T R A N S C R I P T

PUBLIC ACCOUNTS AND ESTIMATES COMMITTEE

Inquiry into Auditor-General's Report No. 202: Meeting Obligations to Protect Ramsar Wetlands (2016)

Melbourne—Monday, 2 December 2019

Members

Ms Lizzie Blandthorn—Chair
Mr Richard Riordan—Deputy Chair
Mr Sam Hibbins
Mr Gary Maas
Mr Danny O'Brien
Ms Pauline Richards
Mr Tim Richardson
Ms Ingrid Stitt
Ms Bridget Vallence

WITNESSES

Dr Mark Norman, Chief Conservation Scientist,

Mr Phil Pegler, Manager, Conservation Planning and Programs, and

Ms Kathryn Stanislawski, Statewide Lead, Ecological Water, Parks Victoria.

The CHAIR: We will declare the meeting back open at 1 o'clock. We have representatives from Parks Victoria here. Thank you for making the time. We have some formal notes that we are required to advise you of. This is the Public Accounts and Estimates Committee's Inquiry into the Victorian Auditor-General's Report No. 202: Meeting Obligations to Protect Ramsar Wetlands, tabled on 14 September 2016. All evidence taken by this Committee is protected by parliamentary privilege; therefore you are protected against any action for what you say here today, but if you go outside and repeat the same things, including on social media, those comments may not be protected by this privilege. You will be provided with a proof version of the transcript for you to check. Verified transcripts, PowerPoint presentations and handouts will be placed on the Committee's website as soon as possible. If there are any media present who were not here this morning, you are obviously welcome but we remind you of the following guidelines: cameras must remain focused only on the person speaking; operators must not pan the public gallery, the Committee or witnesses; and filming and recording must cease immediately at the completion of the hearing. Broadcasting or recording of this hearing by anyone other than the accredited media is not permitted. I advise that today's hearing is being broadcast live on the Parliament's website. Rebroadcast of the hearing is only permitted in accordance with Legislative Assembly standing order 234. I thank Parks Victoria and invite you to make a 15-minute submission. Thank you.

Dr NORMAN: Thank you, Chair, and thank you for inviting us here to speak today. I would like to introduce myself and our team. I am Mark Norman. I am the Chief Conservation Scientist at Parks Victoria, and I am also the Executive Director of our Environment and Science Division. I have got Phil Pegler, who is our Manager, Conservation Planning and Programs, and Kathryn Stanislawski, who is out Statewide Lead, Ecological Water, so our lead on water and Ramsar issues. What I would like to do is just walk you through our presentation and some of our response over the last four years, and then I am happy to talk further.

Visual presentation.

Dr NORMAN: I would just like to start by talking about our core business within Parks Victoria. Our primary mandate is around protection and conservation of natural values and cultural values. We recognise and support traditional owner knowledge and interests—and I would like to pay my respects to the elders of the Kulin nation, where we meet today—and also provide opportunities for the public and visitors to enjoy and be involved in the parks estate of around 4.1 million hectares. We directly manage, either fully or in partnership, 11 of the 12 Ramsar sites. The total area adds up to about 330 000 hectares of Ramsar sites in Victoria, and we are directly involved in about 250 000 of those hectares. Around the state in different ways we manage them with different partners—different site managers, traditional owners, DELWP, Melbourne Water and others.

If you will just give me a couple of minutes, I would just like to set the context of how different these sites are, how diverse these sites are, and just give a sense of some of the sorts of values we are trying to protect. I thought I would start with the Barmah Ramsar site up on the Murray River and just talk about the differences in these systems. These are temporarily flooded flood plain marshes. They are homes to endangered species such as the superb parrot and such as long-necked turtles, and they are part of the overflow of the Murray River system.

As we move further towards the west, we find in the Gunbower Ramsar site that we are dealing with different systems and different sorts of animals, like the grey-crowned babblers, which are critically endangered, and the Murray Darling carpet python, a subspecies that is also critically endangered. This is one that we found in the gutter of a house along the banks of the Gunbower Ramsar site.

Then as we move into Kerang we are starting to get into different sorts of wetlands, so some of these are more ephemeral, more temporary. Part of this wetland complex includes Bael Bael, which is an ephemeral water system that comes and goes. We are starting to deal with different sorts of animals and species—so a really

important site for Australian painted snipe—but also in places like Bael Bael as they dry out it is where burrowing frogs go underground for a couple of years and wait for the water. They fill themselves with water like a jelly bag, and then they will sit it out until the rain comes back. Recently rain in Bael Bael, about two years ago—thousands of these spadefoots came out of the mud to breed in that short little period and then got back in the mud again to wait it out again.

As we move to the Hattah-Kulkyne lake systems, these again are becoming more ephemeral. They come and go depending on water availability, and for these sites you really are on the edge of the Red Desert so you are in country where there are red kangaroos and thick-tailed geckos—you are getting into a very different system.

Then probably we get to our most ephemeral, Lake Albacutya. It was last full in 1975. It was partially full last in 1996, so the term 'wetland' is a sort of loose association with this concept. But it is absolutely critical, a bit like Lake Eyre: when the water does come, everything comes into the system. But even empty it is a critical site for species like the regent parrot, which nests and feeds in the area using the hollows in the river red gums around the sites. But also some of the animals blow in in the dust. So tadpole shrimp have a dust-stage egg, and they get blown in from desert areas. When the water comes they boom, coming out of that kind of spore phase, and that provides the food for all the migratory waterbirds that are coming into the system. That is sort of the dry corner of the state.

As we move down towards the coast this is our newest system—this is the Glenelg Estuary and Discovery Bay Ramsar site—and here we are dealing with almost clear-water aquifer springs coming up from deep under the earth. So you are dealing with all sorts of diversity of aquatic freshwater plants—things like lower Glenelg spiny crayfish, which only occur in this part of the world, but also some really rare other species. This is a strange dragonfly relative known as the ancient greenling, which is a living fossil insect that lives in these systems.

As we move into some of these sites we also have increasing human connection. You have heard this morning from Melbourne Water about the boundary between urban areas, wastewater management, this critical role for all sorts of species, but highly modified environments, so a very, very different sort of system. It is absolutely crucial to birds that are flying in from Siberia and all across the world that use this as their alternative summer. They avoid winter over there by flying to our summers. So it is critical habitat, and you have heard more about that, but absolutely phenomenal numbers of species there. We got 56 bird species in 2 hours one morning walking around with some bird experts. It is just a phenomenal site.

Then as we go east to Gippsland Lakes again we have got a mix of that kind of public interface but we are starting to get more of the saltwater influence in these systems and quite amazing geology, so things like these silt jetties, where the silt from the river running into the lake system has built up these long thin channels known as silt jetties, which are quite unique. They are the longest silt jetties in the Southern Hemisphere and of high significance. That carries the freshwater out into these systems. These are the sorts of sites where we have one of the two known healthy populations of the Burrunan dolphin, a recently described dolphin species, but also a critical site for all sorts of waterbirds, including the pelicans, which are of really high significance to the Gunaikurnai traditional owners—Borun, their totem, is based around pelicans.

Then our wettest and our saltiest, which is in Corner Inlet, is a wetland system that is almost 100 per cent marine or seawater. There are extensive seagrass meadows like these, and you are dealing with fully marine kind of creatures, like this wavy volute snail—and there are plenty of seahorses in Corner Inlet.

So the diversity of species we have got going from these dry lakes that only fill every 10 years to marine systems with seagrass communities with all sorts of complexities—sometimes it is people, sometimes it is invasive species—is enormous. I just wanted to couch that in the context that when we say, 'Why don't we put resources of equal value to each of the sites?', we are dealing with chalk and apples. It is really very different systems.

We were supplied with questions specifically by the Committee around progress made since the audit in 2016. I have put your question numbers in the corners of these just to show that we are addressing some of the questions we have been specifically asked. So under recommendation 1 there were two dot points of DELWP and PV and other parties working together, and I would have to say that it has been a great success for us in

terms of this improved governance. We are finding that our communication lines, our coordination, our prioritisation of actions and our processes for monitoring and reporting and being on the same page has been a real massive improvement for us. It is really clear around our responsibilities and our communication lines. So the coordinated partnership approach, that first dot point, has been very strong, and I think that is reflected in the second dot point, which is around strengthening the implementation of management plans.

We are in a much better place than we were at the time of the VAGO audit being released. So we have annual action plans, we prioritise on-ground actions—that is done in a very collaborative way—and we pool and seek and secure resources across all those agencies to be better and more effective in this space. Other things that Parks Victoria has sort of had as progression since then—I will not go through all of these and we will leave the presentation with you—the site coordinating committees have been a fantastic vehicle for us. I am sure you have gone through this before, but there is a hierarchy of site coordinators leading site managers. We are a site manager across the 11 sites, and our presence on those committees has been invaluable. The other thing that we have done within Parks Victoria is set up a dedicated and ongoing statewide ecological water role, which is Kathryn's role. She comes to us with more than a decade's experience in the CMA sector, and her skill base has been invaluable. She sits on all of those site coordinating committees, so she gets the statewide overview as well as supporting the regional site managers—and often in collaboration with the traditional owners.

I represent Parks Victoria on the interagency governance group. That again is a forum where we are all talking about the same things at the same time, and it really aids in all of those levels of coordination up the hierarchy. The other ones I will just pick out individually. We really do hold very strong and constructive traditional owner relationships around the state, and participation in both their joint management aspirations and giving them a seat at the table in these site coordinating committees as well has been another really constructive step. I think you are meeting with GLAWAC, the Gunaikurnai group, as part of this on maybe Wednesday or something at the Port of Sale.

The CHAIR: We were going to be; it will be at a later date, but at some point.

Dr NORMAN: Well, whenever it is. But again there are really strong relationships there The other thing that I would like to stress is—and I think it was mentioned this morning in the DELWP presentation—that many of the activities that we do even in the land adjacent to these Ramsar wetlands are very complementary, so if we are working on aquatic weeds in the creeks and rivers that run into these Ramsar wetlands, that has a benefit for those Ramsar wetlands. It is the same with pest control and invasive species management. So it is more than just what is within the footprint; we are finding that our activities are having benefits as well.

We received questions about our knowledge of the baseline conditions of sites and how we run the management planning across the different site systems. All of the baseline information is within these ecological character description documents, and that has been a new process and a firming up of how we characterise what is special about these sites. And then when it goes to individual sites, four of them are within standalone management plans and the remainder are within regional water strategies, so they fit into a broader management context. Internally within Parks Victoria we also have our own conservation action plans where we divide the state into 18 landscapes, and we are developing these plans. We have just recently finished the river red gum one, which includes four Ramsar sites within it. It outlines the assets, the threats, the actions and how we improve our managements effectiveness through adaptive managements processes. Then we have strategic action plans, and we have one at the moment for Barmah, which I will talk about in a minute as a special case.

The site coordinating committees develop annual action plans in collaboration with all of the members, and we are using the new monitoring, evaluation, reporting and improvement program logic that has been developed by DELWP and partners so that we really have a focus on the outcomes. I will walk you through an example in a minute. It allows us to set priority actions and whose responsibility it is for those actions, and we use a range of State, Commonwealth and internal recurrent funding as well as support from non-government organisation partners to deliver these programs. That might include Greening Australia doing habitat revegetation, and they are doing the weed work and the other things, so there are lots of forms of that resourcing. We really do deliver diverse on-ground programs, and I will share a couple examples in a minute.

So this mess on the left that you do not have to read shows the complexity of how we ensure we go from—this is the program logic—our broad objectives and our long-term outcomes and how that steps down in a hierarchy into intermediate outcomes, what we are doing as immediate activities and what we have done as foundation activities. This is where we go from sound knowledge, identifying what needs to be done, are we getting some progress in the right direction, is it heading us towards our long-term outcomes and are we really meeting our total objectives. We do this for each of the 11 sites, and so this informs things like, for Western Port as an example, on-ground delivery to control priority pests. In the last year this has included aerial shooting of feral pigs and goats; a continued feral cat control program on French Island—we have taken 1100 feral cats off French Island in the last decade; controlling boxthorn around rookeries; fox baiting; gorse control; and getting the weeds that have come into some of these systems under control and eradicating them from places like Quail Island. But this happens around the state at all the Ramsar sites in very different ways. We are doing surveillance and trapping and ground shooting and aerial shooting and baiting and fencing and ripping.

I have got 'hammers' at the bottom there, because we have got circumstances in Corner Inlet, in the middle of seagrass communities that are endangered, where the warmer waters from climate change have made the sea urchins explode. They have cleared about three MCGs out of the seagrass meadows by forming banks of sea urchins this high—the little spiky creatures on the left—and they are eating their way through the seagrass. It is like the warmer water has set off super-reproduction. We have killed 100 000 sea urchins with hammers. We have had divers with hammers. As soon as the shell is cracked they die, and it has been the only way to turn around the seagrass decline—and the seagrass is starting to come back. So we are intervening at critical points, often in emergency circumstances, to try and turn around some of these issues. This is where our prioritisation process occurs.

It also occurs for overabundant native animals. One of the issues of predators coming out of the north-west of the state at places like Hattah-Kulkyne is that the kangaroos have boomed in numbers. We shoot around 15 000 kangaroos a year in north-west Victoria to allow the callitris pine and the bull oak and the native vegetation to recover. It is as much about controlling our native animals as it is the introduced, invasive ones. We do the same for invasive plant control, and that is across spraying, burning, mulching, manual removal and aerial use of helicopters for coastal and waterway weeds. All of this is towards protecting threatened ecosystems, communities and habitats. Some of the species I talked about before are a primary focus of what we are trying to do.

The new system and the new framework allows us to be much more coordinated in monitoring and having the sorts of destinations that this monitoring information can go to. This is the new Ramsar management system. The opportunity to input our content means it is all feeding into those site coordinating committees, and they are having the best information at their fingertips. We facilitate lots of monitoring on our estate by partners, but we also lead things like wader group surveys or remote camera surveys or measuring the length of seagrass in the bottom-left corner for Corner Inlet. We are doing lots of these things from a mix of agencies and volunteers and non-government organisations.

We have also internally improved our environmental information system, so we are documenting more accurately the areas treated and the outcomes in those systems. Overall there is a greater data input going into the system that is being fuelled by the whole-of-government approach to this.

Another question was around reporting potential character change. We have a requirement to directly report any indication of potential change to site coordination committees, and those committees then pull together the information to see if that is significant enough to make an ecosystem change. We might have a really low number of a particular bird species one year but it turns out that they are actually struggling in the Yellow Sea in the Northern Hemisphere, so it is less likely to be caused by our issues. There could be other factors. But when things come together, like they do at places like Barmah or the other two places listed there, it gets close to that level of acceptable change being exceeded, and that requires formal notification up the system. The last rolling review recognised three locations in this circumstance. Western District Lakes had less water input, and they have become more saline. That is an issue of real concern there. In Gippsland Lakes higher sea levels and less freshwater coming into the system—and you will hear about this when you do your site visit—are changing the salinity, and that is starting to threaten some of those more freshwater marsh systems like Sale Common, Heart Morass and Dowd Morass.

And then in Barmah it is a combination of invasive species and ecological water control which is really challenging the character of that system. Moira grass, the super grass that grows there, is the really core component of it, and the extent of that has gone from over 4000 hectares in the 1930s to 182 hectares recently—and it is predicted to be gone completely by 2026 if we do not intervene. We have worked very closely with DELWP and the Goulburn Broken CMA and developed this plan. We have submitted the final version to the Government with our recommendations for more active intervention in water management, significant control of feral horses within the Barmah National Park, continued control of other introduced animals and then work on invasive plant species. We have gone through an extensive public consultation process, and the results of the consultation have been taken into account in the final plan.

I will just finish with a couple of images. I would have to say we are in very challenging times. We are seeing more and more increasing climate change impacts. Drought and fires across our landscape are a huge issue. We have more and more increased need for emergency interventions, and the one on the right is a good example. The water levels got so low in Sale Common that the invasive European carp were spluttering around in very shallow areas of water. If they had all died, it would have been an anoxic blackwater event that killed off everything right down the system. So we spent $30 000 to electrofish out 30 tonnes of European carp, live, which were caught out of the system using zappers in the water, to be transported off to Victorian Fisheries Authority for experimentation around the European carp virus. This was something where if we had not intervened it would have taken out the invertebrates, the frogs the birds, the turtles—everything. By getting in there it stopped it from being a blackwater event, and its oxygen levels have gone up again. So we do get stuck in these situations. I put 'tricky creatures' at the bottom because things like feral cats, deer and foxes—the animals we are dealing with and the complexities of those are just huge. They are really challenging times, as well as the direct climate change ones.

So in summary I think the coordination is greatly improved. There is very much an outcome focus. We are setting priority actions, and we are putting our collective pool of resources into meeting those priority actions. The new information system, the Ramsar management system, has been great, and we are getting better feedback on support for our decision-making process and our management approaches and success. Thank you.

The CHAIR: Excellent. Thank you so much. It is an extremely comprehensive presentation—much appreciated. In part you probably answered my first question, but I think a lot of what you describe in your presentation, some of that probably would have naturally evolved irrespective of the VAGO report. Are there certain things that you have changed in your management practices that you attribute specifically to the VAGO recommendations, as opposed to things that might have otherwise evolved?

Dr NORMAN: I think the specific ones from VAGO have been around our coordination and communication. So an example might be that in the past an agency might be releasing water and we are not communicating with them to do the immediate pest and weed work that needs to follow that water release, so we may be doing them at the wrong times and then finding there are worse outcomes. So the biggest thing has been all of us on the same page at the same time. I think that was the number one recommendation, and we are seeing material examples of that. I am not sure if, Kathryn, you have got an example of something where that has been materially better?

Ms STANISLAWSKI: That example is great, in terms of the environmental watering one. It just means that we are much more coordinated in our efforts, and I think the on-ground staff that are contributing their on-ground knowledge are also feeling that the work that they are doing is validated and it is clear that it leads up to the outcomes that we are looking for at each site as well. CMAs, who are the site coordinators, work cross-tenure as well. So it pulls all of the different elements together to make sure that we know that what we are doing actually is contributing to the outcomes that we are looking for at the Ramsar sites.

Dr NORMAN: And the other angle would be around monitoring in that in the past I think we were gathering the right information but it was not getting to the right places, and now we have got this platform to bring that together. It means the site coordinating committees have that in front of them in the way they need it, so that is good.

Mr RIORDAN: Just listening today, it seems there are three key bodies you have got: usually a catchment management authority, yourselves and DELWP. Take, for example, the Western District Lakes area, where

Corangamite catchment has done a lot of work in that area. What is the relationship then that Parks play in the management of that and then where does it move to DELWP? Can you sort of step us through what role the on-ground people have and what they do and then—

Dr NORMAN: Where the CMA fits in and where DELWP fits in?

Mr RIORDAN: Yes, where you fit in and then where DELWP fit in? I am not quite clear yet on how the three work with all this information sharing.

Ms STANISLAWSKI: The site coordination committee—so there is one for each site—that is chaired by the site coordinator, which is the CMA. Then we are the site manager, so we participate. There is me, who has got an overall, overarching statewide kind of role, but then there is also our on-ground staff that participate in that. There will also be other people, from different land managers or maybe water authorities, that all sit together. We all then contribute to the development of the annual action plans, and that is how we then prioritise the works that we are going to do. There will be some things that are more appropriate for a CMA to do and some things that are more appropriate for us to do. So our core business would be generally pest plant and animal management, for example. We will take on those actions and agree to doing those and go off and do them, or together we will continue to look for fund sources to implement other actions on the ground that need to be done. Then there is also DELWP overseeing that process. So, Maegan Walker, who is behind me today, also comes along to those meetings as the DELWP representative. Then that coordinates that process up through the IAGG, which is the interagency governance group, and then I can report through to our representatives within there as well.

Mr RIORDAN: And the purpose of all the groups—using the Western Districts Lakes example again, the catchment management authority is responsible for the water element of it. Is that right? You are responsible for the plants and weed and pest side. Is that sort of what people—

Ms STANISLAWSKI: There is not that strict delineation in terms of the Ramsar site management. There is a separate role that CMAs play in terms of environmental water manager—they are the environmental water manager—and that is an element that comes into the management of the Ramsar sites. But they are performing that coordinating role for each site as well, which will pull together the water management; pest, plant, animal; revegetation and all the other things.

Dr NORMAN: And at somewhere like Gunbower, which is half DELWP estate and half PV estate, the CMA is spanning both in terms of responsibilities. It could be the CMA developing fox control for the turtles but DELWP is aiding in another part of control on their estate, and we are doing the invasive species stuff on our estate. So it varies site by site, depending on—

Ms STANISLAWSKI: On the land tenure.

Mr RIORDAN: With the new sort of structure that you have since the Auditor-General's report, you would not now have a situation where catchment management may let more water in and, as you pointed out, that then could potentially have weed and pest issues. So you will do it all together?

Ms STANISLAWSKI: We do it all together, but there is also a separate process that the CMAs follow in terms of their environmental water planning. They would engage with Parks Victoria on where that water is going to be delivered to our estate so that we can contribute in that way in terms of the planning. It means that then we can go ahead and go, 'Okay, well, we'll do our weed control after the watering event's finished'. We can also provide our expertise because we have got staff on-ground who know these sites really, really well, and so they can provide that information to the CMAs to help inform the decisions that they are making about the health of the sites and what is going on, the fact that there might be a recreational thing that is happening that we would like to coordinate with as well, and all that sort of stuff.

Ms STITT: Just following on from Richard's questions, how important was creating that coordinating water role in strengthening your management practices?

Dr NORMAN: I can speak on behalf of Kathryn because she cannot say 'I have done great'.

Ms STITT: Yes, that might be easier.

Dr NORMAN: Historically we had patchy funding for that water role, so we had short-term contracts with people who came and went, and it never gave us the consistency of a full-time dedicated person across that. But there is also the fact that Kathryn has had so much time within the CMA sector, she knows most of the CMA network but also knows how they work. So it has been a critical bridge for us leaning into those partners and then leaning back towards us. It has been really great.

Ms STITT: Specifically in terms of the VAGO recommendations, has that been a key factor do you think—one of them?

Dr NORMAN: Well, I think now we have a dedicated governance person and statewide oversight person that is a 100 per cent on that—that is their 100 per cent job—that slots well into that and they can be right across all the site coordinating committees across the state. So it is a key governance role within our structure to match the new broader governance.

Ms STANISLAWSKI: But there are also on-ground staff that know the sites intimately. They live in those patches and they work in those patches as well, and so I can help work with them to understand wetland management principles better and those sorts of things too.

Mr HIBBINS: I just want to ask you about funding. Obviously in the VAGO report there was an issue where Parks Victoria was not able to identify the resources required to manage its 10 Ramsar sites. Do you have that information now?

Dr NORMAN: The new process that has the structure of the site coordinating committees and makes the annual action plan identifies the priorities. It is very difficult to put an exact figure on systems that are so variable time wise. The cost of fixing a site is something we cannot put a rigid price on. What we do do is we set the priorities and then we seek as much funding as possible to meet those objectives. So it is very difficult to put a price on how you would protect Hattah Lakes not knowing what the water regimes were or not knowing what is happening with invasive species. I think we are in a better place for identifying our priority actions and what we prioritise the funds towards and what our funding needs are to build those priority lists, and then we seek as much funding as we can find through multiple sources.

The CHAIR: Sorry to interrupt, but broadcasting have lost their sound, so we just need to adjourn for 10 minutes while we try and rectify the sound. We are not exactly sure yet how long we have lost it for, but I just been advised that the connection is gone. Our apologies; if we could just adjourn the meeting for 10 minutes, hopefully, we will fix it in the meantime. Apologies for the short interruption, but we are back. We will pick up where we left off. Hansard, I understand, did not miss any of that, so we do not need to repeat ourselves. Sam, you had a supplementary question.

Mr HIBBINS: I did. Just in terms of the funding, I wonder if you would be able to take this on notice and provide the Committee with a breakdown of the funding allocated towards the wetlands that you manage in terms of the specific programs, the source of funding and the time line of funding. I guess the point that I am trying to make is what was highlighted in the Auditor-General's report is the difficulty of relying on grant funding as opposed to recurrent funding and how do you then manage, particularly if you are looking at outcomes-based rather than inputs or specific programs—I am just wondering if you could provide that information to the Committee?

Dr NORMAN: I can give you an assurance to do that. I would couch it by saying that we have allocated $3.3 million since the audit report, but that is just the component that PV directly manages. So we are doing it in the context of other funding streams that CMAs bring to it, that DELWP brings to it and NGOs as resources, like I talked about before with Greening Australia. So the total figure calculation—I can give you a breakdown of what PV's sources are but cannot do that for the other agencies with my sources.

Mr HIBBINS: Okay. Sure.

Ms RICHARDS: You did speak before in the presentation about your relationship with traditional owners, and I am just wondering if you can give me a little bit more detail about how you do work collaboratively with the traditional owners in the Ramsar sites that you are at?

Dr NORMAN: I think I could probably give three examples. We have got 10 joint-managed parks in Gippsland that we jointly manage with the Gunaikurnai land and waters corporation, and we have staff in our employ that are Gunaikurnai staff and then they have their own ranger-uniformed Gunaikurnai staff, and we are working together on things like habitat restoration, pig control, weed control and other projects, but that is done through a joint management lens of those parks where we do joint manage.

There are other models. So at Barmah we have good working relationships with the Yorta Yorta Nation as they are developing their joint management plan aspirations, and they have just gone through a public engagement process for that. Then in the west, Gunditjmara mainly manage their lands through Indigenous-protected areas that they are the sole managers of. We do not joint manage, but we are close partners. We collaborate on things like koala fertility control to stop them eating out forests in some of the catchments, but they also have representatives on our site coordinating committees that we are on very good relations with.

So there are different models for different places, but it is very constructive and I think the strongest strengths are where we have had traditional owner staff, Aboriginal staff of our own that are the link to community as well. So it is not a Ramsar example, but in fire management one of our senior fire coordinators is a Dja Dja Wurrung elder. He has done 10 years of fire management for us as a park manager, but he is now a critical bridge across to conversations about use of cultural fire in very managed and controlled settings. So we have got the equivalent with regional staff in Gippsland that have some of that skill base. It is still early days, and some of it is about the development of those corporations and those communities, but we are doing it together in lots of shared conversations, so it is infinitely better than five years ago—10 years ago—in this space. It is a very positive relationship.

Mr D O'BRIEN: I have got some specific questions, particularly starting with Barmah. Have you done any assessments—I guess this is going to the ecological character issue, with respect to Ramsar—of the impact of the Barmah Choke, with very high flows pretty much constantly and whether that has had any issues with erosion? Has there been any evidence of bank collapse in that area?

Dr NORMAN: I am aware there are reports of bank collapse. We do not manage the water or the timing of the water or the scale of the release of the water. That is a mix of Commonwealth and Victorian State Government. The timing of it has been historically at the wrong times for the critical moira grass component of the Ramsar wetlands. The first chapter of our strategic action plan, which I have got a copy of here, is about the timing of those water releases and trying to make it suitable for the moira grass recovery. I do not have anything specifically on bank collapse or the impacts of the water flow—as in the CMA and DELWP manage that water side of things; we are looking at the health of the ecosystem, the flood plain marshes and associated plants and animals.

Mr D O'BRIEN: Which is a nice segue to my next question, which may be the same answer. Again, due to the way the river has to be run now, there is a lot of water going out into the Barmah Forest regularly. Has that caused issues with river red gums in particular being flooded and dying?

Dr NORMAN: No. The river red gums are not dying. There are sometimes issues with river red gum sapling encroachment, because after the water events—

Mr D O'BRIEN: So many come up.

Dr NORMAN: then they come up in thickets, but we have got active collaborations with the CMA and the Yorta Yorta workforce on sapling removal in those critical areas to stop the shade impacts on some of those flood plain marshes. The timing this year, the earlier release this year, was actually the right time to support the moira grass, and some fenced enclosures that we have worked with the CMA to build that keep the horses out of those areas have had good recovery of the moira grass and a lot of the aquatic life in that water system as well. So when it is at the right time, it is what the system needs. We have to work better with partners to make

sure that timing is the right time of year and not the wrong time of year when it floods and drowns some of those critical plants.

Mr D O'BRIEN: On the Kerang lakes, I believe it is the third lake in the Reedy Lake system that has gone back to a more natural wetting and drying cycle. Is there a proposal for any more of the Kerang lakes to return to that?

Ms STANISLAWSKI: That is a project that is being managed through the Goulburn-Murray Water Connections process, and we are involved in that where it relates to our estate; Third Reedy Lake is not part of our estate.

Mr D O'BRIEN: Is it part of the Ramsar site, though?

Ms STANISLAWSKI: It is part of the Ramsar site.

Mr D O'BRIEN: Okay. Do you guys have a view, again in that area—and it affects Hattah-Kulkyne and Gunbower as well to some degree; I am not sure whether they are necessarily part of Ramsar sites—on where, with irrigation historically over the last 100 years, a lot more water in channels, on-farm storages and other storages has actually provided habitat? And with the sell-off of a lot of that water from private ownership to the Commonwealth Environmental Water Holder, has there been any work done on what the impacts of that have been in terms of breeding cycles of waterbirds and the like?

Dr NORMAN: I would put a short statement in, saying the nature of the water storages in agricultural systems are not necessarily the right sort of habitat, with the right shallow boundaries and the vegetation, for nesting birds, and for frogs and turtles and native fish species. So I am not sure that they are directly comparable, but you have probably got a better perspective than I do.

Mr D O'BRIEN: I know they are not necessarily ideal, but I know from personal experience that they are there; they are in channels, they are in dams, taking advantage of them. There are very, very adaptable—a lot of species, not necessarily the—

Dr NORMAN: Unfortunately for us, European carp love it.

Mr D O'BRIEN: Which I was going to come to as well.

Ms STANISLAWSKI: I guess I would say that where there is a proposal to change the watering regime from what it currently is to something else, there would be a range of processes that sit behind that, like EES and that sort of stuff, and that that would be done routinely as part of that process for that change at those sites.

Mr D O'BRIEN: That is a nice segue again to Lake Cullen. I think it got a big drink this year—9500 megs—which in the middle of the drought was a little bit unusual. What was the rationale for that, given that in a natural cycle it would be dry at this time anyway?

Dr NORMAN: Again, it is outside Parks Victoria's remit.

Ms STANISLAWSKI: Yes, we are not the environmental water manager. We would contribute to the process, but the prioritisation of where water will go in the landscape in any one year is done through the CMA's seasonal water planning process. We contribute to that. Then they provide that seasonal watering proposal to the Victorian Environmental Water Holder, and then they divvy out the water according to how much is available and what the priorities are across the state.

Mr D O'BRIEN: Okay. If I could get one more in, Chair.

The CHAIR: One more.

Mr D O'BRIEN: Just on carp, you mentioned carp, but I was surprised that it was really only the picture in your presentation. In terms of, again, that ecological character change, how high is it on the list of threats to particularly the Gippsland Lakes but probably quite a lot of them?

Dr NORMAN: I think it is a huge threat, but it is again in that tricky creatures category, because we have very limited tools to try and tackle their impact. There has been a lot of talk about European carp virus. One of the issues there is that the estimate is there are 250 000 to 2 million tonnes of European carp in eastern and south-eastern Australia. Charlie Carp, the compost makers, use 60 tonnes a year. When the fish die, they sink to the bottom. We are dealing with a potentially catastrophic blackwater event if the virus is successful, even though we totally agree that there is a need to control. But we are in this damned if we do, damned if we don't kind of context with European carp, and it is one of those really intractable ones. There is some other work with daughter genes, which make them sterile, so that if we can get them fed into the population then they just gradually breed themselves out of existence.

Mr D O'BRIEN: It is a slower process, yes.

Dr NORMAN: It is like something we are doing with foxes—we are investigating a viagra drug that causes spontaneous abortions in foxes. They only have a breeding season of six weeks, so if you were able to aerial bait viagra onto these areas in that six weeks, they would—

Mr RIORDAN: We would have every lonely man in the country up there!

Dr NORMAN: Not into urban areas or into their food and water supplies—I was thinking Wilsons Prom more than downtown Melbourne. But there are tools like that that are worth investigating while we have still got this responsibility of how this could go wrong in terms of a biological control—good intent, difficult outcome—sort of situation. But it is hard to sell.

Mr D O'BRIEN: It is probably a question for DELWP, who I missed this morning, but I think the picture you had there was probably Ingram Wild Caught Fisheries. It is their boat for the carp?

Dr NORMAN: At Sale Commons?

Mr D O'BRIEN: Yes.

Dr NORMAN: I think we contracted them. Were they the ones? I cannot remember the name of the company.

Mr D O'BRIEN: It looked like their gear. I would say so—

Dr NORMAN: But the cleverness of electrofishing out live rather than waiting for them to die and killing everything else as well—it was one of those where we needed emergency funds and we found them at the right times.

Mr D O'BRIEN: It is a tricky issue. From talking to them, they caught in nets, I think—it is some huge figure—30 tonnes or something of carp at the mouth of the Latrobe, right at Heart and Dowd morasses, but they had to put them back because they could not dump them.

Dr NORMAN: Because they are an environmental—

Mr D O'BRIEN: Hazard.

Dr NORMAN: Yes. I know there was one fishing competition in South Australia where they caught 19 000 European carp, trying to get the biggest ones, in a weekend. But we will not get distracted on European carp.

Mr RICHARDSON: Thank you very much for your presentation. It was like skipping through *Planet Earth*, which was beautiful for us. I just wanted to ask about how the Ramsar audit has informed Parks Victoria's management of other wetlands. In taking the practice of the interagency connection as well, how does that flow through from the standard management practice for the other wetlands that Parks Victoria manages across Victoria?

Dr NORMAN: I like doing the little intros and leaving the detail to somebody else! I think there is something in that the practices that we are adopting for Ramsar wetlands and that structure are informing our

conservation action plans that cover the whole landscape, so where we have other wetlands, some of the lessons are applying to those, even though they are not officially Ramsar sites. In some circumstances they are actually lost wetlands that we are trying to redirect water back into. Tang Tang Swamp is not in a Ramsar site, is it?

Ms STANISLAWSKI: No, Tang Tang is not in a Ramsar.

Dr NORMAN: So that might be a good example.

Ms STANISLAWSKI: We work with CMAs for a range of things, and I think some of the principles that we are doing at Ramsar sites in terms of having more regular meetings and making sure we are all on the same page about how we are managing a site are being adopted. Tang Tang is a really good example. We are working with traditional owners, we are working with CMAs to restore a water regime and we are working out how we can do better pest plant and animal control at that site. There is a range of other wetlands across the state where we are trying to do all those things as well.

Dr NORMAN: So Tang Tang is a relatively small site that has very high cultural significance for Dja Dja Wurrung, and redirecting water back into it to bring some life and habitat restoration has both cultural significance and natural values. They are good case studies of that sort of collaboration.

Ms STANISLAWSKI: There is a range of different works that you can do at different wetlands. In some wetlands you might deliver environmental water to improve the water regime. Other wetlands have been historically drained so you might reinstate a flooding regime by reinstating a sill level so that it does not spill so quickly. You have got to work with surrounding landholders, so we need to work with CMAs and partner agencies to do that as well.

The CHAIR: Okay, we have extended 5 minutes, but to keep us on time I will just give Richard one final question.

Mr RIORDAN: Hopefully it is a quick one. Both Sam and I have asked this question in a couple of different ways; it is about the financial resourcing and budgeting for the 12 wetlands. It has been made clear from both your presentation and previous ones that it is hard to predict forward—we do not know how much water is going to cost or whatever. But has someone been collating it in the past so that we have got historical ongoing management costs for these 12 sites? If we look at year 1, year 2, year 3, whatever, and the actual dollars that the various agencies have pulled together to manage those sites, is anyone doing that sort of work so that we can actually get a picture of whether we are hitting the targets or we are going to have to call on Government to find more resources?

Dr NORMAN: We can certainly break down by year what we have directed to Ramsar over the last four years since the audit—

Mr RIORDAN: Not just your organisation, but the other stakeholders as well. Is someone aggregating that so we get a sense of what this commitment to Ramsar is costing us or needs to cost us?

Dr NORMAN: Correct me if I am wrong, but my feeling is that the site coordinating committees are getting a sense of what it should cost to address their action list as part of the development of the pitches we put for funding to State Government, NGOs and others.

Ms STANISLAWSKI: Yes. We have looked back over the last couple of years with all the combined funding to have a bit of an idea of how much has been allocated, but I think now that we have got this annual action planning process in place we have got a really good idea of then what we are spending and we will be able—

Mr RIORDAN: By site?

Ms STANISLAWSKI: Yes, by site. The annual action plan kind of looks like this is the objective for the Ramsar site, these are all the actions that we need to do to address it and that is informed by that MERI plan, which is that thing that went up. These are the things that we have got enough money to do, these are the things

that we are going to look for funding to do, these are the less important things but if funding comes up as an opportunity that meets those criteria, we will do those things as well.

Dr NORMAN: And that is by site.

Ms STANISLAWSKI: That is by site, so that does give us around about. But it is more on a year by year basis rather than forward projecting for the next 10 years.

The CHAIR: Okay, that brings us to time. Thank you very much to Parks Victoria for appearing here today. You will be provided with a proof version of the Hansard transcript to verify, and that will come to you shortly. Thank you for your time. We appreciate it.

Witnesses withdrew.