of that now probably, per year in terms of plastics clean-up.

**Ms KING:** Are we seeing impact of ingestion of microplastics on the fishing industry in Australia and Queensland in particular?

**Mr Merrick:** I am not an expert here, but I do know there is work, for instance out of James Cook University, that has particularly looked at the prawn industry, for example, and shown higher levels of ingestion in prawns than was understood before. It is a very significant issue for our seafood industry.

**Mr ANDREW:** Dr Jacobs, in terms of reef water quality, does the scientific community have a way to pinpoint what is natural run-off and what is agricultural run-off to be able to meet their standards and to understand the level of quality they want to achieve?

**Dr Jacobs:** The science that we use for understanding nitrogen, sediment and pesticide run-off is the best available science and informs the programs and the policies that we have. It is the best available science, it is peer reviewed and it is world-class. That is what is informing the reef water quality program.

**Mr ANDREW:** We talking about an \$870 million budget overall with the portfolio; is that correct?

**Mr Merrick:** Yes.

**Mr ANDREW:** I spoke to Minister Furner back in 2020 and was told that there was a \$945,000 budget for pigs and feral pigs. The problem at the moment is that in the estimates this problem equates to \$106 million of damage to Queensland's economy—one-eighth of your budget. It is about 0.001 per cent. Are we opening ourselves up to a biosecurity risk in not having more funding directed towards feral pigs and the issues they create?

**Mr Merrick:** I will invite the deputy director-general for the Queensland Parks and Wildlife Service to talk about the specific work we do in terms of pests and feral animals and the scale of the work that we undertake each year.

**Mr Klaassen:** We allocate extensive resources to our pest control programs, pigs being one of the main pests causing issues across all of Queensland. We are doing work around banana plantations up around Tully, up in the cape with traditional owners for pigs that are getting turtle nests, and right across the state with feral pigs. They are very difficult animals to track. You have to be very careful about how you do that. We are looking at new technologies for how we can improve. We are doing the best we can with the resources we have. It is a landscape-wide issue; it does not just fall on parks. It falls on all landholders to take responsibility for managing pests across the landscape. We work collaboratively with councils, land and sea rangers, farmers and anyone who is interested in doing pest control. We are happy to work with them and to talk to them about it.

**Ms PEASE:** Thank you so much for coming in. Congratulations on those really great figures that you were talking about, particularly given that last week we celebrated Global Recycling Day. They are really significant figures. Well done. I want an update again on marine litter or other litter to which my colleague here earlier referred. Are there any grants or anything available to support organisations that might want to do some marine litter and litter management?

**Dr Hussey:** The litter and illegal dumping plan I will throw to my colleague Andrew, but the short answer is yes. The entire waste strategy is underpinned by the waste levy and of course the work that is done by us and by others within the economy. There is a range of different grants that are available to support the resource recovery effort in Queensland and the waste and litter reduction

effort. There is the Regional Recycling Transport Assistance Package, which allowed organisations like Rotary groups or local governments to apply for funding to get the necessary transport to enable them, for example, to take advantage of the container refund scheme. An example is that my local Rotary applied for funding through that scheme—not when I was employed, I should say—and secured a trailer which they could then use to engage in the CRS.

The Charitable Recyclers Rebate program allows charitable recyclers—as you can imagine, they get a lot of material that would otherwise end up in landfill—to have their leviable costs on the goods they collect reimbursed. There is the Illegal Dumping Partnerships program, which is where the state supports local governments to employ people and undertake activities that raise awareness of litter and illegal dumping in their local government area. It also provides a hotline, which I think Andrew will refer to. That has been a tremendously successful program because it not only provides local employment but also draws on the best approach to public policy, which rests on really well targeted communication and education campaigns about the risks that are posed by litter and illegal dumping.

Yes, there is a range of different programs that are administered either directly by us or through the Local Government Association of Queensland or, indeed, in partnership with local governments by which we support the reduction of litter and the reduction of illegal dumping.

**Mr Connor:** There are 27 councils involved in the local government partnership program. There is a \$4 million grant program associated with that, but it really is about partnering with the local governments, which are obviously very closely connected with their own local communities, to identify hotspot areas for litter and illegal dumping. At the halfway point of that program delivery there were over 2,500 compliance actions taken by various local governments which resulted in around 800,000 litres of waste associated with illegal dumping being removed from the environment.

**Mr Merrick:** Last Thursday the minister launched the community sustainability award grants. There is a major focus within that \$700,000 stream of funding to support marine and litter clean-up and prevention. There are grants of \$50,000 per project and two streams. The first is on actual clean-up activities, which is getting community involved in activities within their local area and their region but also supporting organisations involved in clean-ups to actually process the materials they collect. The second, is around community approaches, to prevent litter and marine debris actually entering the environment. It is about both community education and diversion, to prevent things ending up in the litter stream. That program was launched and I think closes on 12 April.

**Ms PEASE:** You were talking about litter collection. Are infringement penalties enforced for people who are caught littering? You were talking about council projects. What happens to people if they are caught littering?

**Mr Connor:** Yes, there is certainly enforcement action. The local government partnership is an example of that. There is an ability to take enforcement action—both by DES and by local governments, which have devolved powers under the relevant legislation—and for the community to get involved in highlighting offenders for us. In the financial year 2019-20 there were over 3,000 penalty infringement notices issued for littering offences. We have an online reporting system which we constantly monitor. We take reports from the community and then determine appropriate enforcement responses.

**Mr MOLHOEK:** What was the name of that project you mentioned?

**Mr Merrick:** The community sustainability awards.

**Dr ROBINSON:** I have three quick questions; one about national parks, one to do with Moreton Island and one to do with North Stradbroke Island. In terms of budget allocation to manage national parks, how much of the budget is allocated to Moreton Island in the financial year 2020? How does that compare to previous years?

**Mr Klaassen:** I do not have the specific figures so we would have to take that on notice. In terms of allocations in previous years, I am not aware there has been any change or significant change in budget.

**Dr ROBINSON:** I note that you are happy to take that on notice. In terms of obligations of the department in terms of annual reporting requirements around budget to do with how funding is spent to maintain and upgrade facilities on national parks, can you tell us what that annual reporting requirement is?

**Mr Klaassen:** Are you talking about from the department? Can I just clarify your question?

**Dr ROBINSON:** Yes, just in terms of the maintenance and upgrading work on facilities in the national parks. What is the normal reporting process?

**Mr Klaassen:** We put information in the department's annual report on various projects that are undertaken, but internally we have a process that monitors our capital works program to ensure we are delivering. Externally it is through the annual report that we provide information to the public on what we have done in terms of capital project delivery and general maintenance.

**Dr ROBINSON:** In terms of North Stradbroke Island and talking about commercial permit applications and operators, whether it is tourism operators or small businesses requesting applications to operate, how many operators have been refused permits due to the involvement of the land council there, due to QYAC objections? In terms of that number, are the reasons QYAC objected provided to the applicant?

**Mr Klaassen:** That is a fairly detailed question, Mr Chair. I just do not have that information with me at the moment. I would have to seek your approval to take that on notice.

**Dr ROBINSON:** I would be happy for that to be taken on notice.

**CHAIR:** As long as it is not seeking opinions on the process.

**Dr ROBINSON:** It is just data.

**Ms PEASE:** Is it within scope, Mr Chair?

**Dr ROBINSON:** It involves national parks and land councils, park rangers.

**CHAIR:** Just let me get some advice. Whatever falls within the scope of your department, I guess, Mr Klaassen. I have a question in terms of Parks and Wildlife staffing. Have there been significant increases in staffing? I ask this because some years ago we were working with Parks and Wildlife to address the brumby issue north of Townsville. The conversation I had with Parks and Wildlife is that, prior to my arrival, Parks and Wildlife staffing had been reduced in the previous term. Has there been an increase in Parks and Wildlife staff?

**Mr Klaassen:** Yes, there has been. Additional rangers have been funded through the government right across the state. In terms of new parks that we acquire, we need additional resources to manage those, and also through various programs in Cape York we have additional rangers up there, and as we bring additional parks in we get a budget that assists us to adequately manage the parks, which increases our ranger numbers across the state as well.

**CHAIR:** There has been good investment since 2015. Can we look at those numbers at all?

**Mr Klaassen:** I do not have the numbers with me, but there has been growth in the ranger numbers certainly from where we were in 2013 and 2014 to where we are now. There has been a growth of probably 60 or 70 rangers.

**CHAIR:** I would really appreciate it if we could get a look at those. My other question is in relation to Townsville, and it might be something that the committee would be interested in. Does the department work with the Australian Institute of Marine Science up there? I just want to know what that looks like at a practical level in terms of the science side of things and water run-off. As a local member I did a visit there, and I think they talked about the salinity changing when you had big flooding events like monsoonal events and, for example, the Burdekin River dumping into the ocean—the effects on the reef because of those huge weather events and the damage. I was just wondering what the relationship was at a local level.

**Dr Jacobs:** I can talk to the relationships we have not just with AIMS but also with CSIRO and our university colleagues—JCU in particular in the north but also collaborations with UQ, QUT, Griffith and so forth. AIMS in particular has a focus on marine science which complements our focus on catchments. We provide the water quality monitoring and modelling—water quality into the lagoon—and we work with AIMS at that interface. There is RIMR P, which is Reef Integrated Monitoring and Reporting Program, and we interface at that estuary with AIMS. We have good relationships with all of the research institutes and we aim to complement and collaborate on all of these issues around water quality, both in the Great Barrier Reef and in South-East Queensland and elsewhere in the state.

**Mr Merrick:** One other piece of what we have going as part of the Great Barrier Reef Field Management Program is a joint partnership, with AIMS particularly but also QUT and other universities, to look at the deployment of new technologies to enable improved surveys of the reef in terms of the deployment, for example, of autonomous systems. At the moment when we undertake reef surveys, for example, part of that involves what is called manta towing, so people in the water

behind vessels undertaking surveys. We are very keen to get people out of the water. That is the way it has been done historically, but through deploying new forms of technology in the Great Barrier Reef Field Management Program—and that involves both sensors, the ability to process very large-scale datasets and artificial intelligence learning—we can have a much more fine-grained understanding of processes and threats within the Great Barrier Reef Marine Park.

**Mr MOLHOEK:** Director-General, you mentioned in your opening address broadly about the South East Queensland Koala Conservation Strategy. In the past, developer levies and charges have been required or there has been a requirement to purchase land as offsets. I am wondering where that program sits, what the current status of that is and whether those moneys have been expended. Also, how much koala habitat do we actually have in Queensland that we are currently managing and protecting? How much of that habitat is actually fenced in such a way that it keeps feral animals out, and what programs are in place to keep feral animals and domestic pets out of those areas? I understand that some of that might have to be answered on notice.

**CHAIR:** It is a big question and we have only three minutes left.

**Mr Merrick:** I might invite the deputy director-general to respond on the offsets very quickly.

**Dr Hussey:** I was going to respond about the koalas, actually.

**Mr MOLHOEK:** How many koalas do we have?

**Dr Hussey:** Not as many as we used to have, which is part of the problem. The simplest way to get to what the koala strategy did is to understand how many hectares we now have as a consequence of the koala regulations as opposed to before the koala regulations. We have more than 700,000 hectares, which is an increase of 445,000 hectares from before the regulations were in place. As I said before, that is the strongest conservation framework for koalas that certainly the state has ever seen and is up there nationally.

The koala strategy brings in a range of different prohibitions and mechanisms, and it is worth reading. There are, I think, 42 actions across six themes. Essentially, the framework that was put in place in February last year does a number of things. The first is that it prohibits clearing within koala protected areas. It brings in a new code for the assessment of development approvals. Importantly, though, it does have a couple of exemptions which make it feasible or workable. There are exemptions allowable for up to 500 square metres for fences and roads and in fact if the development approval was lodged before the regulations were protocol into place last February.

In terms of the specific details around the offsets and what is left, that is a number I would need to come back to you with on notice.

**Mr MOLHOEK:** Can we perhaps put that as a question on notice? The other part of the question is: it is fine to have all of this land preserved, but what are we doing to keep it fenced or protected from intrusion by wild pigs and domestic cats and other animals that should not be there?

**CHAIR:** We have one minute left.

**Mr MOLHOEK:** I am happy for that to be a question on notice as well.

**Mr Merrick:** I would just say that, in terms of those protections, some of that land is managed by the department but a lot will be in private hands and in the hands of other environmental organisations. To produce a comprehensive answer across how much of that is fenced would, I think, almost be beyond the scope of the department. I am sorry, but I am just thinking practically.

**Mr MOLHOEK:** Perhaps that could be the subject of another briefing.

**CHAIR:** We can send you out and you can look at the fences.

**Mr MOLHOEK:** I am happy to do that too, Mr Chair.

**CHAIR:** There has been a huge investment in fences.

**Mr MOLHOEK:** I would need to carry a rifle with me.

**CHAIR:** On that note, it is 12.15. This hearing has been most beneficial for the committee. We do thank you for your valuable time this morning. We look forward to engaging with you throughout this term on some of those projects. We have five questions on notice. If we could have responses by 29 March, that would be appreciated. I declare this public briefing closed.

**The committee adjourned at 12.15 pm.**