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SENATE

ENVIRONMENT, COMMUNICATIONS, INFORMATION
TECHNOLOGY AND THE ARTS REFERENCES COMMITTEE

**Reference: Australia's national parks, conservation reserves and marine protected
areas**

TUESDAY, 6 JUNE 2006

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SENATE

ENVIRONMENT, COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS

REFERENCES COMMITTEE

Tuesday, 6 June 2006

Members: Senator Bartlett (*Chair*), Senator Adams (*Deputy Chair*), Senators Lundy, Marshall, Ronaldson and Wortley

Participating members: Senators Abetz, Allison, Bernardi, Boswell, Bob Brown, George Campbell, Carr, Chapman, Colbeck, Conroy, Coonan, Crossin, Eggleston, Chris Evans, Faulkner, Ferguson, Ferris, Fielding, Forshaw, Humphries, Joyce, Ludwig, Ian Macdonald, Mason, McGauran, McLucas, Milne, Moore, Nash, Nettle, O'Brien, Payne, Robert Ray, Scullion, Siewert, Stephens, Watson and Webber

Senators in attendance: Senators Adams, Bartlett, Moore, Siewert and Wortley

Terms of reference for the inquiry:

To inquire into and report on:

The funding and resources available to meet the objectives of Australia's national parks, other conservation reserves and marine protected areas, with particular reference to:

- a. the values and objectives of Australia's national parks, other conservation reserves and marine protected areas;
- b. whether governments are providing sufficient resources to meet those objectives and their management requirements;
- c. any threats to the objectives and management of our national parks, other conservation reserves and marine protected areas;
- d. the responsibilities of governments with regard to the creation and management of national parks, other conservation reserves and marine protected areas, with particular reference to long-term plans; and
- e. the record of governments with regard to the creation and management of national parks, other conservation reserves and marine protected areas.

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Committee met at 9.21 am

CHAIR (Senator Bartlett)—I formally declare open this public hearing of the Senate Environment, Communications, Information Technology and the Arts References Committee in relation to its inquiry into the funding and management of Australia's national parks, conservation reserves and marine protected areas. Today is the fifth public hearing for the committee's inquiry, following hearings being held in Canberra, Brisbane, Sydney and Melbourne. The committee is due to report to the Senate on 30 November this year.

The committee's proceedings today will follow the program as circulated, copies of which I am sure are available from our ever-efficient secretariat. These proceedings are public; nevertheless, the committee will consider and may agree to any request a witness may make that their evidence be heard in camera. I also give the formal reminder that all witnesses, in giving evidence, are protected by parliamentary privilege. This means that it is unlawful for anyone to threaten or disadvantage a witness on account of evidence given to a committee. Such action may be treated by the Senate as a contempt. It is also a contempt to give false or misleading evidence to the committee. If a witness objects to answering a question, they should state the ground upon which they have taken that objection and the committee will consider its response.

[9.22 am]

FLAHERTY, Mr Anthony Andrew, South Australian Regional Coordinator, Marine and Coastal Community Network, South Australia

CHAIR—Welcome. The committee has received your submission and numbered it 193. Do you wish to make any amendments or alterations to that submission?

Mr Flaherty—There are some slight typos that I will correct and send to the secretariat.

CHAIR—Do you wish to make a statement before we go to questions?

Mr Flaherty—I will, just to clarify the gist of our submission. In the lead-up to the first International Marine Protected Areas Congress, which was held late last year, our organisation, the Marine and Coastal Community Network, undertook to survey the various state agencies responsible for marine protected areas and to get their responses to a range of questions regarding resourcing, staffing, size of marine protected areas, future marine protected areas and questions of that ilk. The full response to those surveys has been tabled in *Hansard* and I have distributed today a hard copy of the publication *Waves*, which contains a summary of that table.

We also undertook to obtain, from non-agency people, expert summaries on each of the states' progress on marine protected areas and to ensure they were not strongly biased, in that there was fair discussion. We also undertook to have those reviews peer reviewed by other experts in the field, and those reviews are also in our newsletter *Waves*. In my submission, I have encapsulated that expert opinion, both on state roll-out and on other aspects such as monitoring and evaluation, and have included a brief summary of some of the progress of the national representative system of marine protected areas.

The Marine and Coastal Community Network was established in 1993, after a Fenner environment conference on marine and estuarine protected areas. We were established to help the community understand and advocate for marine protected areas, but our range of issues covers the whole suite of marine and coastal issues. We help community agencies and anyone else who asks for advice and information, seeking expert input into those issues. We are supported, through the Natural Heritage Trust, by the Australian government, but we are managed at one-arm's length through the Australian Marine Conservation Society. We act as an independent program trying to make people aware of marine conservation policies of government. I will leave it at that.

Senator ADAMS—Thank you for your submission. Suddenly, we have many things to read. How is your organisation funded?

Mr Flaherty—As I mentioned, when established, we were funded directly through the marine group of the department of environment—from memory, it was the Australian Nature Conservation Agency, the marine group back then—which has since turned into a grant allocation process through the Natural Heritage Trust. We grew slowly from a small organisation, with funding for three people and a national support base, to an organisation that

covers all states. However, in the last four years, our funding base has been reduced and we have less on-the-ground coverage—but we still deal on a national basis.

Senator ADAMS—When is your next lot of funding due?

Mr Flaherty—We have been negotiating, with the Commonwealth Department of the Environment and Heritage, contract renewal for the grant, which hopefully will be for the next two years. That bid will go up through the Natural Heritage Trust process. However, the amount of funding we were receiving back in the late 1990s has been reduced, which will mean that our ability to service the community will be reduced heavily in the next two years.

Senator ADAMS—Do the states fund you at all? Can you get individual states to fund you?

Mr Flaherty—We have support arrangements in different states. When I first started, I was supported through a state agency, which is the South Australian Aquatic Science Centre. We will be looking at states to directly support the organisation in the future—to put out the hat.

Senator ADAMS—Is your organisation being affected by losing dedicated staff with only short-term contracts?

Mr Flaherty—Definitely. I guess it is the uncertainty. We have lost positions in Victoria and New South Wales, although we have reappointed a part-time person to New South Wales. We are looking at moving to a very part-time organisation in the next funding arrangement, which will reduce our ability to facilitate discussion on a whole range of marine issues—not just marine protected areas but also marine pests and a range of policy issues that we deal with at both national and state levels.

Senator ADAMS—When marine protected areas are growing, it seems a shame and it worries me that an organisation like yours is not being recognised to its fullest extent.

Mr Flaherty—I suppose that many would argue that, in a very competitive atmosphere for grant funding, we are funded better than many others. But at the moment it is difficult to maintain a national presence and also to give our attention to a whole range of issues, particularly in the area of coastal policy and coastal management, which is back and taking an ever-increasing lead in discussion.

Senator ADAMS—Do you consider that the staffing of agencies looking after marine protected areas is adequate to do the job?

Mr Flaherty—The results of our surveys of state agencies clearly show that there are inconsistencies across the states. I think most agencies would say that they are underresourced in all aspects of managing the national estate with regard to parks, not just marine. In some states—and I notice it to some degree in South Australia—there is a fear that having to roll out marine protected areas will in some way reduce the capacity and resourcing that some agencies have for managing the terrestrial parks estate. There is also a need in some states to make the existing staff who manage terrestrial parks more fully aware of the need for marine protected areas and to somehow come up with some reassurance that, in rolling out a national system of marine protected areas and state marine parks, the terrestrial estate will not suffer. That is one of the

worries I hear in talking to rangers on the ground when we have run workshops on marine protected areas. They say, ‘We have to manage that as well?’ and it is a serious consideration.

Some states, Queensland and Victoria, have a parks staffing that covers their whole area, both marine and terrestrial. It is difficult to tease out what the specific resourcing allocations are on the ground with regard to marine protected areas. We are unsure about Western Australia, but definitely the other states lack staff. The Northern Territory, until recently, had very little allocation of staff to look after the marine estate, except they have just now allocated about five staff to look at marine management and marine protected areas. In South Australia the staff are restricted more to the management-planning side, so about half-a-dozen staff. A ranger is allocated to the Great Australian Bight Marine Park, which was huge when it was set up. It took many years to establish. It is a large area, but I do not think it is adequately resourced, except for some of the Commonwealth moneys that have been spent on marine survey and other monitoring activities.

It is something that needs to be budgeted for. If you look at the submission that we have put in, you will see some advice from Neville Barratt, who works at the University of Tasmania. Tasmania is an interesting case. It set up a lot of monitoring frameworks and a very good research base that is now the model for a lot of other monitoring of marine protected areas in other states. But, on the ground, Tasmania has yet to commit fully to resourcing staff to look after its marine estate outside of the basic fisheries roles. If you look at South Australia, historically, we led the way in the 1970s with allocating aquatic reserves under the Fisheries Act. They were small, but it was a good start. They were not all fully protected.

But what have been lacking in the 30-odd years since the establishment of some of those aquatic reserves are the basic fundamentals that any manager would undertake—that is, a management plan, ensuring that there is basic monitoring and that there are people around who know what is going on. I think one of the biggest deficits coming from an organisation that deals with information and trying to communicate ideas and the benefits of marine protected areas—not just for the community but for wildlife conservation, the fishing industry and a whole range of stakeholders who are engaged in the process—has been the lack of investment in communications, particularly in South Australia, over the last decade to actually sell the process so that it is not always a continuous bunfight.

We had some very progressive meetings during the 1990s with peak fishing industry organisations that were brokered through a range of groups, including mine. The Fishing Industry Council, the Recreational Fishing Advisory Committee and conservation groups—the Conservation Council of South Australia and the Wilderness Society—would sit down to flesh out the policy requirements for marine protected areas. One thing that has perhaps slowed the political will of governments and industry is that we have not seen a strong commitment to outlining how industries would be recompensed or compensated for the roll-out of marine protected areas in this state. It has been promised in a range of policy documents that have been available since about 1998, in Liberal state government policy of 2001 and in the latest current Labor government policy. All state there will be some arrangements. Some say it will be based on a Western Australian model. There is a need for surety for the industry, but that should not stop or impede the actual proclamation of marine protected areas.

Senator ADAMS—You said that you used to meet with them. Why do you not now?

Mr Flaherty—We still do. We brokered a range of processes. There were joint media releases by both the Conservation Council and the Fishing Industry Council. Another peak body as well, the Seafood Council, supports in principle the need for marine protected areas. But the sticking point for industry historically has been that we want to know what the arrangements will be for displaced effort and those other compensation arrangements. Governments do not like to call it compensation. They like to call it structural adjustment for displaced effort.

Senator ADAMS—There is a package available at the moment for the northern prawn fishery. I suppose that is what they are looking at.

Mr Flaherty—It has been discussed for the last decade or more by conservation groups and the industry and agencies. I think it needs sorting out for things to progress. There are areas I have been working on in this state that the community were asking for as marine protected areas over 10 years ago and we still await that. That is the other consideration that should be put into policy and legislation—the ability for community or industry groups to nominate areas for marine protection. It is a system that has been put in place in New Zealand under their Marine Reserves Act. The areas that have been nominated there have come from the fishing industry.

I think it is important to allow the community the ability to nominate areas it strongly wants to protect and conserve. In doing so you not only engender broader stewardship for the marine environment but also ensure that the community is actively engaged in managing and caring for that area. It is something we have in our Wilderness Protection Act in South Australia—the ability for community nomination. Back in 1998 about eight marine areas were nominated under that act but they have yet to be assessed by the Wilderness Advisory Committee, although just prior to the state election here the government did say it would be looking at assessing a couple of the offshore island areas which were nominated and which are now subject to some fairly intensive aquaculture development proposals.

Senator WORTLEY—You said there was a lack of investment over the last 10 years and that communication was a problem. Can you elaborate on that?

Mr Flaherty—I come from South Australia, where I have been trying to establish marine protected areas for over 20 years. We can only go so far with our resources in the marine and coastal community network. We have worked very hard to improve community awareness of the need for marine protected areas and marine conservation in general. State agencies and the agencies charged with the legislative commitments have to invest some time in consultation but also in selling marine protected areas.

The problem with the marine estate is that there are so very few people who actually stick their head under the water. Most people basically see the sea; they do not see what is beneath the sea. A number of people take things out of the sea—recreational fishers and commercial fishers—but even then you are limited to the dive fisheries like abalone fishers and scallop fishers who actually spend large amounts of time under water. There are very few recreational divers in Australia, compared to, say, the terrestrial estate and the number of bushwalkers or birdwatchers who can get out there and be vocal advocates for protecting wildlife and habitat.

We really need the ability to get out good images to show people what exists under the sea to help them understand why it needs protection—and that needs some investment. It is difficult to

get good-quality images. We try very hard, and we have a very strong dive network of people who are willing to donate images for our public talks and other things. If the agencies are out there looking under the water, there is a need to communicate why we are protecting these areas; otherwise, people's perceptions are, 'That was a good spot to fish; why can't I fish there anymore?' If a place is a good spot to fish, it probably means that there is a lot of marine wildlife under there.

Again, it comes down to the ability to integrate marine protected areas planning with broader marine planning, so that in the future things will be resolved and, though not everyone will be happy, we will have good protection of marine wildlife and habitat, viable industries and good recreational opportunities. That can be accomplished. To some degree, South Australia did it very well in the seventies when it set up its aquatic reserve system. But that was a system that looked at fisheries management objectives. We have to go beyond that. The current national representative system for marine protected areas is trying to look at wildlife and habitat values or the biodiversity matters.

I tend not to use the word 'biodiversity' when I speak to the public or to stakeholders, because it does not capture the human terms of what we are trying to conserve, which is a magnificent array of marine wildlife—fish, invertebrates and a whole gamut of things. If you stick your head under the water, you will see only a few metres if you are down in the south diving. The other problem with trying to engender public support is that we cannot visualise a seascape. You cannot stand on the hill and look over the magnificent expanse of the equivalent of a terrestrial park. It is very hard to do that, but we are now getting that with the technical ability for marine mapping and side-scanning sonar. Government agencies are now generating amazing maps.

One of the strong points in trying to get the Murray Canyons protected as a marine park—something I have been involved with over the last decade—was partly that it is a spectacular geological and geographical feature. You can fit the Grand Canyon into it twice over. From the work that I had assisted the South Australian Museum with for many years, we knew from looking at the pattern of strandings of the very rare beaked whales that there must be something out there that is important for beaked whales—and it is probably the canyon systems. But, again, until now, there has been very little work done to highlight the biodiversity benefits of these amazing geological features we have sitting off our coast.

Getting back to answering your question, Senator, we need to meld the science but with the communications. It is a role that, historically, agencies like the CSIRO did very effectively. But I think you need to look at how changes in some of those departments have affected their communications and public communication.

Senator WORTLEY—Could you outline for the committee the number of marine protected areas in South Australia? Could you also include in that the reserves surrounding the waters of Kangaroo Island?

Mr Flaherty—A couple of aquatic reserves were established on Kangaroo Island. I forget the dates, but the department could provide that detail or I could provide it later. There are two aquatic reserves. One is Pelican Lagoon, which is a shallow embayment with a number of offshore islands that I am very familiar with—having spent a lot of my time working on the reptile fauna that live on those islands. The other is the seal colony at Seal Bay, which is

protected in a small aquatic reserve that goes out to about one nautical mile and encompasses a sandy beach adjacent to the seal colony at Bales Beach.

Senator WORTLEY—Could you detail the funding responsibility for those areas?

Mr Flaherty—They were proclaimed under the South Australian Fisheries Act, which is currently under review. We were uncertain as to what would happen to marine protected areas proclaimed under the act, but I think fisheries will maintain some. Dr Peter Shaughnessy, the author of the Australian seal action plan for the Australian government back in 1999, recommended that the administration of areas where there are seals or sea lions should be handed over to park authorities in the long term to get a consistent approach for seal conservation in Australia. But currently they are managed by fisheries.

Unfortunately, under the provisions they were established under, aquatic reserves in South Australia have no requirement for a management plan. Though there are no requirements, I have seen that there is an ability to put management plans in the draft fisheries bill. So, hopefully, some management arrangements could be clarified—for example, with Seal Bay, which is a very important area not only for Australian sea lions but also for tourism and regional tourism on Kangaroo Island.

Senator WORTLEY—Do you think it is currently adequately funded? What is the federal and state government share?

Mr Flaherty—I could not answer that question. The state's national parks has put in a lot of infrastructure and funding on terrestrial staff. Personally, I think the real onus on managing that area is to manage the tourists—not necessarily the seals—but there is still a range of seal work being conducted. Historically—and I think it is probably still ongoing—the bulk of wildlife work in most states has basically been reliant on Commonwealth funding. From my knowledge, some states do put in for wildlife research, but they are reliant on grant processes or allocations. Having been on the national whale advisory group and some other marine mammal research bodies, I would say that real problem is trying to get long-term funding not only for the management of parks but also for research and the monitoring of wildlife populations—be they terrestrial or marine.

Senator WORTLEY—So you are talking about ongoing funding?

Mr Flaherty—I am talking about ongoing funding and clear commitments outside a yearly budget cycle. Whether it be terrestrial or marine, you will only track trends in wildlife populations beyond 10 years, unless you are dealing with very short-lived organisms—but even then you need consistent baseline reoccurring survey work to work out the trends of wildlife populations and trends in habitat. This is an area that needs to be better investigated when you look at the natural resource management frameworks that are being rolled out and the ability of those NRM frameworks to cope with the monitoring and evaluation that is needed for land management—not only agriculture or private land but also public land—and how we go about getting the information we require to make sure those areas are there for future generations.

Senator WORTLEY—From your submission, I see you obviously have some concerns with the marine environment areas and the way that they are managed. The issue of funding is also

something that comes through. You spoke about the continuity of funding. What other things do you think need to be put in place to ensure long term that our marine environment is protected?

Mr Flaherty—This also relates to terrestrial conservation, but there is a need for consistencies between the states. When you look at specific wildlife management issues there is a need to manage wildlife populations consistently under similar legislation. So for seal populations across southern Australia we should have state legislation that is similar to that for whales. We have come some way with whales. It also extends to fisheries regulations and aquaculture regulations—the whole gamut. Some would argue that there is a need for a national oceans policy. We had an oceans policy which was developed and launched by the Commonwealth government, but it was a Commonwealth policy. It was very hard to get commitment across the states, as is the case with any of these things unless there is some funding tied to it.

Conservation organisations such as the Australian Conservation Foundation and the National Environmental Law Association have put out a discussion paper on the need for an oceans act—again, a national act with state sign-on. Until you start to get consistent legislative and jurisdictional approaches to land and sea management you will always get inconsistencies between states, which means you will get inconsistencies in the way things are managed and conserved between states. That is important in the marine environment when you have a range of wildlife that is highly migratory but when you have impacts in marine environments that are across jurisdictions—things like marine pests and marine pollution. Many would argue there is a need to look at consistency between states for wildlife and park management but also consistency at a legislative base with regard to land management and conservation issues.

Senator SIEWERT—Do the 19 marine protected areas—the 19 areas that are proposed for marine reservation—in your opinion meet the requirements of a CAR system?

Mr Flaherty—The proof will be in the pudding. They are areas that have been proposed. For the last decade I have been listening to proposals for marine protected areas. One of the areas that the community on Kangaroo Island has sought for many years is near Penneshaw. We have been waiting since about 1997 for any action. That has now been encompassed into a pilot marine protected area that was proposed under the previous government. With the technical work that has been done to date, those 19 areas are well worthy of conservation but they will not lead to a South Australian representative system. You have gaps. The area of the Great Australian Bight is not being considered in those proposals. Probably, better management or higher levels of protection could be put in place.

The big omission in the 19 areas proposed is a huge gap which covers Adelaide, north and south. We have a number of very small aquatic reserves off the Adelaide coast. In the 1980s an independent report by scuba divers and researchers highlighted the need for those aquatic reserves to be much larger than they are off metropolitan Adelaide and the areas around it. There is also a need in developing the protected area system in South Australia to make sure there are continuations of conservation estate areas on land with the sea. That will be very important.

What worries me in the current framework we have had since the early 1990s and 1995 is that we have seen aquaculture basically rolled out outside of marine planning or marine conservation, marine protected areas frameworks. We are now seeing some very worrying—to some members

of the community—changes under development legislation regulations to make, some would say, contentious aquaculture developments comply under development legislation. So you are removing rights of public notification and public rights of appeal on marine industry development.

That is not a worry just for conservationists. It is a worry for people in the fishing industry who maintain a living from some of those areas, and in some cases it would be a worry for the industry, where the industry, say, for some shellfish leases, have already met the capacity of some bays. The areas that have recently been gazetted have not necessarily reached overproduction or close to production, but it does not set a good precedent for balanced marine planning. Until we have some of those areas of high conservation value that have been identified for the last decade protected in those 19 prepared areas, I do not think conservationists will be happy and I do not think industry will be happy. Again, with protected areas processes come debate and uncertainty for industry. And until there are proper mechanisms in place to reassure people who are making their livelihoods from the sea and the marine environment then you will always get problems, and you will probably not have a strong political will to implement those protected areas systems.

Senator SIEWERT—We have heard a lot about this. I know what it is but most other people probably do not. Can you describe what this is and what its genesis was?

Mr Flaherty—The senator is holding up a copy of the Marine and Coastal Community Network's *Taking NRM beyond the shore*. When the natural resource management framework came in to replace the Natural Heritage Trust—what is called phase 1—many organisations and people were concerned because, under previous NHT arrangements, there was a specific Coastcare program which was trying to cover marine projects. There was also a memorandum of understanding to deliver a program called Coasts and Clean Seas between three levels of government—local government, state government and federal government. In the transition to NRM frameworks, many people feel that perhaps local government has missed out in the early stages. The other big loser, in some people's opinion, was marine and coastal.

This book is an attempt to try to highlight the following questions: what should we be putting in regional plans and what are the stages that natural resource management bodies and groups should be going through in developing their plans so that they are actually dealing with integrated natural resource management which can draw on many decades of successful lessons learnt from integrated coastal zone management? Until we see marine and coastal issues dealt with effectively through natural resource management frameworks, I do not think we will have integrated natural resource management. It was an attempt to put the 'i' back into NRM and to change what many considered NRM to stand for—'Not Remotely Marine'—to 'Now Really Marine.'

Senator SIEWERT—Do you think there has there been any progress in marinising NRM?

Mr Flaherty—I think there has been. We have been involved in a number of reviews across Australia of integration of coast and marine. Things are getting better, but it is not the perfect shazam-whizzbang thing we would like. I sit on a state government committee that assesses all of the investment strategies for our Natural Resources Management Council, and I think there is a commitment there from regional bodies, at least in this state, to try to integrate. But, again, I

think you find a similar situation that I referred to, with that tension between terrestrial parks and marine parks. Currently, there is a limited bucket of money, despite certain surpluses at state and federal level, and I think people really feel they are carving up a limited pie rather than being able to generate or get more income into the system. In that situation, I think marine and coastal will always suffer when it comes to not only resource management but also conservation.

Senator MOORE—We have heard about the comparative review that you published in a condensed way in this booklet. If your organisation had not done that, was it anybody else's responsibility to do a snapshot across what was happening?

Mr Flaherty—It is no-one's responsibility. You may or may not be aware of the strategic plan of action for the National Representative System for Marine Protected Areas, which people refer to as the NRSMPA. There was a bit of an overview of what was happening in the states in developing that document, but that is some years ago now.

Senator MOORE—And this is getting to be some years ago now too.

Mr Flaherty—It was last year. At a Commonwealth level we have seen a commitment to a range of areas in the south-east. If you refer to the report from the peer scientific group of that process you will find that they have some misgivings as to how the system fits into the national representative system and also with regards to the level of protection. In looking across the board, I think that Australia is leading the way in marine protected areas. Marine protected areas in Australia and across the globe, however, are still a long way behind what has happened for terrestrial protected areas and are also remiss with regards to the levels of protection that are offered through both state and Commonwealth systems.

Senator MOORE—Do the terrestrial comrades accept that assessment?

Mr Flaherty—Some people in agencies would accept that levels of protection may need tweaking, but for the recent south-east system that is a clear message from the scientific peer group report that was recently put out with that process. I think that it is very encouraging to see that those sorts of robust scientific peer reviews are publicly available for the people who have participated in those processes. Another important aspect is to ensure that people have access to information to make good decisions.

Senator MOORE—If your body receives continued funding and maintains interest in the area, do you see it as part of your ongoing role to have another look at how states are going at a regular time?

Mr Flaherty—I think that it is important. We are trying to play catch-up on a whole range of evaluations of things. We have looked at marine pests and our last publication was about coastal management and what progress has been made in the last decade. I think that there are always areas that need auditing. As a non-government organisation or project you cannot carry a big stick and demand information, but I think that the great thing about the network is that we have been around long enough and are trusted enough that people are willing to contribute to across-the-board surveys of that nature.

Senator MOORE—So you have cred.

Mr Flaherty—We do. When it comes to the states, they are subject to peer pressure in many cases just as others are. In that survey there was going to be one state that was possibly going to be blank, which would probably be a bit embarrassing for that state. But in the end they provided enough information to make it relevant. There are always inconsistencies in the ways that agencies report, and I can point out some inconsistencies in those state replies. But it is the best to date. From memory, the Commonwealth Grants Commission was mooting some sort of assessment of funding allocated to marine protected areas in this state. I was contacted many years ago, but I have found no reference to it on their website, so whether that was undertaken I am unsure. But it could be interesting to review the funding allocations from the Commonwealth and to see what was actually delivered.

I believe that, anecdotally, one of the reasons for some of the previous funding not to be continued at levels was that there was a political perception that the states were not delivering on the funding that was offered through Ocean Rescue 2000 and some other marine program funding. It is a bit of a catch 22. I think the states do need resourcing from the Commonwealth when it comes to the very complicated and difficult scientific process of marine mapping and marine planning. It is something that needs a lot of infrastructure, vessel time and bucks. It needs funding. There has to be a joint approach.

I think one of the big advantages we will see in the next decade as the protected areas system progresses is the integration of state waters conservation, management and marine planning and terrestrial planning and conservation processes with the Commonwealth processes, so that we will capture transects from land through to ocean to fully represent and conserve marine wildlife and habitats.

Senator SIEWERT—And to ensure that there is monitoring and evaluation put in place at the time that we set up the parks.

Mr Flaherty—And hopefully even before. I think that is one of the benefits of the approach that Tasmania and Victoria are undertaking with their marine mapping programs. There is some dabbling in that in this state, South Australia, but, apart from some funds acquired through the strategic reserve process of natural resources management, I do not think it is fully resourced.

CHAIR—I have two questions, but whether I will ask the second will depend on how short your answer is to the first question. An issue that has come up across the board—marine and terrestrial—has been the continual push to create more protected areas but there not being a parallel increase in resources, whether it is staff or other things. I presume the same concern would apply with marine. Related to that has been people being reported as saying that they have difficulty properly assessing exactly how many people there are as rangers or in other roles because of a blurring of roles between protected areas and people who do city parks and those sorts of things, depending on your state. I know you have some data here, but are we able to properly assess how many staff are being made available for marine protected areas, or is there still a lot of ‘rubberiness’ about what the states and the federal government are putting forward?

Secondly, do we need to have more marine specific people in these roles? As you pointed out in some of your answers, there are fairly different aspects to marine. The impression that I am getting is that a lot of rangers are more and more focused on almost being police or regulating the activities of people rather than assessing what is actually going on down there.

Mr Flaherty—The figures are rubbery. If you tied it into budget estimates processes in each state, you could look at the number of staff on the ground.

Senator MOORE—Good luck!

Mr Flaherty—I have tried that. You will never have enough people on the ground, no matter what agency you are looking at. But with the protected areas system, the important thing is to make sure that the community is aware of what you are doing so that in the long term it is the community looking after those areas. I think there have been some major hiccups in the transitional arrangements for the Natural Heritage Trust funding with regard to community groups accessing not only cash to do projects but also the facilitator network that they need to help coordinate projects on the ground.

The aspect of training and the need for marine people within parks systems is a very major question. It is a question that I have not touched on here but I have in my discussions with the universities. Over the last decade we have seen, particularly in South Australia, the dropping off of marine and coastal components in a number of the natural resource training programs that are meant to be churning out rangers. Some of them might get it in the university system, but a lot of that has been lost.

My background is in wildlife and park management. I trained as a ranger. We had quite good field components back in the eighties. I do work for the university system in lecturing in resource management. We have people doing natural resource courses coming to do our teacher education basic marine ecology course because they are not able to access the basics of marine and coastal ecology through some of the natural resource management training packages that are out there.

If you are looking to deliver an effective marine park system, you also need to look at the way the training is delivered to future staff to make sure that those people know what they are doing and are not trying to play catch-up. There is also a real need—and Victoria is doing it—to make sure you are retraining or giving new skills to current terrestrial staff, so that they know what they are meant to be doing and they do not see marine protected areas as a threat or another impost on their job or another loss of resources that they could otherwise be spending on terrestrial park systems.

CHAIR—Are you in a position to make any comment on the adequacy of what the Commonwealth is doing with the marine area around Christmas Island?

Mr Flaherty—I have not been to Christmas Island for many years. Unfortunately, the territories have dropped off our radar a bit, though we have had some assessment done of Lord Howe and others. The Christmas Island reserve system was put in place many years ago. It comes under a framework, from memory, of the island conservator. I guess what you would be looking at there, with the other pressures on Christmas Island with regard to the terrestrial system, is the ability to effectively manage the marine systems of Cocos (Keeling) and Christmas islands with the pressures from overseas fisheries that can impact on those waters. I think the review process for the management plan for those parks has been very good, but I would think that it comes down to there not being a lot of people out there to input into some of those review processes.

CHAIR—We might explore that in another context. From my reasonably limited experience there, it struck me that it is another example where marine is looked at as, ‘We’ll deal with that after we have managed everything else on land’—that it is very much an afterthought.

Mr Flaherty—There are some gems in the marine estate. If you are looking at Australia’s need to commit to turtle conservation, there are some areas on Christmas Island that need consistent on-land management approaches to maintain the turtle breeding colonies there. Again, on Cocos (Keeling) Islands, North Keeling is one of the gems of Australia’s conservation estate, but it is so difficult to get to. There is a question as to how we go about managing and policing some of those very remote corners. I would also hope that this committee would investigate some of the very good conservation outcomes in subantarctic territories that Australia lays claim to and also the Antarctic. They are some of the gems. Having worked in some of those places—

CHAIR—Maybe we could ask Senator Joyce about that, as he went down there. As there are no further questions, I thank you for your input. As I said at the start, the committee is continuing through to the end of November. So, if you would like to provide any further material or extra information, it would be most appreciated.

Mr Flaherty—I am happy to clarify any points that I may have made or any mistakes I may have made. Thank you very much.

[10.14 am]

MacDONALD, Mr Neil, General Manager, South Australian Fishing Industry Council Inc.

van der GEEST, Ms Claire, Project Officer, South Australian Fishing Industry Council Inc.

CHAIR—Welcome. The committee has received your submission as submission No. 63. Are there any amendments or alterations you would like to make to that submission?

Mr MacDonald—No.

CHAIR—Do you want to make an opening statement before we ask you questions?

Mr MacDonald—Yes. Thank you very much for giving us the opportunity to come here today and make a presentation to you. I would just like to take a couple of minutes to quickly touch on some issues that we think are key to this whole debate about the development and management of our national parks systems. With your permission, I will lodge a document with the committee at the end of the process. It goes into a bit more detail on what I would like to say in my opening remarks.

I think from the industry's perspective, the industry has formed a view over some time that the fishing and seafood industries have been a major target of those seeking to manage national marine parks. The industry continues to support the need for management of our marine ecosystems to ensure that it has the ability to supply a safe, reliable and healthy food source and a sustainable future for rural communities. The resilience of our marine ecosystems must be better understood and recognised in the context of existing uses, the consequences of a failure to manage terrestrial impacts and global climate change.

I will quickly touch on the key areas that we think need focusing on. The first is the process of establishment and management of our parks and marine protected areas. Australia, from a fisheries perspective, has a sound reputation internationally for being both innovative and world-leading in its fisheries management. We believe that, because of that reputation, the nature of Australia's fisheries mean that we should look at a different set of rules and guidelines to ensure preservation of critical habitats than the approach of standard rollout across the board globally that has been taken to date. As resource managers and the industry have learned from past mistakes, we believe that the industry has as a consequence become very proactive in the way it manages its impacts on and interactions with the ecosystem. Too often the plan has failed to recognise that that is the case.

Another key area that we would like considered is the issue of recognition. Fisheries have a strong history with management, particularly in terms of managing spatial and temporal areas to protect fish stock sustainability, ensure habitat integrity and protect ecological processes. Management areas have been introduced in a lot of instances with industry support and in many instances with industry's information and insistence in order to secure their future. The process

of recognition must bring with it an agreed whole-of-government approach rather than the competition that the preservationists and development agencies seem to engage in.

The use of marine protected areas as a quasi-management tool for fisheries is not supported. The industry adjustment package for the South-East Regional Marine Plan will largely address the failure of a management approach that believes that the only considerations needed are limited allocation or output controls or quotas. Identifying areas that warrant recognition as examples of healthy ecosystems must also recognise that the very values that are being protected exist only because they are consistent with current uses.

On the issue of multiple use, parks and management zones are used to exclude one type of stakeholder while supporting access by other stakeholders with similar or consistent practices. The measure of impact on the environment is not whether it is commercial or recreational but rather the scope and extent of that activity and the manner in which it is undertaken. All users seek to maximise their benefit from their involvement in the marine ecosystem. Commercial fishers have a greater understanding of that system in which they operate so they generally tend to practise a greater degree of husbandry.

Another area of concern is the methodologies that are used. The risk assessment approach that was developed through the South-East Regional Marine Plan process was, we consider, a very worthwhile process and a beginning for developing a much better balanced approach to the key issues for marine protected areas. The process ensured ongoing support for the Australian Seafood Industry Council in order that it can work more proactively with government and the industry. We would like to see that continue with the remaining national marine park plans as they are implemented.

We believe it can only happen with the full understanding of the impacts of such proposals. Decisions then need to ensure that there are improved outcomes and that this type of work is a prerequisite to management models, and that is clearly a case where the industry is of the view that it should not be necessary for it to have to fight rearguard actions. When draft plans are put on the table, we would like to consider that the planning process is rigorous enough that it actually seeks the correct information and then balances it up before it releases even a draft plan, let alone seeks to finalise an arrangement.

Monitoring is a key issue for us. There must be an effective and adequately funded system for monitoring the ecosystem itself and the health of its component parts. If we are to have management intervention to support the security of the marine ecosystem then governments must invest in a better understanding of the processes and those interactions. Also, in the context of monitoring, we think the failure to invest by governments will mean that the marine parks will simply end up in the same sad state as many of our terrestrial parks—that is, underfunded, undermanned and ultimately open to degradation from introduced pests and diseases. All of these will certainly leave any protection arrangements compromised and ineffective. The best sentinel that you can have is someone who is there regularly with an investment in ensuring that they have continued access. Fishers have the capacity to provide a range of non-fishing data while engaged in their core businesses.

In conclusion, the value of any park will be the sum of how effective the process of identifying the park will be. The requirements for characteristics to be protected, the

methodologies used for measuring the impacts of all of the issues must support a strong planning and implementation approach and a clear model for monitoring and adjusting the plan over time.

Senator WORTLEY—Can you outline for the committee how large the fishing industry is in South Australia and can you include all of South Australia in that—including Kangaroo Island, which sometimes gets left out? What are the impacts of the marine protected areas on this industry?

Mr MacDonald—In South Australia at the moment, the commercial wild catch fishing industry represents the interests of in the order of over 900 small to medium businesses. My understanding from the last lot of economic analysis is that that represents something in the order of 3½ thousand people employed directly in that industry. The value of the wild catch sector in South Australia is in the order of \$800 million a year in direct revenue from production. To be honest with you, I am not a hundred per cent sure about the full extent of aquaculture, because the land based businesses vary somewhat, but certainly in the marine environment aquaculture probably represents the best part of 200 to 300 small to medium sized businesses—and, come to think of it, some actually quite large ones. It has a value greater than the wild catch sector—it is probably closer to \$100 million. To be honest, I have not seen any recent figures for the number employed in the industry. Off the top of my head, I cannot recall what the most recent numbers are in terms of employment in the aquaculture sector but, certainly all up, the South Australian industry is worth the best part of \$170 million in direct income alone, let alone the downstream benefits.

Senator WORTLEY—So what is the impact of the marine protected areas?

Mr MacDonald—One can only say that the impact of marine protected areas in South Australia at this stage has been minimal—and minimal only because we have only to date been exposed to the south-east region marine-planning process from a Commonwealth perspective. Initially, we believed that that was going to have a significant impact, particularly on the rock lobster industry based on Kangaroo Island, because of the initial area that was planned to be zoned. As a consequence of the amendments to the zoning arrangements, I would now consider the impact on the rock lobster industry in South Australia to be almost negligible. There was a small impact on some of the deep water gill-net fisheries for shark, but I believe that that impact, through the management arrangements, has also been largely minimised as a consequence of the revised zoning arrangements.

At a state level, we have not yet seen an impact from the marine park planning process, simply because, at this stage, the state government has to date released for public comment a proposed marine park for the southern Fleurieu Peninsula-Kangaroo Island region. After the public consultation period closed, I understand the agency is reviewing the comment and reassessing the draft. To date, there has been no subsequent release of information, so where that stands at the moment, and therefore what impact it is likely to have, is pretty questionable.

If the draft as it was put on the table is what is presented, it is likely to have a direct impact on a number of small businesses on Kangaroo Island. Certainly there were several people that we believe were the specific target of vested interests in the community consultation process who would have seen their entire businesses removed. Other than that, my estimation would be that the impact on the commercial industry from the proposed state MPA process would

collectively—over both what we call our inshore marine scalefish fishery, which produces our King George Whiting snapper and garfish species, our key table species, and the rock lobster industry—be in the order of \$1 million out of a \$20 million inshore marine scalefish industry.

Senator ADAMS—Do you have any trouble keeping your members away from the no-take areas?

Mr MacDonald—I guess that depends on where they are located and how sensible the zones are in terms of providing transitional arrangements and access to and from ports and areas that they actually would fish. Obviously, if you draw a line across the water that compromises going from A to B, whether or not people are behaving is always going to be a challenge. As I said, the industry in South Australia has, since the early seventies, had a whole range of permanently closed aquatic reserves and a whole range of spatial and temporal closures for a number of reasons in order to protect fish stocks and habitats. I would think the compliance activity in this state would very rarely target activities such as people operating within those areas, simply because the philosophy and the psychology of the industry today is that there is a reason for preservation or protection and it has credibility and therefore it should be recognised and supported. I am not aware of there having been any persistent or consistent activity that the fisheries compliance group has had to deal with in terms of our closed areas or aquatic reserves.

Senator ADAMS—If you or your members see rec fishers out there, how do you get onto them? Do you act as police? The reason I am asking is that we were just told by a previous witness that there is only one ranger available for all of the marine enclosed areas right along the coast. Do your members act as pseudo rangers? How do you deal with them?

Senator MOORE—Public spirited dobbing in, I think.

Senator ADAMS—I am not saying that. I am trying to be—

Mr MacDonald—No, that is fine. I guess at this stage most of the aquatic and marine management and monitoring and compliance has been undertaken at a fishery specific level rather than at a marine ecosystem level, so the bulk of the investment in compliance and monitoring has been in a fisheries context. One of the key strategies for fisheries management has been a 1800 number, which is basically a ‘dob in a mate’ number.

Senator MOORE—Public spirited dobbing in again.

Senator ADAMS—That is what I wanted.

Mr MacDonald—It gets a fair old beating from time to time from both sectors, with regard to each other—

CHAIR—Can you tell us what the 1800 number is?

Senator ADAMS—It is 1800 Fishwatch.

Mr MacDonald—Exactly.

CHAIR—It is better than the antiterrorism—

Mr MacDonald—Yes.

CHAIR—I am sorry to interrupt.

Mr MacDonald—I think part of the issue is that at this stage most of the activity has been directed towards a strictly fisheries management approach to the issue rather than a broader ecosystem based approach. I believe who will, and how they will, service the state marine parks and what resourcing is required is still very much up in the air. Whether the environment agencies will seek to have a partnership arrangement with a fisheries agency that has the capacity and the resources to do that, and whether or not that will mean additional resources, or they will have more of a cooperative arrangement between national parks rangers and fisheries compliance officers I am not sure. It was a question we asked the agency when they released the draft Encounter marine plan and that to date I have not heard anyone come up with a final answer to. I do not think they have got their heads around how they are going to monitor and manage these once they are in place.

Senator ADAMS—It seems to make a lot of sense that everyone should be talking to one another and they should utilise the fact that your people are out there. You are never going to have one ranger trying to cover that whole expanse. I am from Western Australia and I can assure you I know just how big your coastline is from seeing an awful lot of it when I go backwards and forwards every week and also from being involved with the West Australian fishing people. It is an issue. The reason I asked about the rec fishers respecting the closed areas or the no-take zones is that we are having a few problems over there in that respect. I wondered how you were dealing with it.

Mr MacDonald—As I said, to date the closed and protected areas we have under our fisheries arrangements have been there for a long time and I think there is a reasonable level of acceptance generally. I certainly would not argue that there are not individuals out there that do not always recognise and play by the rules, and that applies on both sides of the coin. I think it would be naive of anyone to think, given human nature, that people would follow the rules in their entirety without the temptation to ever see what is over the other side of the fence.

Each of our major fisheries has a fisheries compliance plan as part of their annual process through their management cycle. Monitoring of aquatic reserves and closed areas does not largely fit on the compliance areas radar as one of the key strategies to be funded during the season, so I would assume that they do not see it as a major issue. I guess one would hope that, given that level of acceptance and awareness, when we have marine parks here in South Australia people will adopt a similar philosophy—that is, they will recognise them for their value and worth and treat them with some level of respect.

Senator SIEWERT—In your submission you said, and I think you made this point this morning, you do not see, if I understand correctly, what I call no-take zones, total exclusion zones, as the only mechanism for the protection of marine biodiversity. A question that comes out of that is: do you recognise them as a tool? Also, I did not think that no-take areas were the only mechanism that was being considered in marine conservation.

Mr MacDonald—No-take zones definitely have a place within a multiple use approach for managing marine areas. As I have just said, there is a history of areas within the state management arrangements that are total no-take zones. So they would have a place. Our concern is that one of the key principles of marine protected areas is supposed to be multiple use and a lot of what we see people attribute multiple use to is in fact exclusion rather than providing for an appropriate type or level of access or opportunity. I think the balance is the issue. To us it is a largely untested issue at this stage in seeing what happens at a state level in terms of what we saw with the south-east region marine planning process. There was some adjustment to the zoning arrangements, which gave a greater recognition of that multiple use philosophy in the final zoning arrangements compared to what was originally proposed, which was essentially exclusion rather than appropriate use. From our perspective I see a strong place for protection for those areas that have a specific intrinsic value that needs some form of protection. For the rest of the MPA planning process multiple use philosophy is the key, and we believe that multiple use should be a key outcome from any zoning arrangement.

As we have said in our submission and as I mentioned earlier, the reality is, if there is an area out there today that people believe has preserved its intrinsic values and therefore warrants some level of protection and preservation, you need to look at the uses within those areas in deciding whether you exclude any and all use or you allow for some types of use under some limited arrangement. That becomes the balancing act in the planning process.

Senator SIEWERT—In South Australia is there compensation if fishing effort is displaced? I use the word ‘compensation’ because everyone recognises it. But in Western Australia we have a specific piece of legislation that can be used if fishing effort is displaced. To my knowledge it has been used very rarely, which I think is an issue. Is there a similar piece of legislation in South Australia?

Mr MacDonald—No, there is not at this stage. One of the critical issues the industry put on the table with government when it first signed on to supporting the Marine Protected Areas Program in South Australia was that there needed to be recognition that where there was displaced fishing effort there had to be a mechanism for dealing with that displacement, whether it was supporting people in adjusting their businesses or in relocation or purely and simply compensating them for the loss of their business and their entitlements. As part of that process there has been some discussion between us and the environment agency with respect to developing a framework for a compensation process. We expect to see that rolled out in the proposed marine parks legislation when it is released for public comment shortly.

Senator SIEWERT—So you think either there will be a piece in that legislation or an amendment to the fisheries act?

Mr MacDonald—My understanding is that it will ultimately appear in the marine park legislation. There is a fisheries bill about to be introduced into parliament that also provides a mechanism for government to compensate for fisheries adjustment, which did not exist previously. Previous adjustments essentially relied on the goodwill of governments, so they succeeded or failed largely depending upon the level of goodwill the industry perceived.

Senator SIEWERT—I believe the \$220 million federal package on the table at the moment is going through the first round of applications, tenders or whatever they are being called. Is South Australian industry involved in that process?

Mr MacDonald—South Australian industry is entitled to participate in that process. Our expectation is that, apart from some operators based in South Australia who have Commonwealth entitlements in the South East Trawl Fishery, for example, or in the south-east non-trawl hook and trap fishery, very little of the South Australian industry will be involved in that. I think largely the adjustments to the zoning arrangements within the south-east region have meant that there is going to be little direct impact on the industry and little need for the industry to seek any form of assistance or compensation. There is an expectation the industry will simply be able to adjust its operational practices and fish in different areas to compensate for its loss of access in the small area in the Murray Canyons.

Senator SIEWERT—I have not read every single little bit, I have to admit, of the scientific report on the south-east process, but it brings to mind a more fundamental question. Do you believe that overall we have enough science on our marine environments? I will limit you to South Australia rather than expect an answer for the rest of Australia.

Mr MacDonald—I am happy to be broad and national in my view. The short answer is, no, I do not believe we understand, as I said, enough of the key processes and interactions within the marine ecosystem around Australia. We sure as heck do not in South Australia, and I would doubt very much that it was better anywhere else. I honestly think we make very flawed decisions in our planning process because of that lack of understanding.

The south-east regional marine planning process was a good example. We probably had available to us the best scientific understanding of the ecological and biological issues that were available. We had little or no understanding of the social and economic issues that were relevant to that particular arrangement and that was probably one of the most criticised areas from the industry nationally. It led to the development of a report funded through FRDC, the state government and industry to respond to that lack of understanding of the socioeconomic impacts of the process, which we believe and understood then influenced the final zoning arrangements. Not only do we not understand the marine environment appropriately, I do not think that Australia generally has a very good social and economic understanding of its industries and communities either. I think that is an area that definitely needs a significant amount of investment as we roll out the rest of our marine planning processes.

Senator SIEWERT—I do not disagree with you that we do not have a good understanding of that, but you would be aware that the science report was quite critical of some of the original zonings that were made and subsequently I am presuming there will be some concern about the adjustments that were made to the zoning.

Mr MacDonald—From our perspective, not particularly. The impact and our involvement in it was pretty minimal given the nature of the areas that were targeted and the adjustments that were undertaken, say, in the South Australian context. Short of the traditional lack of data and information about our systems, I am not sure that there was anything that was added to through that process. I am confused about what you are getting at.

Senator SIEWERT—Sorry. There was comment on the first lot of zonings that came out. My interpretation of that was that they were critical of some of the proposed zonings, that they did not meet conservation requirements to protect specific areas. I interpret that to mean that there were decisions made whereby the zonings did not comprehensively provide protection of habitats.

Mr MacDonald—I can only comment that I think, from an industry perspective, certainly on the revised zoning arrangements, those comments would not have come from the industry itself. They probably came from other interests. At the end of the day, part of the process and part of the debate about developing parks and marine protected areas need to probably more adequately engage people in the discussion about what is appropriate, adequate and representative because I think everybody has a very different view and perspective on the CAR principle. In applying that principle, I think it would not matter where you drew lines or where you were in Australia; you would always maintain the debate simply because people have not adequately been engaged in coming to a consensus on just what is comprehensive and adequate protection.

For any process that follows from here on in, that debate needs to be had more openly and a lot more rigorously than has occurred. Queensland was another example, through the Great Barrier Reef process, of where there was a lot of discussion but not a lot of debate about what was comprehensive, adequate and representative. So we ended up with a hodgepodge of zones and arrangements that left nobody satisfied with the outcome apart from perhaps the people who drew the lines on the water. It certainly has not left the Commonwealth particularly satisfied because it is still footing the bill for it.

Ms van der Geest—On the Queensland process, there was very little research done prior to those zonings being implemented. I was part of the biodiversity team that was doing the research up there and it happened after the draft zoning was released. Scientifically, from the biological perspective, that research had not been done and they had put in zonings plans without having rigorous biological information.

Senator MOORE—In the opening comments in your submission you talked a lot about the south-east planning process and concerns about the sequence of information sharing, the length of the consultation and the quality of the data. Do you think any long-term learnings have been achieved by that process that will go into the next round?

Mr MacDonald—One would hope so although I am not sure. To be honest with you, I think there probably were. The extent of those learnings and the extent to which the process is modified and improved I guess will only be tested as we move into the next process. That is going to be a critical issue not just for the Commonwealth but for the state in its marine park process to improve those learnings. There is a lot of experience overseas where a number of management techniques improve engagement and decision-making processes and probably, as a nation and a state, we need to look at some of that experience a bit more, learn from it and use some of those techniques to enhance our processes. We tend at times to be a bit insular and consider that Australia does it very well therefore we do not need to learn from others.

CHAIR—Do you have any comments on the role the Commonwealth plays in the marine area and whether there are aspects of it that it could do better or differently? The focus of our inquiry is at a Commonwealth level, but we are looking at what is being done by the states, seeing what

we can learn and making assessments. Obviously, we are also interested in how well the Commonwealth is performing its role. Maybe its role is to butt out and leave it up to the states or the other extreme. I am curious as to whether you have any views on the role that the Commonwealth is or is not playing.

Mr MacDonald—I think the role of the Commonwealth in the whole process of developing a strong suite of marine protected areas around Australia is critical. It has got to be the lead in terms of that process because of our obligations internationally. Much of the process to date has been the states or the Commonwealth doing their own thing with very little commitment to engaging the other side of government in the process. To be entirely honest with you, that is probably to a large degree where there have been a number of gaps—it was in Queensland. There is a lot of resistance at the moment through the south-east process about the fact that the states believe they were largely left out of it and it was run by the Commonwealth.

Senator SIEWERT—My understanding was that the states refused to participate.

Mr MacDonald—They may have—I do not know.

Senator SIEWERT—That is my clear understanding.

Mr MacDonald—As an industry, we do not get involved in the internal machinations of government agencies and competition. The notion that our national system should be complemented and supported by the state systems I do not think is working particularly well. From an industry perspective, we would like to see a much stronger engagement across the two key government levels in any planning process and the development of areas so that there is compatibility and consistency. The worst thing that industry can see is one government implementing a set of criteria and arrangements in an area only to see a different set of rules supposedly addressing the same principles applied in another jurisdiction. From our perspective, an enhancement and improvement in the system would be a greater level of engagement between state and Commonwealth agencies and in the planning process generally.

CHAIR—So not so much that one should be doing more and the other less; more that whoever does it should do it in a more cooperative and integrated way.

Mr MacDonald—Definitely. I think that the Commonwealth system to date has shown itself to be reasonably comprehensive in its scope and the extent of the areas that it has looked at. Certainly, it seems to have attempted to capture a reasonably good chunk of representative areas in the SERMP, although some people would probably argue about the size of those representative areas. But, at the end of the day, I think that the Commonwealth process has sought to identify the key habitat types and ecosystems that need protection.

I think that could be enhanced, though, because of the overlap issue with the states. The Commonwealth should have more effectively engaged the state in that process and developed those things in cooperation and conjunction with the state, as we have now. South Australia now has probably one third of its coastline covered by the south-east process, and we are now waiting for the south-west regional marine planning process to roll out. To date, we do not have any state marine protected areas in place. A draft planning process has been undertaken for one discrete

area of the proposed 19 and, at this stage, there do not appear to have been any linkages or any cross-jurisdictional discussion between those two processes.

In the South Australian case—the Murray Canyons area that was covered by the south-east plan—having an integrated area from the Murray mouth and Coorong beaches all the way out to our 200-mile zone would have been a pretty logical thing to do for the planning process. It did not happen. The location and the area in the Commonwealth zoning arrangements were modified. Whether or not the state will seek to capture the continuation of that zoning arrangement we do not know. But, certainly, it would be nice if there was an integrated process that looked at the issue from the Murray mouth right through to 200 miles. That has not happened and, if there were one area that the industry would like to see better integration on, that would be it, rather than having to deal with two separate processes.

CHAIR—Abolish the states, then!

Mr MacDonald—Why not!

CHAIR—Sorry, I just verbed you completely. Thank you for your input. As you heard, we are going through until the end of November, so if there is any further information you want to provide to us we would be happy to receive it.

Mr MacDonald—I have copies of some additional information we would like to present to the committee.

CHAIR—Thank you for that. I note the continuing involvement of marine themed attire with your nice fishy tie; that is very good.

Proceedings suspended from 10.53 am to 11.10 am

BOHM, Mr Craig, National Fisheries Campaigner, Australian Marine Conservation Society

CHAIR—I welcome Mr Craig Bohm. The committee has your submission, which we have numbered 184. Are there any alterations or amendments that you need to make to that?

Mr Bohm—No.

CHAIR—I will let you make your brief opening statement before we proceed to questions.

Mr Bohm—In brief, Australia's oceans are not very productive. There are few nutrients provided to oceans from land because it is such an ancient country, and we have very few deepwater wellings compared to other parts of the world—for example, South America—to generate large, productive marine ecosystems. This lack of nutrients in Australia's marine systems encourages our marine species to diversify. Indeed, we have a most amazing array of marine species in Australian waters. For example, there are over 4,000 species of vertebrate fish and over 13,000 species of invertebrates. This is staggering and probably underappreciated by us all. This diversification is really inspired by the connectivity of our oceans. The fluid medium in which these species lives helps things to mix and flow and to be able to move over great distances. This has really helped this speciation occur.

However, this speciation does not reflect abundance. It is an assumption that I think we have brought with us to some degree from the Northern Hemisphere. We have great diversity but, apart from maybe a few species which we could cite as examples or exceptions, most species are not very productive. They actually occur in very low numbers. This should affect the way we think of managing or caring for them.

It is certainly the view of the Australian Marine Conservation Society that, apart from the broader impact of human-induced climate change and what impact that has on our natural terrestrial and marine systems, the greatest direct threat to the viability of our marine ecosystems is fishing. Why do we say this so boldly? We say this because we are noticing that there is an increasing number of marine species being overfished. We are seeing fishing industries trying to find structural adjustment assistance because they are not managing to stay afloat. We are seeing fishing boats rusting on the wharves in some regions of the country.

But, perhaps at a broader level, from a scientific point of view, what we can really see in regard to the goal of fishing, particularly commercial fishing, is that when you look to attain the maximum sustainable yield of a population of fish, you take out something like a half—or anything up to three-quarters—of the total biomass of that population from the water as part of that fishing activity. That huge volume of biomass is an incredible loss to the marine ecosystem and the way it functions. What that loss means is something that we have very little understanding of at the moment, other than that even the most conservative marine scientists will admit that it must create massive system fluxes. This, in my view, really sends up some red flags about how precautionary we need to be in considering the way we manage our marine environment.

My view, and the view of the society, is that fishing today is so intensive and pervasive around Australia's coastlines, on our offshore seamount and around our remote island territories that there are very few places in the sea that are not exploited by either commercial or recreational fishing. Virtually everywhere this fishing is permitted, apart from perhaps some areas of northern Australia, the intensity is really quite high. There are very few places left in our oceans where marine life can thrive and survive without the direct impact of fishing.

Historically—going back to, say, the early times of white settlement—there were large areas of the sea that our fishing fleets could not reach. I suppose you could say these were natural reserves. These were the natural areas where life thrived and was very, very productive and fed those coastal systems where we fished and helped to keep them afloat to some degree, perhaps for a lot longer than they otherwise would. What we see today is that there are very few of those areas left. We need to consider that when we think of marine parks and their role. In our view, we need to restore some of these natural refugia or natural places in the sea which can remain in their own state, be productive and feed the broader system.

In our view, the Australian government carries the prime responsibility for maintaining the viability of Australia's main ecosystems. Indeed this is stated as the No. 1 objective in the strategic plan of action for the NRSMPA—that is, to maintain the viability of Australia's main ecosystems. This means protecting marine ecosystems from impacts. It is not a complicated equation. Climate change is of course a broader issue that we need to deal with, but certainly managing the direct threat of fishing to marine species and marine habitats must be one of the ultimate goals of establishing a national network of marine parks.

We need a national network or networks of marine parks in both our offshore and our coastal zones. Their design and establishment should of course be led by the Commonwealth, but in coordination with the state and territory governments. As we have said in our documentation, we have all been part of committees to design comprehensive, adequate and representative levels of protection for the marine biodiversity within the proposed network of marine parks for south-eastern Australia. There needs to be a network because of the fluidity of the systems. The network is important. For example, a snapper coming out of a river in south-eastern New South Wales moves up the coast towards Wollongong or Sydney and grows larger. At some stage it might migrate back or it might stay up there to produce a lot of babies, if it is allowed to grow big enough. You can have a marine park in the nursery area where that snapper comes from, but if you do not have one where the fish ends up, the big fish might be able to be caught but you lose the productivity because the big fish that produce all the babies are killed before they get a chance to spawn.

So I think it is critical for us to understand the importance of establishing a network of marine protected areas, and because it is complicated to establish such networks we need very strong scientific guidance. Basically we need the best scientific guidance available to help us to design those systems. I must emphasise that such networks cannot be designed purely between stakeholders in the negotiation processes. Science has to drive the way because scientists know best. They will have to make judgments, but they will know better than we do and we need to follow their lead.

CHAIR—Thank you. You have advocated strongly for a sizeable number of no-take zones, and whilst acknowledging multiple use you have a different emphasis on the number of no-take

zones than others might suggest. One aspect that has been raised a few times during this inquiry is that we are slowly getting our act together on marine protected areas and are closer to where we are with terrestrial areas. But there still does not seem to be a lot of connection between the two—for instance, where you have land based activities that are impacting on the marine environment. In speaking of that I am thinking of your comments about fish breeding, for example. I guess it would depend on the breed, but certainly some significant fish-breeding habitats are right on the coast in mangroves, river mouths and those sorts of places. Are there things we should be doing better, whether at the Commonwealth or some other level, to get the integration between the two? Or are we already doing that but I have not picked it up?

Mr Bohm—I believe we have come some way in trying to do that. I think the NRM bodies, and to a growing degree regional marine planning, are at least an attempt to go in that direction. The land-sea linkages are very important for marine ecosystems—for example, fresh water flowing in pulses at flood times into the sea—and is critically important to stimulate events such as fish spawning. So the connectivity is important.

As to what can be done more consistently, I think an example certainly would be with the NRM bodies. I really appreciate the Commonwealth taking the direction of helping coastal NRM bodies to become more directly engaged in marine management, but certainly there is more that needs to be done. In my view, most of those committees do not have the marine expertise they need to help them understand exactly what role they might play in the marine environment as against the roles of the fisheries or environmental protection agencies, for example, or others that might have control over marine parks.

Also, they might not know exactly what they can do. For example, NRM bodies can do plenty in terms of habitat mapping, looking at identifying ecological hot spots or areas that are socially or ecologically important in their local area and in their aquatic environment. They can work on a range of community based projects to collect community views on how people would like the marine environment to be managed and on the icon areas that they would particularly like to be protected as the jewels in the crown. But NRM bodies do not really have the expertise within them to, for example, pursue those things themselves—apart from a few communities that, fortuitously, have people with marine interests and expertise who become involved and drive the message home.

I believe this committee has heard a number of times of the Marine and Coastal Community Network's NRM guide, which was part of the process that was funded by the government to help marinise the coastal NRM bodies. It is certainly a worthy document. However, the next stage as far as that document is concerned, is funding MCCN and others to go out there with those NRM groups to help them interpret that guide in their local context: 'What does this mean for us? Can we expect to go out there and manage local fisheries or is that beyond us? Can we manage marine habitats? If so, what will it cost? What experts in the country are we going to need?' I think there is some more resourcing needed towards getting direct extension work to get things like the NRM guide out to the NRM bodies and also as to getting more marine experts directly on those committees.

CHAIR—This is a question that I probably should have asked of previous witnesses as well. Should we making more use of the expertise of people such as fishing industry members, recreational fishers and the like who have a pretty good understanding, I would assume, of the

health of the fish-breeding habitat? It seems that a lot of the debate is portrayed as being fishers versus conservationists as to how much we lock up, which is I think a fairly simplistic approach. I refer to the positive knowledge and awareness of the industry, not so much in terms of what they are taking out of the ocean but in terms of what is happening in the breeding grounds. Could we tap into that more?

Mr Bohm—In a previous life I ran a series of community stakeholder workshops on the New South Wales coast, where I was based, which involved commercial and recreational fishers, Indigenous elders, conservationists and scientists. They looked at identifying, for example, biodiversity hot spots, areas that are critically important to sustain the fishing industry or areas that for the recreational sector are ‘Don’t go there or we’ll fight you to the death’ sorts of areas.

My experience has been that at that sort of level there can be some very good discussions in which people can teach each other a lot, given that they are coming from their particular area of expertise and perspective. But at the end of the day, as I found, unless there is some broad framework being erected, with people being directed to say what the targets for biodiversity conservation are that everyone is trying to achieve, the lobbyists inevitably come to me and say: ‘This is great. This is fantastic. But our position is that “no take” is a wedge issue and we will not go politically with you on that.’

That is principally the experience that we have had around the coastline on marine protected areas, apart from in a few examples. It is that lack of leadership and direction-setting. What are we trying to aim for; what is the target? Those questions are at the core of any achievement. In my view, the south-east marine protected area process was a classic example of where that failed. The biodiversity targets were not set, so people did not know what they were working towards and so they worked through a ‘process process’ and then everybody jumped towards the politicians to try to get the biggest chunk of the pie for their interests. That is a fatally flawed way of trying to manage our marine resources and our marine natural heritage.

Senator ADAMS—Do you consider that Australian waters are overfished at the current time?

Mr Bohm—I think—and this is not meant to be rude—that is probably not the right question, simply because it is about which species are overfished. Over 500 species are commercially taken from our marine waters. There are certainly individual species within that collection which are being overfished and have been overfished.

Some of those are on record as being overfished. They are ones which are some of the principal 70 commercial species managed by the Commonwealth, or Australian, government. The Australian government has the Bureau of Rural Sciences, which in my view has done a relatively good job of articulating where overfishing of some species has occurred. We do not actually have a national audit to really determine independently what species are being overfished, what species are not, what species have already been overfished and what species are threatened.

We do not actually have a national process for that. It is a question I get constantly—and you just asked it—and it is very hard to answer. We do not have the processes. Recently we produced an expanded edition of *Australia’s Sustainable Seafood Guide*. I was the primary author and it has just been released. We produce this guide in response to public concern about this very issue

of overfishing. In our research we had to go to such a breadth of scientific papers and then, at the end of the day, still make some judgments about what we thought the status of our seafood species was, because, outside of the work of the Bureau of Rural Sciences and the very select group of species it deals with, there is not an independent audit that we can turn to.

State fisheries reports are not independent. The Department of the Environment and Heritage strategic fisheries assessments are not independent—they are not an audit and they are not able to be applied at a generic level across the country for us to get that picture which you asked for. I wish we had that, and I think it is something which the Commonwealth could take stronger leadership on. I have certainly been lobbying for a group like the Bureau of Rural Sciences to have massively increased funding to provide that marine audit function at least on our fish stocks, let alone the broader marine ecosystem and the impacts we may be having on it.

Senator ADAMS—Do you believe there are enough marine parks currently or do you consider that we should have more?

Mr Bohm—Two issues: we need more and the ones we have already need to be of better quality. In the main, particularly in our coastal waters—and I would like to take the Great Barrier Reef Marine Park out of this equation as it seems to skew a lot of the results, and possibly even Ningaloo and Heard and McDonald Islands and Macquarie Island—our history of marine reserve and marine park establishment is very chequered.

The reasons they were established and the boundaries that were set have been highly politicised. It is my view that—perhaps apart from the Victorian system which we have just got in place and which covers just over five per cent of the coastal waters—we probably could do with a decent review looking at the quality of the parks in existence and whether they are achieving some biodiversity targets. If we put out some targets today and said, ‘Let’s go around our National Representative System of Marine Protected Areas and look at whether they are achieving those targets,’ I think we would be all rather surprised about how poorly they are coming up.

We do not have many indicators at the moment to answer that question accurately, but some that the conservation movement uses are the location, size and number of the no-take or highly quality protected areas. Although the Marine Conservation Society is supportive of multiple use and no-take—both are complementary in our view—the no-take does have to be at the core of any such system. The level of the no-take is debatable but scientists are giving us strong advice: 30 to 50 per cent of each habitat type across every marine biome. That is the quite substantial level that we should be protecting which the World Parks Congress came up with in 2003. We are nowhere near those targets.

The south-east marine protected area process, for example, probably delivered close to two per cent no-take protection on the continental shelf and upper slope. It may be a little bit more than two per cent—we have not actually seen a figure from the government. That is two per cent across the whole south-east marine region and that part of the Commonwealth MPA that is on the continental shelf and slope where most of the fishing occurs and where most of the impact has occurred. On the eastern seaboard from Sydney down to Hobart, we have fished that area for nearly 200 years, yet we have very, very few areas there that are not accessible to fishing interests. From a social point of view, it is not equitable, but from the biodiversity conservation

point of view I echo the results of the CSIRO submission on the south-east marine protected areas and the view of the government's own scientific review panel, which say that this is inadequate marine protection to maintain the natural heritage of those areas.

Senator ADAMS—Another question an evaluation: who evaluates and how often are these parks evaluated?

Mr Bohm—There is a dichotomy between the state and federal processes. Commonwealth evaluations and, perhaps to some degree, state evaluations are ongoing. I would hesitate to say whether they are a rigorous evaluation, because we would really need a process like the *State of the marine environment report* that had consistent objectives and criteria for evaluating their performance and against a range of criteria, including biodiversity conservation and recovery of threatened marine species. Economic and social indicators could be built in there as well. Without that framework—which unfortunately I cannot relate to for our marine parks estate—it is very hard. Percentages of protection and levels of impact are things we all grapple with various documents to try to put together when we get asked such questions, because we do not have a national system for such evaluation, which would be very necessary for us to answer those questions.

Senator ADAMS—How closely does your organisation work with the commercial organisations?

Mr Bohm—The Australian Marine Conservation Society has had a very amiable relationship with the commercial and recreational fishing sectors. When it comes to the pointy end of no-take marine protected areas we are at odds politically and in our positions to a fairly large degree. But that does not mean we cannot talk. I work on fisheries management committees and we have amiable discussions—debate. I learn a bit and they learn a bit. Politically, on the marine protected areas, yes, there is a great divide. That is partly because often the outcome of a marine park process at either a state or Commonwealth level—and this is a general statement; it does not apply to every marine park—is highly politicised at the final hour of where the line on the map goes.

We can have a relatively good scientific process but, at the end of the day, the areas that look like they would be good no-take areas, particularly around coastlines, are often excised from the final draft. This means people like me and the Marine Conservation Society lose faith the process. This is why we have our constant mantra that we want scientifically driven processes with biodiversity conservation targets set up front by those scientists using their best judgments. Then we can have faith and confidence in the process.

Senator WORTLEY—You say in your submission:

Over the last five years however, timelines for the delivery of regional marine planning and the NRSMPA have continuously been stretched. Without increased recourses and renewed political commitment by the Australian government, Australia will not meet the 2012 target for a national system of marine protected areas.

Could you explain to the committee why it is proving so difficult to establish marine protected areas?

Mr Bohm—We probably all have a reasonable sense of the politics of fish and the politics of managing natural resources—which, of course, make it difficult to establish good process. As people have said before, at a global level the Australian government has a reasonably good record on establishing marine protected areas and on regional marine planning process. But, to be frank, the global benchmark is so abysmally low that it is not really a big pile to climb on and crow from. I echo again that the delays have come from lack of conservation targets up front and a lack of fixed time lines that we are committed to delivering on, and thus fairly heavy politicisation and delays in reaching final outcomes. To give the Commonwealth its due, regional marine planning is a fairly new idea. It is something that we as a country have embraced as a way of trying to grapple with better and integrated marine planning and management. It is a complex beast and I think it is going to take us some time to get our heads around what it means. In the meantime, people are still going to be sitting with their traditional focuses thinking, ‘I hope nobody impacts on my territory’. Down the track, if we commit to regional marine planning and the NRSMPA, we will get outcomes as people become more aware of their importance.

Historically, though, as the speaker from the South Australian Fishing Industry Council said quite clearly, since 1999, when the Ocean Rescue 2000 program first announced that it was going to have a National Representative System of Marine Protected Areas, the NRSMPA has had very little impact on the South Australian Fishing Industry Council. That is an indictment of its failure to deliver on biodiversity conservation, because it has not excluded fishing from anywhere where it is having an impact. So, although we have not come very far in many areas, we have a good basis to go forward. The Great Barrier Reef Marine Park’s outcome of the representative areas program was excellent, and I think it is right for the Australian government to run around the world trumpeting it as an excellent outcome. But I hope the echo does not go around the world that there are forces that would not like to see that authority continue, because in our view that sort of model delivers a reasonable—not perfect, but reasonable—and very consultatively driven conservation outcome. But we have some way to go.

Senator WORTLEY—The Australian Marine Conservation Society has made a number of recommendations directed towards the delivery of a National Representative System of Marine Protected Areas. From your recommendations, which areas do you think most need to be addressed immediately? Where is the starting point?

Mr Bohm—The starting point for us, I think, is the learning we can take from the south-east MPA process. As I think you flagged earlier, that process has taken a very long time, has used many resources and, in the view of a number of us, has resulted in fairly questionable conservation outcomes. The starting point for us is putting the science back into MPA design—putting scientists in charge.

A team of scientists—marine ecologists, fisheries biologists, geomorphologists and whoever else we think is necessary—can go off into a room, have a good bash around and come up with biodiversity targets and some operating principles to drive the process. Then our stakeholders can become involved with the process. That is the core. The people in that room do not need to have stakeholders in their ear, threatening to rip their funding out from under them. It needs to be a bunch of people who, in their independence, are able to ask, ‘What do we need to protect the vitality of our marine environment?’ That is, firstly, the core.

Secondly, as other people have mentioned, there is the resourcing. There is no doubt that more marine research needs to be undertaken. We can never have too much marine research. We need to learn a lot more not only in the south-east region, for example, but around most of the country. However, I suppose my key point is that you will always have to make decisions on what you know already. That means, the less you know, the more precautionary you have to be in your decision making; therefore, we probably need to inject more precaution into the decision making process.

Dr Keith Sainsbury, who sits on the Australian Fisheries Management Board, recently said that ‘where we know less, we have to protect more and that is our insurance policy’. He said that within a fisheries management context and it applies equally to a biodiversity conservation context. So the two key things are to ensure that we inject precaution into the decision making framework and it is a science-driven process. The third is to have the follow-up resourcing.

Senator WORTLEY—Would you like to comment on the assessment and the outcomes of the research that has been done on the areas that have been marked already as marine protected areas? Do you think there is enough of that going on, or does there need to be more?

Mr Bohm—Of course. We have been establishing marine protected areas at a Commonwealth level for 15 years, and not many punters out there are happy about what has come out of it. So we need to keep going; indeed we do. We need more research. As I claimed in my opening statements, I think we need to take the fishing effort out of some areas and give those areas back to biodiversity conservation.

The Australian Marine Conservation Society, in principle, supports structural adjustment assistance, the buying out of licences or whatever it takes. However, with the south-east MPA process, for example, most of that \$220 million federal package, as I understand it, has been allocated to the restructure of the south-east trawl fishery and possibly some of the non-trawl fishery and the closing of the Bass Strait Central Zone Scallop Fishery. But very little of that money went to helping the fishing industry structurally adjust to a marine protected area system in the region. If that \$220 million had been allocated to marine park establishment as opposed to being allocated principally for fisheries management reasons—that is, industries not being able to autonomously adjust to the new world order and having to restructure, so basically, in my view, getting a bailout—we may have ended up with a better conservation outcome on the shelf and the slope; the industry might have been more open to compromise on more areas because structural adjustment money for that purpose would have been available.

Senator WORTLEY—A number of the submissions that we have received comment on there not being a follow-up assessment or a consideration of the outcomes so that things are put in place but not followed up. Do you share that concern?

Mr Bohm—Do you mean particularly from the south-east process, or more generally with marine parks?

Senator WORTLEY—Generally with marine parks.

Mr Bohm—I think we are getting better. I think what I am seeing now is being driven particularly by marine scientists themselves. They are getting together to help at least to set up

some evaluation procedures for the marine park estate, as we see it, at a state and Commonwealth level. Certainly there is a commitment to do that. I think it has been a bit slow because it has been driven by scientists more than by governments. Governments are not shying away from it, but of course it is an issue of resourcing.

I think probably one of our foremost marine park researchers would be Neville Barratt from Tasmania. He said that monitoring and follow-up evaluation is fairly pointless until you have the whole estate in place. You protect a handkerchief-sized marine reserve in Tasmania yet the same species that occur in that zone is perhaps being overfished, say, in Victoria and it sometimes swims down to Tasmania. How can Neville evaluate the effectiveness of that marine park to protect that or another species when he has not got the whole picture of what the network looks like to evaluate? He can only evaluate those few dots in his backyard. The broader strategic level assessments, coordination of those assessments and looking at the state as a whole is a key role for the Commonwealth. I think there is commitment and interest, but it needs resourcing and perhaps some more government involvement in its national design.

Senator SIEWERT—I want to pick up on the area of targets and setting targets before anything else happens when you are putting in place marine protected areas. That is exactly the experience I have had in Western Australia participating from a community perspective in terms of Jurian Bay—that is, we had all these fights between stakeholders, rather than saying, ‘What are we trying to accomplish?’ Has the society had thoughts about what your ideal process is for the establishment of a marine protected area system in a particular park? In other words, what are the steps that we should go through to set that base but also to engage everybody?

Mr Bohm—The Great Barrier Reef Representative Areas Program model is the best we have seen globally, and the Australian government is also running around saying: ‘This is fantastic. This is a great model. It actually worked.’ Of course, not everybody is happy with that model, but the conservation movement, including the Marine Conservation Society, think that their process of having scientists setting the targets was ideal and the stakeholders come in behind that. There are other elements that need to be involved. You need to have ongoing research to understand the systems. You need the monitoring system. You also need a process that allows communities to still be able to nominate iconic areas for marine protection and not just have the government in total control of the process.

At a strategic level, New South Wales, for example, said, ‘We’re going to have five parks and communities cannot nominate their local backyard for protection because there isn’t a procedure to deal with their nominations.’ The government says, ‘We’ll look at it, but there is no process’. We need the community nominations style process, along with strategic marine park establishment; scientists leading the process; ongoing research; ongoing monitoring; and stakeholders being involved, being clear and up front about what the expectations of the outcomes of the process are, being resourced to be involved in the process and being able to understand the increasing complexity of the information being put into marine park design.

Once again, I come back to Senator Bartlett’s comment about the land-sea interface—that is, the relationship with the states. There have to be MOUs. There has to be collaborative development. I would not like to see, for example, a situation again like at Coffs Harbour, New South Wales, where there is Solitary Islands Marine Park, a state park, and Solitary Islands Marine Reserve, an adjacent Commonwealth managed reserve. The Commonwealth committed

to phasing out trawling in the Commonwealth marine reserve over the life of the management plan. The state did not make a similar commitment. It is about to come up, and my understanding is that trawling will be phased out, but it is a fairly useless move if trawling can still occur right next door in the adjacent state waters. That is one small example of the need for complementary work and design and moving it back to having relevance to the NRM bodies and regional management.

Senator SIEWERT—There are two processes when we talk about marine protected areas: Commonwealth waters and state waters. When we talked about the Commonwealth's process of marine planning in the south-east earlier, I understood the states refused to engage. Is that correct?

Mr Bohm—That is my understanding too: the Commonwealth received quite a lot of encouragement from stakeholders and, through commonsense, went out and talked to the states trying to get them to sign on. The states did not like the deal they were being offered and they decided not to be involved. I think perhaps in other regional marine planning processes there will be more synergies. My impression is that some of these issues will be worked out in other areas, but in the south-east it was not a good result. But we do need to go back and fix it, and deals need to be done.

Senator SIEWERT—There is a process for regional marine planning going on in northern waters. Are the states engaged in that?

Mr Bohm—My understanding is that the Northern Territory government is taking an interest and the Queensland government is taking a marginal interest. My understanding is that the Western Australian government is having reasonably good discussions.

Senator SIEWERT—Yes.

Mr Bohm—You would know better than me on that one. I am worried that the state of Queensland will do what it did with the Great Barrier Reef process, for example—wait for the Commonwealth to take the lead, to establish its marine parks and to take all the heat from community groups that might be disenfranchised by what is going on, and then come along later and say, 'We will do complementary zoning after the fact.' I am worried about states taking that approach and letting the Commonwealth take all the heat. The national representative system of marine protected areas is an all-of-government agreement and the states and Commonwealth need to share responsibility for its implementation.

Senator SIEWERT—That leads directly to my next question. We are having problems in areas that are currently proposed for the regional marine plan and it is going to take a while to roll those out. In a whole-of-government approach where the states are not participating, it seems to me that some of the states are not going to meet the 2012 goal. What would you suggest we could recommend to encourage the states take a more diligent and speedy approach to getting these areas in place by 2012?

Mr Bohm—That is a tough question. The Commonwealth's approach in the past under Ocean Rescue 2000 was to hand the states money and resourcing to undertake the marine bioregionalisation, to go and do some preliminary biological assessments and have those

positions based within states, usually fishery agencies, and to provide that sort of resourcing. There was never really a strong enough agreement to say, 'We give you the money, you will deliver this back.' I think it is a true and tried model of the Commonwealth bringing the money to the table and people having their tongues loosened up and becoming more willing to speak. In bringing the resources to the table, particularly now when we have a commodities boom on—there is quite a surplus in the budgets—we could do some real nation-building projects in my view with some of that money. Certainly, establishing our marine protected areas estate would be fairly high on my priorities list as part of that. I think some collaboration with the states would work.

The funny thing about marine parks and the state agencies—and I do not quite understand where they are coming from—is that, say, for some aspects of fisheries management, there are various memorandums of understanding in place. There is shared responsibility for some fish stocks. The states have given some species back to the Commonwealth to manage—for example, tunas, southern sharks and gummy sharks—although not in every state. There are collaborative science projects going on. The agencies fly backwards and forwards all the time on a whole range of issues but there seems to be a sticking point on marine park collaboration and establishment.

Yet there is so much to be gained through combining resources to have a scientifically driven approach with shared responsibility for the outcomes that it astounds me that that has not really been achieved. I would strongly encourage the federal government to go back to the states with some money and say, 'We are coming to do this,' and drive a better negotiation, because there is pressure from everywhere. The fishing industry, the recreational sector and the conservationists are all saying, 'Better integration.' There is nobody in the community saying, 'Do not do that', yet it is not happening. I think it is up to the Commonwealth to go back, sit down with the states in a small padded room and say, 'We have to do this deal.'

Senator SIEWERT—I have one last question. We have talked a lot about the fishing industry, the conservationists and marine parks; we have not touched much on the oil and gas industry. From a Western Australia perspective, the oil and gas industries had a huge involvement in the negotiations of marine protected areas. Is that your experience, and what influence have they had?

Mr Bohm—Yes. Our understanding is that national energy policy overrides everything. We have been told this by bureaucrats. Whether that was in context or not, I really could not be clear now. I am not targeting anybody specifically but we have been told on a number of occasions that national energy policy overrides everything. Marine parks come a poor second place to oil and gas interests. On the south-east marine protected area process, we can all see by looking at the maths that a marine park will come up and there will be a straight line down the edge of an oil and gas reserve. For me that is not (a) integrated marine management or planning and management and (b) biodiversity conservation done in a holistic way. That is somebody saying, 'You cannot go into my turf; stay out.'

We are not going to achieve good marine conservation outcomes, and even to some degree good fisheries management outcomes, when there is a line that says, 'You will not deal with this sector,' and that sector says, 'You will not deal with us; we are sacred.' Our society has a real problem in that there is a key player in the marine management environment that is just not at

the table. Particularly in this context of marine park establishment, the south-east process showed that they were not a player. They were taken out of the equation. For a government touting regional marine planning and holistic government et cetera, this really does need to be overcome.

Senator MOORE—We constantly hear about the south-east MPA plan, because that was the most recent experience—

Mr Bohm—Six or seven years of the lives of most of us!

Senator MOORE—Yes, and the blood is still on the table! In terms of an actual review of that process—all the people who were involved, the ongoing relationship and how that went, what was learnt, what could be done better, what was a total failure and all that stuff: are you aware of any review of that kind being done?

Mr Bohm—I am not aware of one. Perhaps the Department of the Environment and Heritage will undertake an internal review in some form. I am not aware of a wider review. I would probably expect the Commonwealth to let it sit for a while, to go and get on with the north and try to do a better job, take some learnings to the north—hopefully, a lot of learnings to the north—and then, in the not-too-distant future, come back and have a look at the south-east in light of what we have learnt from elsewhere. Although we thought we knew a lot about the south-east area, the result did not reflect that, and perhaps if we learned some better ways of doing business elsewhere we can reinject that back into the south-east. It needs to be left alone for a bit, I think; the relationship between industry and conservationists has been a big topic. There is a lot of spilt blood, a lot of anxiety. We probably need a break from each other in that area for a while. We need to go and work on some other relationships and look at where there are some collaborative approaches we can apply in other regional marine areas. But I would not want to see that review drop off the shelf. I just think—

Senator MOORE—And was your little book, *Australia's Sustainable Seafood Guide*, done with the fishing industry?

Mr Bohm—No way.

Senator MOORE—Are you really clear on that?

Mr Bohm—I am very clear on that! And that is because, although we used fisheries assessment reports in our analysis, this guide is a result of members of the public, particularly in quite large numbers at Easter and Christmas, saying to us, 'We want to know what we should and shouldn't eat.' They do not trust the fishery status reports, they do not trust even the minister's claims of sustainability, so they wanted someone to take an independent look. This is a job that we did not want. It is quite good for our profile, don't get me wrong, but we did not want the job. We are actually a very collaborative organisation and this is a very political document. But it is because it is not being done by the Bureau of Rural Sciences or somebody else that our members and our supporters were very strongly of the view that we should do it, as a number of groups are doing in the United States and Europe now.

Senator MOORE—I have seen a similar kind of document from somewhere in the US. And is it a bestseller?

Mr Bohm—It is a wonderful seller. The first edition of this guide was 50,000 units. We have a little pocket guide that goes with it—100,000 of those went. We only just expanded and revised the guide, releasing it a couple of weeks ago. We have printed 50,000 units initially. There are restaurants in Melbourne and Brisbane, and restaurant chains, buying multiple copies. It is an agent of social change in my view. Industry is worried about it closing them down. We say no, we do not expect this will close industry down. What it will lead to is people at the seafood counter asking a lot more questions about labelling, sustainability, where the wholesalers are actually buying their fish from—for example, is it coming from a trawl fishery or a net fishery? These are all the questions that a product like this generates. I think that it will just contribute more generally to our community awareness of and interest in fisheries as well as marine management.

Senator MOORE—Thank you.

Senator WORTLEY—This document, *Australia's Sustainable Seafood Guide*, has had good coverage in the media as well; coverage was quite wide. When you actually go into a shop to purchase seafood products, do they have that kind of information there to give you? Is that forthcoming?

Mr Bohm—Our experience—and this is our experience; we have not surveyed this—is that, generally, no, they do not. Sometimes a merchant who has come, for example, from the fishing industry can be quite articulate in talking about some of the issues and some of the sources of the seafood. In particular, they can be quite knowledgeable about the sources of the seafood. But often they are not. In some instances, we have had quite a bit of frustration with merchants. I will give you one small example. In south-east Queensland, when you go into most restaurants or even fish and chip shops, the various names of things are there, except there is a label of 'reef fish'. If I go and ask even a fish merchant what reef fish is, he will say: 'It comes in a box. It's a number of things.' And it changes; we know because we can see the texture changes in the fish. We are starting to ask, but we are not necessarily getting the information we need.

It is a cultural change thing. People are going to be asking for the information. Slowly processors and wholesalers will learn more and get better at documentation. We say that, where industry is doing a good job, we can promote that with this sort of format but, without good labelling, we cannot, because people do not know where their seafood is coming from.

Senator WORTLEY—What are the requirements? You say that they get a box that says 'reef fish' which could be a combination of all sorts of fish. What are the labelling requirements for those boxes?

Mr Bohm—We have come to a point in our history where we are trying to standardise the marketing names. It is really early days. With regard to quality control and public health, there are a range of mandatory requirements in place but, with regard to information provision about sources, sustainability and companies that provide the seafood, this sort of information is not yet forthcoming. Increasingly, people want their fishmonger, restaurateur or even supermarket to have those answers on hand. That will be the future.

CHAIR—What sort of response have you had from the fishing industry to that?

Mr Bohm—Understandably, those members of the industry who have contacted us have been concerned. Sometimes they have needed more clarification because they may not have seen the actual product but they have seen the media. The media is one thing, but I must emphasise that the product is often another. We try to be very reasonable in our guide from our point of view. Of course some industry sectors are nervous. That is because we have a section that says, ‘Say no,’ and there are some things we ask people to avoid. They should be nervous about that. That is its role. There are a large number of fish in what we call the amber or middle section, which are basically species that are being intensely fished. If we get the management right, they will be okay, but, if we do not make hard decisions, they will be in the ‘say no’ section next time. There is a green section which says: ‘These ones are generally faring better. Go for your life.’ Industry’s response is mixed. Often they are seeking clarification, but sometimes they are genuinely concerned. They should be, because it does expose them to some degree.

CHAIR—After the wounds and bruises of the south-east marine park thing, you thought you would take on something a bit more soothing?

Mr Bohm—Yes. The timing was very unfortunate. To be fair, we did receive some industry submissions, for example, on the status of their fisheries and some scientific reports. The Bureau of Rural Sciences did some more work and we felt it necessary to update and consider that information and incorporate it into a new product, and it just so happened that it coincided with the end of the south-east MP process.

CHAIR—Leaving aside the obvious, you will always have areas of disagreement, because you are coming from different perspectives to the industry, but with regard to some of those issues like the reef fish example, I would have thought industry in the broad—maybe not across the board—would be supportive of greater standardisation and clarity about those things.

Mr Bohm—I cannot think of a time when I have not spoken to industry about labelling, labelling clarity and identifying individual fisheries where I have not had industry saying, ‘Yes, we want that too.’ It is a fairly complicated and antiquated system of just getting fish names standardised in Australia, so there is quite a bit of work to go into the whole labelling side, in our view. Some elements of industry want different things from labelling than we want, but there is a general agreement that the labelling could be better. There is certainly scope for collaboration on that. I know fisheries that are well managed. In this guide, I want to say, ‘Go buy that fish,’ but the general public cannot necessarily identify that that fish came from that fishery. That is labelling. Until that happens, it is going to be difficult for us to make friends in the fishing industry on this topic.

CHAIR—Speaking completely personally from my role as patron of the Vegetarian Society, you probably have more common ground with them than some other groups in the community. I think there is a lot of scope for getting that consistency of information wherever you are coming from. We better wind it up there. Thank you for your participation.

Mr Bohm—I will give you a copy of the guide for your leisurely reading. I also add our submission for the south-east marine parks process. This is not the core submission; this is a submission about what we call fishing in paddocks, which is looking at this idea of fish refugia

and having some areas in the sea where there is no fishing. I submit that for background information.

CHAIR—Thank you. Do you think the fishing industry share similar concerns about the energy industries not being approached?

Mr Bohm—At times, yes. In the south-east, where I have been working in fisheries management, we have demanded in the last couple of years to know anything that the oil and gas industry is up to that is related to fisheries management. We have certainly been concerned as a collective about seismic testing, and we are concerned about drilling and about access, so there is definitely some common ground about oil and gas, and they should be an equal player at the table.

CHAIR—Thank you for that. It helped heal some of those bruises by joining together and ganging up on the energy industry.

[12.01 pm]

BYRON, Mr Grahame, Manager, Coast and Marine Conservation, Department for Environment and Heritage, South Australia

HOLMES, Mr Allan, Chief Executive, Department for Environment and Heritage, South Australia

INNS, Dr Bob, Manager, Land Management, Department for Environment and Heritage, South Australia

LEAMAN, Mr Greg, Director of National Parks and Wildlife, Department for Environment and Heritage, South Australia

CHAIR—Welcome. We have received a submission from the South Australian government. I presume it does not need any alterations at this stage. Are you comfortable with it as it is?

Mr Leaman—We are comfortable.

CHAIR—I remind members of the committee that the Senate has resolved that departmental officers at state or federal levels shall not be asked to give opinions on matters of policy and shall be given reasonable opportunity to refer questions to superior officers or to a minister. The resolution prohibits only asking questions for opinions on matters of policy and does not preclude questions asking for explanations of policies or factual questions about when and how policies were adopted. I invite you to make an opening statement.

Mr Holmes—I would like to make a few comments, and I will be brief. The first of two points that I will make is the importance of a reserve system as a cornerstone of biodiversity conservation. If you look at South Australia's work on a biodiversity strategy, you will see that the reserve system does form the basis for that strategy. The second point is to emphasise the importance of a public reserve system. I know there is some debate about the role of the private sector, but I would certainly argue that long-term security, accountability for management and public accessibility are critical points.

There are three or four challenges that are worth mentioning. The first of those is managing for biodiversity. Issues around fire, feral animals, hydrological systems, balancing use and climate change all impact on the prime function of managing for biodiversity. The second challenge is working with communities—neighbours, local communities and volunteers—and getting that balance right. Perhaps a lower level issue, but a significant one nevertheless for us, is attracting and retaining people to work in regional Australia, where it is not an easy thing—and in remote locations it is a difficult thing.

I will briefly outline some successes in South Australia which you might want to discuss with us. There is work around cooperative management, both on and off park, which is quite significant. There is some large-scale ecological restoration, especially in the desert range country. Our friends-of-park system is something to talk about. We have been a beneficiary of

the Commonwealth's NRS program, and acquisition in the last 10 years has made major additions to our reserve system. Kangaroo Island is a nice microcosm of a changing economy that is dependent on nature conservation and a park system. We are making some interesting progress in relation to marine parks. Something which might seem a bit odd, but I would not mind briefly reflecting on it, is the impact of rabbit calicivirus on biodiversity in South Australia.

There are five or six issues that we would like to see addressed in the senators' deliberations, and they might form the basis of some of our discussion today. The first of those is in relation to a truly national reserve system. If we are serious about that, what sort of partnership do we want? The second point, which I have already made, is the importance of a public reserve system and the complementarity of private reserves. There is a lack of valuing of science and knowledge underpinning park management and nature conservation; we do not know enough about our biodiversity in this country. My point about the release of rabbit calicivirus was about national approaches to feral control. National programs can have great success. There is some really interesting stuff around Aboriginal participation: dealing with some of the long-term issues of remote Aboriginal communities, restoring sense of purpose and engaging them more seriously in caring for their country. There is a set of issues around the role of the state and the importance of capacity, infrastructure and history and being able to work with the Commonwealth. Finally, there is some interesting stuff around marine protected areas and the need to get broad community support for that to be a successful venture.

Senator WORTLEY—We will start with marine protected areas, which you concluded with. I understand that there are targets to create 19 marine protected areas by 2010. Could you explain to the committee how far down the track you are with that and what still needs to be done?

Mr Holmes—Grahame is responsible for that program. I could talk about it, but Grahame is the expert in the area.

Mr Byron—Nineteen MPAs by 2010, as you said, is the target in the state plan. To date, we have expended quite a bit of energy doing a fairly thorough and pragmatic exercise to get us to a stage where the MPAs will have general acceptance not only through the scientific community, because they are helping us develop it, but through our stakeholder groups, which we are working with quite closely, and more broadly through the community. I think a couple of the approaches that we have taken have not been done elsewhere. The first thing we did was establish a regional consultative committee at Encounter Bay to work on the first park. We set that up as a pilot to test how we were going to develop MPAs. What are the things that would work in South Australia? What are the things that do not? How do you involve the community effectively? How do you engage the stakeholders? In that one particularly, we were looking very much locally. What are the influences on the locals? What are their issues? What are their concerns? We have used that as a pilot to test not only the whole theory of MPAs but how we actually develop legislation that is commensurate with society's requirements.

We have had a draft plan out for three months of consultation. We have met with all the key stakeholder groups. We have had a number of public meetings. We have held a lot of public information days. We have talked through all the issues with people and we have asked for their input. We have received well over 400 submissions, which have been quite informative. They will help us to frame where we are heading with the legislation. The next stage of it is to develop

some purpose specific legislation to allow us to introduce the marine parks within our time frame.

As for the other components that are providing valuable input, we have a scientific working group which was established by the minister. It has eight of South Australia's most eminent marine scientists—and you heard Craig, in putting the previous submission, talking about how we need to have the best based science to develop these MPAs. Our scientific working group is working pretty much overtime at the moment in addressing the principles. What is it that scientists really see as being critical to the marine park process? In South Australia what is unique about it? What are we trying to protect? We have a fairly unusual situation in South Australia because about 90 per cent of the species are endemic to the southern coast of Australia, so they are fairly unique and there is a fairly wide variety of abundance. We do not know a lot about them and we have some very big system drivers. There are the big oceanic drivers coming up from the Antarctic. We have upwellings and all those sorts of things which influence how ecosystems might move or shift along the coastline. So that, combined with two of the largest inverse estuaries around—Spencer Gulf and Gulf St Vincent—makes for a fairly unique marine environment.

The scientific crew are working through all of those processes to give us advice on what is best for marine parks. Then we have a marine advisory committee—also established by the minister—to bring in from across the state people with various expertise in different industries and sectors to give us their views of what they believe the community is expecting from our marine parks. The minister also has another working group by which the stakeholders get to meet with the minister directly to talk about other issues around this. At this stage the legislation is currently being drafted. The minister is hopeful of having it in parliament later this year, and once that moves on then we can progress further the development of the 19 parks.

Senator WORTLEY—What percentage of state and Commonwealth funding is being used to establish the marine parks?

Mr Byron—In South Australian waters?

Senator WORTLEY—Yes.

Mr Byron—There is no Commonwealth funding.

Senator WORTLEY—So it is all state funding?

Mr Byron—Yes, it is all state funding.

Senator WORTLEY—Chair, I have a number of questions but they do not relate to the marine areas. Do you want to move on or go backwards or forwards?

CHAIR—I do not mind. We can mix it all among ourselves as we have had a watery morning so far. We can mix and match. We can cope with that. We need to integrate marine interests into this anyway so we may as well integrate fishing.

Senator ADAMS—I want to talk about Indigenous involvement. I am on another committee that has actually been doing an inquiry into petrol sniffing. We have already been to Adelaide and have heard a number of witnesses speaking about their lands plus the problems that are associated with petrol sniffing. I note that in your submission you say you have developed ‘modern, dynamic legislation’ to facilitate Indigenous aspirants managing their land. Has this legislation been implemented? Can you give me examples of how it is going?

Mr Leaman—Yes. In 2004 the government amended the South Australian National Parks and Wildlife Act to facilitate cooperative management of national parks and conservation parks in the state with Aboriginal people. It created a three-tiered scheme whereby reserves—these parks—could be established over Aboriginal owned lands and be managed by a cooperative management board. Cooperative management agreements could be established over crown owned parks at two levels, one with a cooperative management board and the other with an advisory committee advising the director. Those cooperative management boards effectively replace the powers of the director of national parks and wildlife to manage those parks, so they represent real management and real responsibility. These arrangements involve a cooperative management agreement between the Minister for Environment and Conservation and the particular Aboriginal community.

Tier 1 parks, the parks over Aboriginal owned land, can come about in two ways. Firstly, they may result from a hand-back of an area of land to Aboriginal people. Then they are Aboriginal freehold and can continue as a park. It may be existing Aboriginal owned land. An example of where they might be established is in the APY lands, or elsewhere. That change is quite significant. I think it is the case in most of Australia that national parks and reserves can only be established over crown lands. We now make the provision to establish them over Aboriginal freehold lands as well. So the provisions of the National Parks and Wildlife Act then apply to those lands: the requirements for management plans and the involvement of the minister et cetera.

In August 2004 the South Australian government handed back the Unnamed Conservation Park, the L-shaped park as it is called, in the far north-west of the state. That is an area of 2.1 million hectares. It is a very large area. That was handed back to the Maralinga-Tjarutja people, and a cooperative management agreement was entered into. A board was established for that park, which has a majority Indigenous membership. It is chaired by Maralinga-Tjarutja as well. That has been functioning quite satisfactorily since. That was the first tier-one, Aboriginal owned park established under the new legislation. Since then, last year in the Vulkathunha-Gammon Ranges National Park, in the northern Flinders Ranges, a second cooperative management agreement was put in place between the minister and the Adnyamathanha people. A cooperative management board runs that park with Adnyamathanha and state government representatives on it. That board has now met once and meets for the second time later this week. So the Vulkathunha-Gammon Ranges National Park is now managed by a board rather than the Director of National Parks and Wildlife but it remains a Crown owned park.

The third example is a small reserve on the Murray River near Nildottie called Ngaut Ngaut Conservation Park. We have a cooperative management agreement in place there with the local Aboriginal group. That is a tier three, a third level, one with an advisory committee involving departmental staff and the Aboriginal community providing advice to the Director of National Parks and Wildlife on the management of that park. Some of the responsibilities of that advisory

committee are to advise on the management of the park, to help prepare the management plan for that park, to advise on the implementation of that plan and to provide advice on matters relating to Aboriginal cultural heritage, obviously, on that park. It is quite wide ranging and it meets the aspirations of that group at this stage.

Senator ADAMS—How many Aboriginals are employed in park management in South Australia?

Mr Holmes—Around four or five per cent of our workforce is Aboriginal, so it is not a high level. It is a really interesting one. In our experience, there are significant costs associated with moving from government managed parks to cooperative managed parks. You open up a range of issues around development of local people. There are many issues associated with joint management. For us it is a bit experimental. I have to say that over the last 10 or 15 years we have learnt a great deal but we still have a great deal to learn. We have made many mistakes and we are still learning about cooperative management and how to really transfer responsibility from government to community.

As I said, there is a lot of experimentation in place. Greg has talked about several examples: Maralinga, the unnamed park, Vulkathunha-Gammon Ranges and Ngaut Ngaut. There is also an earlier model that we ran in the Witjira National Park, back in early nineties I think, where we had a lease-back arrangement, which is probably the longest one of ours. How many Aboriginal people do you employ? How do you find people who are suitable to manage a park? How do you train people to be suitable to manage a park? They are all issues that you have to confront. You find that there are local considerations where Aboriginals from other communities are unacceptable in the management regime of a particular park. It is quite complex.

Senator ADAMS—I realise that, but I would like to go back to your comment about modern, dynamic legislation. It does not sound too dynamic to me from what you are saying. Do you have the funding to back up your statement?

Mr Holmes—I think that is a little unfair. As Greg has outlined, the model gives you a complete range of opportunity effectively from an Aboriginal community managing the park right through to an advisory arrangement, depending on circumstances. We are quite different from other jurisdictions where they have entered into lease-back arrangements. It is a different approach.

Senator ADAMS—I realise that. I have had a lot to do with Aboriginal people over a long time, so I know how difficult it is, but they must be supported and you have to have the dollars in behind to give that support. That is really what I am coming to. Is there enough support? Are there enough dollars to be able to involve Aboriginal people to really do what you are stating you want?

Senator WORTLEY—Would you be able to explain to us what the allocation of Commonwealth and state funding is? Is it a secure tender from both a land and funding perspective? That ties in with what Senator Adams is asking.

Mr Leaman—On the funding, tied with the co-management agreement and the hand-back of the Unnamed Conservation Park was an additional \$200,000 per year made available for the

management of that park by the state government. I am not aware of any Commonwealth contribution. There may be some directly through the Aboriginal organisations but not as part of the park management. Additional funding has also been allocated in the Vulkathunha-Gammon Ranges to cover the additional costs of boards associated with co-management. We have also created an additional senior position for an Adnyamathanha person to be involved at a higher level in the management of that park. There have not been additional funds. I cannot tell you if there is any other—

Senator WORTLEY—Where was that funding from?

Mr Leaman—From the state government.

Senator WORTLEY—So the additional funding was from the state government?

Mr Leaman—I am not aware of any Commonwealth funding that is going into the management of those parks directly. However, that is not to say that there is not funding through the incorporated Aboriginal organisations. I am not familiar with their finances but, from the park management and state government perspectives, the state government has put considerably more into the unnamed park to set it up and get it running and has put additional money into the Vulkathunha-Gammon Ranges as well.

There was another key point Allan alluded to a moment ago which differentiates our approach from the other states. We have moved away from the lease-back arrangement. There are a whole lot of inherent issues with lease-backs. Obviously, there are some issues with power associated with any landlord-tenant relationship. Our approach is focused on cooperative rather than joint management, and I differentiate there. I see joint management as two groups of people working towards their own objectives in parallel or together, whereas cooperative management—the approach we have tried to pursue—is two groups of people working for one shared set of objectives. We think that that is best done, at this stage anyway, away from the lease-back arrangements so that there is true cooperative management of the park.

Senator ADAMS—In your program, is there any funding for training youth and having them employed?

Mr Holmes—Are you talking about Aboriginal people in particular?

Senator ADAMS—Yes.

Mr Holmes—We run a series of different programs. We have got apprenticeship schemes and cadetship schemes. We take advantage of the Commonwealth's CDEP programs. So there is a range of approaches. You asked the question: is it adequate or not? It is a difficult question to answer, isn't it? We are a small state. I think we do the best we can. We are experimenting. One of our real success stories is some work in the APY lands in a small community called Watarru. We have been working with that community to really engage them in a biodiversity conservation program around caring for their country. It is largely Commonwealth funded in terms of employing the Aboriginal people. However, the state's contribution is in the science, management and input that is required to make that program work. It is very small-scale but in

areas where there is not a lot of hope that is one positive story from South Australia. In fact, if you are not familiar with it, it is really worth having a close look at.

Senator MOORE—We asked specific questions at the petrol-sniffing inquiry about whether there were programs like this, and it was not mentioned. It would be useful for all of us. You have one paragraph in your submission—it is very difficult when you are writing a submission for something—but if we can get some more detail of this particular process, as you are doing Indigenous experiments in South Australia, that would be very useful.

Mr Holmes—Interestingly enough, that one arises out of the old Commonwealth Indigenous Protected Area Program. In the APY lands there are two IPAs—not all that successful in many respects; work is in progress—but out of that has come this very positive story with the Watarru community.

Senator MOORE—If we can get some information on that, that would be great.

Mr Holmes—Yes.

Senator WORTLEY—When you said that it came from the old Commonwealth program, is it a state government funded initiative or is it Commonwealth funded? I mean the one that you are currently running.

Mr Holmes—It is a mix, really. I suppose we would claim it as our initiative but you cannot make it work without the Commonwealth assistance for employing people. That is where their day-to-day money comes from. As a result of that we have engaged, through the NRM funding, with the Commonwealth to fund two specialist ecologists to work in that APY community. We do not do these things on our own. They are partnership based. As I said, there is a lot of experimentation and a lot of work in progress, but I actually think there are some really positive stories there.

Mr Leaman—The state government commitment to the project over the last two years has been around \$400,000 a year. It is significant. On that project we employed one Indigenous project manager within our department but from that local small community there were 11 Anangu employed full time on the project and another 10 part time. They also utilised the CDEP money, which is from the Commonwealth, as well. So that is applied to land and biodiversity conservation projects.

That community has taken a very strong interest in it. It does not suffer some of the issues that some of the other communities in the APY lands suffer around petrol sniffing and everything else. There is still, as I understand it, a moderate level but this community wants to do something about that and so they have been extremely keen to work on this program because it gives people good employment, legitimate employment, and gives them something to do and injects money into the community. It is showing some changes in health and wellbeing in that community, to the point that the community has agreed to take in low-level problem people—substance abusers and others—from other communities to work on it and try and assist in their rehabilitation. So it is showing some very positive things. That is being picked up and there are now people who are considering applying the same Kuka Kanyini methodology in other communities. In fact, that project only yesterday was named as a finalist in the Banksia awards for the Prime Minister's

Environmentalist of the Year Award as well as in the land and biodiversity category, which is great recognition.

Senator ADAMS—What I was really trying to get at was the employment issue. With these combined boards or advisory committees, there is the fact that you have the expertise there to support people to be able to look after their own land. Employment is the key to it, because if they are not employed it is not going to work.

Mr Holmes—You would have to say that the South Australian park management model is fairly lean. We run it on moderate levels of resources. To think that you are going to resolve the aspirations of Aboriginal people through park management with our current resource base is just not possible. It is the sort of programs like the Kuka Kanyini program, where you have this much greater involvement in lifestyle and living, which contribute to nature conservation as well. It is multifaceted; it is achieving a number of goals. It seems to me that it is not reasonable to expect a park management agency to pay for that. If you were just managing for biodiversity conservation you would do it in a different way, but where you have these other aspirations and other requirements it is a much more complex mix and requires multiple resources.

Senator ADAMS—You have a positive model to work with anyway. During our inquiry we have come across quite a lot to do with fire and how it is managed in your parks overall, not just Aboriginal parks. Could you give me an idea of what you do? Do you do control burning? How do you actually manage the risk of fire?

Mr Holmes—South Australia is an oddity in that we do not have the large natural hardwood forests of the eastern states, Western Australia or Tasmania, so you do not have that history of fire and forestry, which is the long history of those other jurisdictions. In South Australia there is not a history of burning for ecological or fuel reduction purposes. That is just the way it has been here for a long period of time. However, probably in the last 10 years, as the result of significant fires in New South Wales, the ACT and Victoria, questions have been asked about the appropriateness of our approach to burning. In 2002 this government committed to a major change in its approach to fire management on public land. Over the last four years we have engaged in a program of reintroducing fire management into public land management on any scale, both for fuel reduction or fuel management purposes and for biodiversity conservation purposes.

The reality is that it requires a great deal of technical expertise and technical competence to do it well. You do not turn that round overnight. In four years we have built some capacity. We are now able to conduct fuel reduction burns and ecological burns at scale. In South Australia we are starting to see that become part of our management tool kit. As I said at the very start, it is a different landscape to the Victoria, New South Wales and Western Australian landscapes where you have high-value forests and different fuel levels, fire behaviours and fire ecology, so it is a different scale.

The other thing to bear in mind in South Australia too is that we have a bit of natural fire in our mallee landscapes on a very large scale. In fact, one of the problems for us is that, from an ecological point of view, we have had too much fire in a number of our parks. Ngarkat, a large park on the Victorian border, has been extensively burnt over the last 10 years. We would prefer to keep fire out of it altogether for a period of time. So it is very complex. It is one of the big

threatening processes—both too much and too little. There has been a major shift in philosophy in South Australia in recent times.

Dr Inns—Can I just add to that. As a part of that program, we have a research and monitoring aspect, so we are learning as we go under the prescribed burning. We look at what we are burning for and we look at the results and then we use an adaptive management approach to it.

Senator MOORE—I am just following up on the issue of change in fire direction. It is an issue that does cause a great deal of diverse opinion, as just about every issue in this area seems to. In terms of the significant change you have identified to your fire management strategies, what kind of community consultation was involved to bring the people who may or may not have agreed with your change in direction along with you? Fire management is one area where there are such competing views about the right way of doing it and a lot of pain involved. You have identified that was a really major change that your department made. What was involved in doing that and what are you doing in an ongoing way to keep people involved in major changes?

Mr Holmes—You are right; it is a highly contentious area, isn't it? You do not get anything more contentious really. What happened in South Australia was that there was a great deal of community concern about public land management. That concern culminated in a summit, I think, around 2002 and it was the government's response to that concern and that summit that led to the funding of a major fire program within our agency.

I do not think South Australia has those tensions that the eastern states have—or not to the same degree—but concern about fire in South Australia largely relates to burning on Kangaroo Island, from which Aboriginal people were absent for probably 10,000 years. The fire regimes in Kangaroo Island were largely natural in the sense that they were lightning induced, whereas on the mainland of course there were both natural fires and Aboriginal burning. They are quite different fire regimes. The concern expressed on Kangaroo Island is that you need to be cognisant of that different regime in what you do on Kangaroo Island. That has really been the most sensitive issue.

But, as I said, we really have not burnt on that scale yet. Given the great fire threat in South Australia is in the Mount Lofty Ranges, the peri-urban areas—just as you experience in Sydney, Canberra and Melbourne—when we get to the stage of burning at a significant level, I think that will be an interesting time for us then, to see how the community responds. We do not get many smoky days in Adelaide as a result of our burning, which you do in other jurisdictions. So we have not encountered that yet. But I think there is an appreciation of why you need to do it. We do not seem to have the controversy that exists elsewhere.

Senator WORTLEY—You are lucky.

Mr Holmes—Yes.

Senator WORTLEY—Around Australia many of the national parks abut urban areas. Is the management of the fire interface a state government responsibility? Does the department look after that?

Mr Holmes—Yes.

Senator WORTLEY—In South Australia what specifically is done in relation to where the parks abut urban areas?

Mr Holmes—Can I make one preliminary remark. We have been in this business for a long time. Greg has worked in four jurisdictions and has more than 20 years experience. I have worked in a couple and have more than 25 years experience in this. This is what we have done for our working lives, so we have seen this fire stuff played out. I come out of Victoria; Greg has been out in Western Australia, Tasmania and New South Wales.

The harsh reality is that people who live in fire-prone areas have got to look after themselves. There has to be some community resilience. You cannot do enough to protect them. Our loss of life on Eyre Peninsula last year, where almost a dozen people perished, shows that. When you look back at that, we were in the business of trying to apportion blame: ‘Was it a land manager’s fault? Was it the firefighters’ fault?’ But if you read all of the coronial inquiries into fires over the last 30 years, you conclude that we have forgotten that we live in a very fire-prone environment where on catastrophic days you are going to get fires that will burn houses and threaten life. If you live in those environments, you have got to take care. I think that is a really important starting point.

Having said that, public land managers do have responsibilities. We do have obligations. The obligations that we have relate to that boundary protection, reduction of fuel along boundaries and trying to ensure that you actually have control lines on park boundaries. If you look at the work that we have done over the last 10 years in the Adelaide Hills, which is where there is the greatest risk, they are probably defensible. You could say: ‘Look, this land management agency has done the right thing. It has firebreaks. It has fuel reduction burns. It has got resources deployed. It works well with the community firefighting organisations. It works well with local government.’ But I still fear the day when we get another Ash Wednesday in the Adelaide Hills. You will get catastrophic fire. Houses will burn, and the inquiries will come looking to blame public land managers. You have seen that played out in New South Wales, Canberra and Victoria. In a large part, they are pretty good land managers who do pay attention to fire management. It is just that we have forgotten that we live in a very dangerous environment.

CHAIR—One of the positives of working in the marine area, I suppose!

Senator WORTLEY—I want to go to pest and weed control in national parks. Can you provide the committee with an explanation as to what is going on in that area?

Mr Holmes—We have got a philosophy that, if you are not serious about being in it for the long term, do not even start. There are more resources wasted on half-hearted attempts and misguided efforts than I can imagine. I have seen that over a lifetime. For us, it is: where are the priorities? Where can you have success? It does have to be strategic. It has to be scientifically based and it has to be well thought through. Have a look at the Bounceback program in the Flinders Ranges, which is our great success story, just as there are great success stories in Western Australia. Bounceback is here, where we have, on a landscape scale, controlled rabbits with the release of the calicivirus—that was the great help, of course—and foxes, goats and cats. So there is significant control. Then you start to see ecosystems’ equilibrium swing back and a whole set of changes occur as a result of that. Again, there is a fair bit of experimentation and a

fair bit of learning associated with that, but at scale with significant resources—both state and Commonwealth—you can make a real difference.

Senator WORTLEY—With regard to fire, weed and pest control, what share of the allocated funding is Commonwealth and what is state?

Mr Holmes—The Commonwealth has assisted us largely through the NHT for the NRM programs where they have had broad landscape scale results. If you look at the Bounceback program—I am guessing now—but it has been for us around a half a million dollar program for the last 10 years. About half of that money has come from the Commonwealth and half from the state. So it has been a fifty-fifty program over a long period of time. But that is for these large-scale demonstration projects. Most of the work that we do is state funded as part of our normal recurrent park management program.

Senator WORTLEY—So that is the weed and pest control?

Mr Holmes—Yes.

Mr Leaman—Our understanding is that there is not any contribution from the Commonwealth in terms of the fire management.

Senator WORTLEY—So the fire management is the state funding.

Mr Leaman—That is correct.

CHAIR—With the invasive species, and I am thinking perhaps as much about weeds as about animals, an issue that has come up relatively frequently through this inquiry is that there is a lot of money being spent on trying to contain and eradicate weeds in protected areas and in the wider community. It seems that we are still not doing as well as we could be at preventing them escaping in the first place. I know there have been some moves between state and federal in that direction. Would you give an idea of what things may be being done at state level in that regard in stopping particular plants being sold in nurseries or fish at aquariums and those sorts of things, and what other things still need to be done? What needs to be done in that preventative area?

Dr Inns—Certainly we look at a weed strategy at a state level, looking at identifying major environmental weeds and how best to control those. Through nursery trade it would be identifying potential environmental weeds and advising nurseries of that potential. There is not the legislation to prevent the sale of them, but certainly we encourage nurseries to look very seriously at some of the plants that they might sell. It is an education and community awareness type program.

Within parks themselves, as Allan was saying, we look at where the priorities are. That can also be where you have adjacent land where there may be weeds either going out or coming in, so you are looking at that interface and determining how you can handle your particular weed problem. There is a variety of different weed issues that we would deal with in South Australia. There are a number of the control measures involved—biological control as well as just physical control. So there are some aspects of control of blackberries, bridal creeper and boneseed where

there is introduction of biological control programs. These are in their early phases. While there is some success, biological control is still going to be a long-term program. On top of that, you also need physical methods of control—and you are working in an environment where you need to conduct your weed control program while limiting any impacts on your native species at the same time. Usually, where you have the interface with agricultural land alongside, it is a matter of working with neighbours to conduct weed control to the benefit of both the agricultural land and the park lands.

Mr Holmes—It is interesting in terms of where the greatest risk is. For us, it is existing pest animals and pest plants. In the arid areas it is camels. We have this massive camel infestation through arid Australia, with hundreds of thousands of camels doing enormous damage. You cannot deal with that at a state level; it has to be something that is deal with nationally as the camels move over large areas. This is a massive problem that does need national attention. Another one that scares the life out of me is the introduction of exotic reptiles. The potential for rattlesnakes or corn snakes to get loose in our environment is horrendous. You only have to see what the brown tree snake has done in Guam to understand the impacts that those sorts of animals can have in sensitive environments.

I think there are significant existing risks from reptile trade and that fascination with exotic reptiles which is there now. Then I go back to those incredible problems that we have with rabbits, foxes, cats, goats, horses, donkeys and camels. There is some interesting history. Have a look at the rabbit calicivirus. There was national cooperative management, and we were able to fund the analysis of what was going on with calicivirus for three or four years, and then we stopped funding it, which was an absurdity. We lost interest once we thought that we had dealt with the problem. What we will see in time is that rabbits will develop a resistance and rabbits will become a major problem for us again.

I came to South Australia in 1994 and I remember that the Director of National Parks at the time said to me, ‘Look, you have only got one thing to worry about, and it is rabbits.’ It was true because they had devastated this landscape. The release of the virus in the mid-nineties caused this just incredibly extraordinary event where you saw one of the most significant pests effectively taken out of arid Australia. There are some lessons to be learnt there.

CHAIR—Senator Siewert has been waiting patiently.

Senator SIEWERT—I want to go back to marine. The legislation that you are bringing in and the 19 proposals that you have got, are they no-take, multiple reuse or zoned?

Mr Byron—The policy document, which we call the blueprint, outlines that the 19 MPAs will be multiple-use. I do not know if they will be zoned according to a range of criteria similar to that in other jurisdictions.

Senator SIEWERT—So it is a different model from the model that Victoria is using?

Mr Byron—Yes.

Senator SIEWERT—I think some of you were here when Craig Bohm was speaking. He was talking about going to community consultation, setting your targets et cetera. Is that the approach that you have used or have you started with almost a blank slate in the consultation process?

Mr Byron—With Encounter, as I said before, what we did as a pilot was work within the community for a couple of years with representatives of various sectors, with a blank map, and we said: ‘How do we put this together? This is what we need for conservation. What do we need to minimise impacts on social and economic type issues and come together with a draft?’ Now, come the end of the day, the committee came to us and said: ‘We worked this thing to death; this is about the best we are going to get it. Now is the time to test it on the rest of the community’. So that is effectively what we did. We put it out there as a draft for the three months and then we took it back, looked at all the comments and all the submissions to see what it was that made people happy, what made them unhappy and then we tried to rework the framework.

The proposed legislation that is coming up actually embeds that into legislation so that that consultation process does happen with the community. It is a requirement, there is no way around it and, quite honestly, given the nature of South Australia there are not a lot of people out in the regions. If you have marine protected areas out there we want the community to own them; we want them to be the stewards of the area so there is no point in introducing things that they cannot live with. So we have to pragmatically work through the zoning exercise, try and achieve our conservation objectives while at the same time ensuring that we are not adversely impacting the community.

Senator SIEWERT—Do you set targets in terms of those conservation outcomes?

Mr Byron—In terms of the target, the only target we really have is to ensure that we have got a representative sample of all our bioregions protected. There is no number target on any particular zone or anything like that. It is about protecting a representative sample across the whole of South Australia both in terms of biota and what it means.

Senator SIEWERT—What about the other two—comprehensive and adequate?

Mr Byron—Yes. They are all embellishments.

Senator SIEWERT—How do you know if you have met them if you do not set any targets or any bottom baseline?

Mr Byron—The way we are working to date is we have had probably about eight years of research done on it by a variety of people looking at what we have. We have looked at all the sites across South Australia in determining, if you needed to pick up areas to get your comprehensives set, what are the basics of comprehensiveness? How do you achieve representativeness? The tricky one comes down to the adequacy and that is what the scientific working group are on at the moment. They are things like how big does a zone need to be before it is effective or, if it is in a certain location, does it make a difference to what you need as opposed to another location? Also, within the zoning we look at issues like: is there redundancy? For example, if you declared, say, a sanctuary zone to protect a certain type of habitat, is there another one somewhere else protected in case this one gets wiped out by some unforeseen event? Because you do not want to lose everything you create a little bit of an insurance policy. That is

how you get something that is adequate. And the adequacy is one that the scientific group is working on at the moment.

At the time of going out to consultation last year, we released a technical report of about 1,200 pages summing up what we knew about the marine environment in South Australia. That is on our web site and available for everyone. So it has been quite a process.

Mr Leaman—It is strongly underpinned by science, rather than by some arbitrary figures that might be in favour at the time. There is a very strong underpinning of the science. Then the communication, the consultation comes after that and it is still around the science, as Grahame said. There is a big emphasis on that.

Senator SIEWERT—I want to change back to terrestrial, because I know we do not have much time. Some of our submissions, and I know the conservation movement is very strongly pushing it, relate to the next R, which is resilience, particularly as it relates to climate change. Firstly, do you think that is an issue; and secondly, if you do, how are you incorporating it in your planning?

Mr Leaman—Resilience is something that is right at the forefront of mind with the climate change issue. For a long time, a major part of our reserve establishment has been based around comprehensiveness, adequateness and representativeness, although there are some other things taken into account as well. There are some other strategic issues. But a couple of years ago now, the government adopted the Nature Links policy, and that is really an expression of something that recognises reserves—it is not the 1970s or the 1980s when you had collections of ‘postage stamp’ reserves and we stood on the border, looked inwards and tried to manage them. We now recognise very strongly that parks are part of a bigger landscape.

Parks will not survive as islands. They have to be managed as a part of a bigger landscape, and that is where the resilience comes in and so Nature Links is about establishing connectivity in some form or another. It is not necessarily vegetation corridors. It involves biological connectivity based on a series of core protected areas, highly protected areas, buffered and then joined by areas that are managed for conservation objectives, and they can be in addition to production objectives and everything else, but that then provides those linkages that we are trying to achieve. Three initially were identified as Nature Links corridors. One is called East Meets West. It is a fairly large area. It runs from the Eyre Peninsula right through to the Western Australian border and coincidentally there happens to be something going on at the Western Australian border, the Gondwana Link project, that it would join up with. That is a major one. We want that connectivity across there. It goes a fair way north as well. So we get north, south, east and west connectivity.

The other one is Cape Borda, which is at the western end of Kangaroo Island, to the Barossa, through the Encounter Marine Park and up the Fleurieu Peninsula. The third one is based on the Bounceback project, that Allan alluded to earlier, which has grown out of the Flinders Ranges to go out and out and take in pastoral land, and it has been extended to the Olary Ranges. The resilience is really important and one way of achieving that is through the connectivity across the landscape. That is the whole way. It is not just the way we manage our parks now, it is the approach that underpins the whole approach to biodiversity conservation in South Australia.

Mr Holmes—I just would not mind adding one thing there. It goes back to my earlier point about the importance of science and knowledge. We do not know a lot about our ecosystems. Climate change, temperature change and rainfall change are the big threats. Without a lot of knowledge you would have to say a large protected area system does give you a bit of insurance. How good the insurance is, we do not know. It would be good if it was north-south rather than east-west, because the gradients are going to be north-south. We do not have much altitude in this state, so you cannot rely on retreat up or down a mountain.

We presently have an American specialist in biodiversity and climate change, and she has been talking to us about change temperature profiles affecting bird movement and bird habitat. It is really quite frightening when you see the impacts of small temperature changes on breeding behaviour, distribution, migratory patterns et cetera. As I said, we do not know a lot. Probably the best insurance is to have a decent protected area system. You would have to argue that in arid Australia, in central Australia, we probably do not have a big enough one.

Senator SIEWERT—That was going to be my next question: what is the science saying about refugia for species and how is that being factored into reserve design?

Mr Holmes—As Greg said, we have moved beyond reserve design into the landscape. Eighty per cent of South Australia is in the pastoral zone and has relatively intact native vegetation. Pastoralism is a grazing system based on keeping intact the vegetative system.

Senator SIEWERT—In theory.

Mr Holmes—In large part it is. It has changed somewhat. Our parks in that area do not sit in a sea of agricultural land; they sit in a sea of pastoral land, which is still relatively intact. So the issue for us is: how do we engage pastoralists in ensuring that we have got these issues of connectivity, that we do not water all of that country, that there are refugia through that? That is the big challenge. One of the commitments this government has is to develop this concept of corridors. Greg has talked about three of those. Another one of those corridors is in the arid lands of South Australia. We do not know what form that will take yet, but it is a major challenge and it goes to the heart of dealing with these big issues of climate change, getting that right.

Senator SIEWERT—We heard yesterday that some of the various states' pastoral legislation is not easily useable in terms of nature conservation purposes. For example, in Western Australia, you are supposed to carry stock and we have had problems with mining companies destocking and then getting in trouble and having to put stock back. How flexible is the South Australian legislation?

Mr Holmes—Very flexible. We have a number of pastoral leases that are for conservation purposes. Pastoral acts across the country are not the most modern of legislation. Ours is relatively modern; it is an eighties piece of legislation and it is called the Pastoral Land Management and Conservation Act. So it is about conservation. The thing that has happened in South Australia over the last 20 years is that we have got a hold of pastoral management and it is much better than it was. Some would argue that it has still got some distance to go but it is vastly improved and there is great opportunity for conservation in those lands.

Senator MOORE—In your submission, you talk about funding needs and the limitations of the current model and management plans, which we have asked about in a number of other places. You say about 60 per cent of your current areas have management plans in 2006. What is the goal in terms of your expectation of moving that through? From the outside, you would say that management planning is the core aspect of effective park management. Why is there only 60 per cent in South Australia with current plans?

Mr Leaman—Firstly, there is an obligation under the act to prepare management plans, so that is obviously a driver. We believe that management plans are exactly what they say: they set out the strategies and the directions that we would like to take that reserve in. They are an opportunity for the public to have input into the management of that reserve and they make it very clear to everybody how it is to be managed.

Management planning around the Western world has followed a fairly similar model, that is quite big and heavy and burdensome. They become major resource documents and everything else. And the process of pulling those together and going through the consultation and everything else has been long, slow and expensive.

In the last two or three years, we have reviewed our processes to come up with a more streamlined approach that, in fact, increases the level of consultation to some extent and gets more involvement but it is a somewhat more rigorous and well-defined approach. We have raised the sort of strategies we are identifying. We are not getting down into the minute detail that was in some of those older plans. Through doing that and having a big focus on accelerating our reserve management planning process, we have actually increased it quite dramatically. There are a number of other things we have done, such as grouped reserves of similar types and everything else to move the process along. Our goal is to have them all covered.

Senator MOORE—That is the goal.

Mr Leaman—That is where we would like to be. We are working fairly quickly towards that. Whether we get there or not is another question because they should be reviewed as well at the end of it. We have purposely accelerated our process, dedicated more resources to it, and refined the process so that we can move more quickly towards that goal.

Senator MOORE—Is there a best practice on that, seeing that this is a requirement on the legislation for all people, all states who are in this particular national reserve plan are expected to have management plans? That is a component of the process. I would have thought the kinds of issues you have just raised would be shared by your counterparts in most states, exactly the same. I know in the Queensland evidence it was similar. Has there not been developed a best practice model so that the best way, the least intensive way of planning is now common practice?

Mr Leaman—There was best practice done some years ago. Bob can perhaps outline that a bit more.

Senator MOORE—A long history.

Mr Leaman—The thing with the best practice is that it was done some years ago, and I think there is better practice now that is available.

Senator MOORE—It evolves.

Mr Leaman—I think we would have to be at the forefront of some of that best practice around the country at this stage. There was some work done by the ANZECC task group.

Dr Inns—Some time ago ANZECC did develop a best practice approach to management, but it is now probably a bit outdated. And I think through the reserve system direction statement some of those issues will be relooked at in terms of how we approach management planning and probably bring it up to modern standards and approaches to how best to achieve it.

Mr Leaman—We share our approaches with the other states that we view. We think some of the other states' practice is excellent as well and we have quite a bit of communication between them to try and share ideas and work together to move forward.

Dr Inns—I suppose just the other thing to add to that is park management effectiveness measures, which has become a topic of increasing interest. Some states are taking a slightly different approach to what we are taking in South Australia. We are just in the process of developing some measures, targets and indicators and looking at how we can incorporate that through our management planning process, so really taking it down to the particular park management level, rather than a state of parks report, which some of the other states have taken.

Senator ADAMS—I was speaking about cooperation between the states and the territory. You mentioned the camels. Have you got a culling process working with Western Australia and the Territory to deal with the issue, anything happening there?

Mr Holmes—We have embarked on two, you might say small scale but we would probably say large scale culls of camels over this year and last year where we have culled somewhere between 1,000 and 1,500 camels each year. Again, a bit experimental: we are just testing methodology to see whether you can do it humanely and you can do it cost effectively. I think we have proven that you can do that. We have not done that into Western Australia, but we have done it into the Northern Territory in cooperation with the land-holders, not with the government. The next step for us now is to look at whether we can get some national cooperation on that. We have got a proven methodology. We have got a reasonable understanding of population levels in the Simpson Desert, but the problem is large scale. It is a much more significant problem in the Northern Territory and Western Australia than it is in South Australia, and that will get onto the national agenda through the NRM standing committee and ministerial council. You can see that will start to emerge.

Senator MOORE—Mr Holmes, could I ask something on funding. It would seem most unusual for a state government to come before a Senate inquiry and not mention something about funding.

Mr Holmes—The funding one is how long is a piece of string. When did I stop beating my wife? It is one of those difficult questions to answer.

Senator MOORE—There is also legislation for that.

CHAIR—Perhaps as part of that funding thing, one of the issues that continually arise, apart from just whether it is adequate, is options for funding from user pays, or non-government sector, and that type of thing.

Mr Holmes—That was one comment I was going to make, because I think that is really important. Again, South Australia, with 1.5 or 1.6 million people, has a small population base and there is not a lot of opportunity to derive income from visitors. We pull somewhere around \$8 million per year out of park users. We charge park entry; we recover costs for vehicle use. I do not think there is a great deal of opportunity there. I believe that commercial enterprise and sponsorship is problematic. I am not sure there is great opportunity there, so that is not where we are looking. For us, I believe there are two or three avenues. To go back to where I started, there are two or three avenues. One is if the Commonwealth is serious about a truly national reserve system, then we ought to look at a partnership involving states and Commonwealth in terms of managing a national reserve system.

Currently, the Commonwealth's contribution is largely in establishment or addition to the park system. There is no money put to park management apart from those NRM related experiments that I talked about. If we were serious about a truly national system, we would run it in a different way, and we would do that as a partnership. The other opportunity that I talked about was the work with Aboriginal communities, where we spent an extraordinary amount of money in Aboriginal communities to not a lot of effect. We could learn a great deal from our experimentation in the APY lands and turn that into real gain.

CHAIR—Just as a final encapsulating question, I noted at the start you outlined five points of the Commonwealth's potential role. Obviously we are looking at everything, but we are a committee of the Commonwealth parliament, of course, so the Commonwealth's role is of particular interest to us. I noted in your submission—and I think this flows on from what you were just saying—about the public reserve system, not dismissing the role of private, but a public reserve system as a core base, and a truly national reserve system with an emphasis on the word national I think you seemed to give there. The word that stuck out a couple of times in your submission on page 14 were where you talked about this document, the directions for the national reserve system needing to be underpinned by a renewed commitment to the NRS program and a renewed commitment to jurisdictions in developing the NRS. Would you expand a little bit on what you mean by renewed commitment?

Mr Holmes—One of the things that has happened in the last 10 years relates to the demise of the old ANZECC institution where we used to have an environment and conservation ministerial council, and now we have an NRM ministerial council and an environment and heritage ministerial council. What has happened is that nature conservation and national park management have also slipped off the agenda in large part. I am exaggerating that for effect, but you rarely see national park management discussed in those forums anymore, whereas once they were mainstream. Biodiversity conservation is still there, but it is second fiddle to issues around water management and sustainable farming. There is a real issue about bringing nature conservation and public land management back into the main focus. As much as anything, the message that we are trying to send is that these really are important aspects of land management

in this country. They are about who we are, where we have come from and what we are; we all relate to that yet we are walking away from it. That is what it is about.

CHAIR—Thank you very much for your time today and your submission. As you would be aware, we are not reporting until the end of November, so if there is further material you think would be useful to provide to us, please do so. As I think you are also aware, some of us are going to the Flinders Ranges tomorrow to have a look around and I am sure we will get more ideas out of that experience as well. Thank you in advance for your assistance with that.

Mr Holmes—Thank you for your time; it has been an engaging and interesting conversation. I appreciate it.

CHAIR—I am glad to hear it. Before we conclude today's proceedings, just a motion from Senator Adams receiving documents that have been tabled over the course of today from various people that we all agree to. That concludes today's proceedings. I thank all of the witnesses, and Hansard, Broadcasting and the secretariat.

Committee adjourned at 1.15 pm