

# TRANSCRIPT

## 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 Nerina Di Lorenzo, Executive General Manager, Service Delivery,

Mr John Woodland, Manager, Regional Services (South-East),

Mr Aaron Zanatta, Team Leader, Liveability and Systems Integration, Western Treatment Plant, and

Dr William Steele, Principal Biodiversity Scientist, Integrated Planning, Melbourne Water.

**The CHAIR:** Thank you very much to Melbourne Water for appearing before our Inquiry today. Thank you for coming along today. We have a formal spiel in which we are required to advise you of a few things, so if you bear with us. We welcome you to 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 media are present, we welcome you to the hearing today. 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 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. Thank you to Melbourne Water, and I invite you to make a 15-minute opening statement to the Committee.

**Dr Di LORENZO:** Good morning. Thank you, Chair, and thank you, Committee, for inviting Melbourne Water to speak to you today. My name is Nerina Di Lorenzo. I am the Executive General Manager of Service Delivery at Melbourne Water. Joining me today from Melbourne Water we have Mr John Woodland, who is Manager, Regional Services, in the south-east region, which encompasses the Edithvale-Seaford site. I have Mr Aaron Zanatta, Team Leader at the Western Treatment Plant, which obviously encompasses the Western Treatment Plant site, and I have Dr William Steele, who is our Principal Biodiversity Scientist, here with us today. I would like to start by acknowledging the traditional owners of the land on which we meet today, the Wurundjeri people of the Kulin nation, and pay my respect to their elders past and present.

Today in this statement I am going to set out our role, which you will see has a narrower focus than perhaps what you have spoken about so far, our management approach, our funding arrangements and our progress on the 2016 VAGO audit findings.

### Visual presentation.

**Dr Di LORENZO:** I will set out our responsibilities in the context of Ramsar wetlands. If you refer to the slide, there are 66 Ramsar wetlands in Australia, 11 in Victoria, and Melbourne Water has an involvement in two Ramsar wetlands, so within that context. The two that Melbourne Water has an involvement in are the Port Phillip Bay and Bellarine Peninsula Ramsar site and also the Edithvale-Seaford Wetlands. Our role is different for those sites. For the Port Phillip and Bellarine Peninsula Ramsar site, the Corangamite CMA is the site coordinator, and Melbourne Water is the site manager of the Western Treatment Plant, which is a component of the site. I will illustrate that in a second. For the Edithvale-Seaford Wetlands, Melbourne Water is both site coordinator and manager. As you can see, management of these sites involves strong collaboration between multiple agencies. We think the VAGO report was important in helping to drive that increased collaboration and statewide framework, so we found that to be a positive outcome.

I will expand a little further now on the two sites. The Port Phillip western shoreline and Bellarine Peninsula Ramsar site is encompassed in this map and has six subsites within it, one of which is the Werribee-Avalon site, which includes WTP, which is the acronym for Western Treatment Plant, which you can see here. This is the site that Melbourne Water has direct responsibility as the site manager for, so it is a subset of that broader site

arrangement. It is one of Victoria's internationally acclaimed Ramsar-listed wetlands, and with regard to the Ramsar obligations we coordinate back with the Corangamite CMA and the site manager, basically, for the Western Treatment Plant. This is a very large site, with an area of 10 500 hectares, 179 constructed wetlands encompassing 700 hectares, and some natural wetlands. The site treats 50 per cent of Melbourne's sewerage and rivals Kakadu in terms of birdlife, diversity and abundance. It started operation in 1897, treating Melbourne's sewerage through land and grass filtration. As Melbourne's population grew, treatment capacity was increased through the construction of wetlands in the 1930s through to the 1990s. Today the plant treats about half of Melbourne's sewerage and produces 40 billion litres of high-quality recycled water annually.

As I have mentioned a few times, it rivals Kakadu in terms of abundance and diversity of birdlife. The plant's lagoons, waterways, natural wetlands, shelterbelts, grasslands and coastline provide an ideal habitat for birds, with a permanent and nutrient-rich water supply that is associated with operating the plant. It provides plenty of food and very little interference from humans because it is quite shielded away from encroachment. It is also one of the most popular sites for birdwatching in Victoria, with over 300 species of birds recorded there from south-eastern Australia and east Asia. One hundred thousand birds at any one time have been sighted at that location, so it is really significant. Fifty per cent of Victoria's waterfowl are on site, particularly during drought conditions, so this is really important because in years of low rainfall the site can support more than half of Victoria's summer waterfowl, making it a really important drought refuge. A third of Australia's birds are sighted on that site—pretty amazing.

If I move across to the Edithvale-Seaford Wetlands, these wetlands are located in south-east Melbourne and are the largest natural wetland of their type for the Port Phillip and Western Port basins. It is made up of two sites: the Edithvale wetlands, up here, comprising a land area of 101 hectares, and the Seaford wetlands, here, comprising 159 hectares. Melbourne Water is the site coordinator across both of those sites, and Melbourne Water is also responsible for managing the Edithvale wetlands and manages the Seaford wetlands together with Frankston council—however, as the primary site manager. We are helped by the Edithvale-Seaford Wetlands Community Liaison Committee and the Friends of Edithvale Seaford Wetlands, an active community group.

The wetlands are all that remains of Carrum Carrum Swamp, which once covered more than 5000 hectares between Frankston and Mordialloc. Prior to European settlement the swamp was used extensively for food gathering by local Aboriginal people. The swamp supported many animals and plants, including the brolga and the magpie goose, which are both now extinct in the area. During the second half of the 19th century the swamp was progressively drained for farming and flood protection purposes, and in 1879 the Patterson River, which is an artificial waterway, was cut through the swamp to the coast as part of the drainage program. The remaining wetlands were retained at that time to provide further flood protection.

A little more on the site: the wetlands attract over 190 different bird species. As many as 7000 birds make the Edithvale-Seaford Wetlands their home at any one time. This includes 38 migratory species, protected under international agreements and Australian legislation. An important migratory species at the wetlands is the sharp-tailed sandpiper, and the wetlands regularly support more than 1 per cent of the global population of this species. At Edithvale a state-of-the-art discovery centre and iconic bird hide were built in 2011, which allows visitors and school groups to get up close to the birdlife and learn how the wetlands work as well as their importance in history. Melbourne Water also looks forward to hosting the Committee at the discovery centre tomorrow. We are really looking forward to taking you around.

I will move on to our management approach. As you have ascertained, they are very special sites. We take our Ramsar obligations really seriously, and we manage the sites in accordance with national and state obligations. On the left of the slide, it takes you through, I guess, the cascade from legislation through to plans. I will illustrate that a little further. At the national level the *Environmental Protection and Biodiversity Conservation Act 1999* guides the management of Ramsar wetlands through the Australian Ramsar management principles. At the state level the primary governing Act is the *Water Act 1989*, which requires Melbourne Water to develop a healthy waterways strategy—which is here—which guides the management of our Ramsar sites. Standalone management plans are in place for each of our Ramsar sites, and these plans provide the blueprint for managing the ecological character of the sites over a seven-year period. As mentioned earlier, the Corangamite CMA is the site coordinator for this site. So they prepare the plan with input from Melbourne Water and collaboration with us and all of the other authorities involved, and a new site management plan was released in 2018.

For the Edithvale-Seaford Wetlands: Melbourne Water is both the site coordinator and the site manager. So Melbourne Water is responsible for developing the site management plan, which was last released in 2016, and as the site coordinator we have not only the management responsibilities but the additional responsibilities of monitoring the management plan; developing those action plans yearly, as you heard earlier; convening a site coordination committee; reporting on annual investment; and reporting any potential decline or change in ecological character.

With regard to reporting: for the Western Treatment Plant, we report our data through the Corangamite CMA, and for the Edithvale-Seaford Wetlands, we report our data directly into DELWP's Ramsar management system, which will happen this year for the first time.

Moving onto funding: just broadly—and this provides an average over five years—we spend an average of \$1.66 million every year across our two Ramsar sites. Now, this can change. That is an average over the five-year period—some years it is a little more; some years it is a little less. It is built up as a result of those action plans—\$1.23 million at the Western Treatment Plant and \$430 000 at the Edithvale-Seaford site.

We go through a really careful prioritisation process, and really we prioritise according to three levels. The first level is statutory obligations. So that is basically expanded here; it is really about controlling invasive weeds and pests, monitoring birds and other native wildlife, monitoring water regimes and levels, and maintenance checks of fences. So this is our main priority of funding each year. We then move on to priority two, which is really about funding what is considered best management practices, which is about really improving sites, and that might be looking proactively at high-threat weeds and just being able to think a little further ahead and provide some of those actions. Priority three really works at a completed, more on an as-needed basis and where funding permits, as noted earlier. So, for example, it might include things like erecting signs—you know, public education signs in relation to, say, responsible pet ownership or similar sorts of issues.

Moving on to the VAGO audit process and the outcomes. The VAGO report did not include any specific recommendations for Melbourne Water, but we acknowledge that we have a critical role in strengthening the overall governance and management of Ramsar wetlands in Victoria. Since the release of the VAGO report, we have worked very closely with DELWP, Parks Victoria, and the Port Phillip and Westernport CMA to implement the recommendations.

Our responses have included actively participating with DELWP's interagency governance group for Ramsar wetlands; preparing or contributing to the annual action plan for each Ramsar site, which is consistent with the other Victorian sites; contributing to the development of a site management plan for the Port Phillip Bay and Bellarine Peninsula Ramsar site; reporting into DELWP's Ramsar management system; and supporting DELWP's monitoring, evaluation, reporting and improvement framework for the Ramsar sites. Overall, we think the actions coming from the VAGO report have been useful in providing that clear line of sight to all agencies and have allowed us to continue streamlining our management and reporting through that greater standardisation and uniformity.

In closing, as noted before, we take our Ramsar responsibilities very seriously. Our sites are actively managed to maintain or improve their ecological character, and we prioritise funding carefully to achieve that. We have worked alongside DELWP and other organisations to implement the VAGO recommendations, and we are benefiting from the new statewide governance arrangements. Within that our people have a very clear understanding of their role and how it fits; they bring a wealth of experience, expertise and passion to their management of these Ramsar sites; and they have a really detailed understanding of what is happening. They are very clear about what needs to be done and also recognise those long-term challenges to managing those sites. So thank you again for giving us the opportunity to speak, and we would be very happy to respond to any questions.

**The CHAIR:** Thank you very much for that detailed presentation. You have spoken a little bit to the various environmental factors across the two sites. Are there other key environmental values that you have to prioritise over the other, and how do you go about making those decisions?

**Dr Di LORENZO:** Just more generally, some of the key environmental threats or issues are really around increased salinity levels and, looking ahead, that question of sea level rise, which we think are both issues for

both sites. What I might do, given that I have the experts from each site, is throw across to them to just talk a little bit further about the balance in terms of the different environmental factors that are being looked at on those sites.

**Mr ZANATTA:** We have got a foreshore adaption plan, so we are looking at the future to see if there is any sea level rise. We have broken the site up into a number of areas on the foreshore, and we are sort of factoring in that each one of those areas has a different value, and each value may have a different approach. Our foreshore adaption plan is not just one, rock-solid 'This is what we'll do'; it is many different tools in the toolbox. As situations change or arise, we can adapt to them to protect the values that we are trying to do.

**Mr WOODLAND:** I can talk for Seaford-Edithvale. Obviously our primary focus is on the ecological character that we are trying to protect for the Ramsar outcomes, which for us is around birds, habitat and breeding space for birds. That is the primary focus. But we do know there are increasing threats to managing those wetlands and maintaining those ecological values. For us that includes increased urbanisation, given that there is a lot of urban development around those Ramsar sites. Climate change is definitely a big one. Rising sea levels and also higher salinity levels could require us to adapt and do things differently. One of the things we are looking at at the moment is whether we can utilise water from the Eastern Treatment Plant, which produces very high quality water, to put into those wetlands at some future time. For us it is about really the monitoring, the evaluation, the reporting and the improvement, and making sure that we have really good data to adapt to changing circumstances.

**Mr RIORDAN:** Two questions, if I may. One is: I think you put up there about \$1.2 million or so, which obviously is funded from your own organisation. Do you regularly or occasionally get that supplemented by other government funding for particular projects, or are you pretty much responsible for the management of the sites entirely yourselves?

**Dr Di LORENZO:** Mostly it is Melbourne Water in its management of the sites. If you think about both sites, the WTP is really closely linked with sewage treatment, so the funds that come in for sewerage systems are what is also used to help manage that Ramsar component of the site. So there is a funding stream for that. Then separately the Edithvale-Seaford Wetlands is also part of a regional drainage network, and so the funds that come in through the waterways charge are also able to fully encompass what we need to do for our Ramsar obligations there as well.

Separately there are other funding programs. It was mentioned I think previously that there is a range of different methods and levers to fund some of these programs. We are aware of things like a recent funding commitment I think of around \$5 million to the Edithvale-Seaford Wetlands site, which is about enabling greater connection and recreation. We know that was funding provided by the State Government. So the short answer to that is: for management of those sites, it is through Melbourne Water and its charges. However, for other enhancements there are other levers where funding can come from.

**Mr RIORDAN:** So where there might be clear community benefits, you can access that.

**Dr Di LORENZO:** That is right—where it links with our management of the site as part of the network that we manage.

**Mr RIORDAN:** Just one other question, and it probably relates more to Western Treatment. With the growing competition for water and the potential greater use of recycled water, down the track does Melbourne Water identify any potential risks to the Western Treatment area, particularly if we were to start diverting and reusing a lot of that water back in the system, whether it goes to agriculture or to growing Melbourne or whatever? Is there so much water there that it is seen as going to be a problem, or is that something that we would have to be cognisant of?

**Dr Di LORENZO:** At the moment a large proportion of the water is treated and purified to really high standards and then discharged into the bay, but a growing proportion of that is being used for farm irrigation.

**Mr RIORDAN:** At Werribee and so on.

**Dr Di LORENZO:** So really that is the output that would have gone into the bay anyway; it is not going to reduce environmental values inland by re-using more and more of that water.

**Mr RIORDAN:** Right. So there is still plenty to use?

**Dr Di LORENZO:** That is right, exactly.

**Ms STITT:** Just on the Western Treatment Plant, you have just answered Richard's question around water usage, but are there other things that you have to be mindful of so that you are not negatively impacting on the Ramsar values?

**Dr Di LORENZO:** I will answer broadly, and then I will hand over to Aaron. The Ramsar wetlands and the Western Treatment Plant are very closely linked and they are finely balanced. That link and that balance are kept in mind as it is operated year on year. Aaron, I might just hand over to you to expand on that, if that is okay.

**Mr ZANATTA:** The Western Treatment Plant treats over 50 per cent of Melbourne's sewage, so 550 million litres are coming in every day to get treated. From that we have still got to meet our EPA licence obligations to the bay as well as our Ramsar values, so we have had a really good monitoring program over a long time that ensures that we keep track of and on trend with anything that changes. An example is that back in 1996 the CSIRO and Melbourne Water did a study of the bay and it showed increased nitrogen levels to the bay, so that ensured that we needed to start adapting our processes to reduce that nitrogen. In doing that, that set up some controlled actions with the department of environment in Canberra and our long-term monitoring programs so that we could still deliver our environmental outcomes and our EPA licence requirements. So it is keeping that focus on both those elements so our ecological values are kept solid and in place, plus we have also got a long-term community group as well as other departments that help us keep—I am losing track, I apologise.

But what I want to say is that we have got a Biodiversity Conservation Advisory Committee that also interprets those results. It is made up of government departments, Parks Vic, DELWP, BirdLife Australia—we have got other experts within that group—and they help us keep track of our ever-increasing flows from sewage treatment and help us keep in line with the ecological values of the site.

**Mr RICHARDSON:** Thanks for coming in, Melbourne Water representatives. I have got a question about the Edithvale-Seaford Wetlands and recent EESs that have been had for Edithvale, Bonbeach, the Chelsea level crossing that has been brought in and that did not need to go to an EES, and then the Mordialloc Freeway. I am just wondering how you manage those competing priorities with the environmental values that are to be protected for what were the remnants of the Carrum Carrum Swamp.

**Mr WOODLAND:** In terms of any impacts on the wetlands, obviously we are a referral authority and decisions are made whether those projects need to go to an environment effects statement process. You mentioned Seaford Road. So that was referred to us. The concern there was around trenching and what that means to the flow of groundwater and how that gets back into the sea. The concern there was that that could adversely impact particularly on the Edithvale wetlands. All the modelling there showed that the impacts were negligible—they were small. However, we did require additional controls to be in place to be absolutely certain that there would be no adverse impact on the wetlands, and that included putting in additional engineering controls to make sure the water could get through those trenches and flow through. So that input was accepted and that has actually happened—that will be built and put in place—plus we requested additional groundwater monitoring to make sure that we could see what was happening into the future, and that was put in place and accepted. For the other ones, it is the same: it is referred to us and we will input as required to make sure that the controls are put in place, if required, to manage any risk to the wetlands.

**Mr RICHARDSON:** Also, I guess the climate change mapping methodology of the impact to Port Phillip Bay in that area is significant, particularly through the backs of Chelsea Heights, Patterson Lakes and Aspendale Gardens. I am interested in the Eastern Treatment Plant flows that might go into those wetlands as well. Could you tell us a little bit more about what that might entail?

**Mr WOODLAND:** At the moment there is not any flow from the Eastern Treatment Plant going into those wetlands. It is an investigation that is currently in train. It is too early to speculate as to what that actually

means, but it is something we are looking into to mitigate against climate change and increasing salinity levels. It is just too early to describe what that might entail.

**Mr RICHARDSON:** So the reporting obligations at Melbourne Water, with the EES—has that been set down? And going back to, I guess, VAGO's issues around governance and the interaction with agencies, how does that play out at the Edithvale-Seaford Wetlands site—that ongoing reporting and monitoring work there?

**Mr WOODLAND:** There are various levels of both involvement and monitoring. We have a coordination committee, which has the various councils on it and the Friends of Edithvale-Seaford Wetlands, so there is local involvement. As site coordinator, we are also obliged to put information into the Ramsar management system, which DELWP manage; that includes not only the site plan and the actions that are happening but also the results of monitoring to demonstrate that we are inside the limits of acceptable change against ecological value. That is the typical process in terms of reporting and monitoring.

**Ms RICHARDS:** In a way, sort of bouncing off what Tim was just talking about, the characteristics of the sites that you manage are different to the other Ramsar sites, and I am interested in what those characteristics are. I am conscious, as we have just heard, that you have got probably the only one that has the work that is going on alongside it—you have got built environments. How do you manage those particular characteristics as compared to, say, your friends in Parks Victoria, who have different issues when it comes to Ramsar sites?

**Dr Di LORENZO:** I might lead off, and there might be some further detail to provide. One thing that is common with both of those sites is that they are highly engineered, so they face a different set of challenges to a natural setting. So the main tools that we use: besides the management of the overall networks, which they both sit within, there is the tool of having the annual action plans fitting within a broader management plan—they are the main tools that we use to try and reconcile the different things that we will need to do to manage those sites. Because they do provide two purposes: they are part of a bigger system, either a sewerage or drainage system, but they provide these very special—you know, they are very special places. So we will have network management plans to manage the whole network, but also this is sort of almost a slice through—applying the ecological lens to make sure that we are then using the governance frameworks to manage the Ramsar values at those sites as well.

**Ms RICHARDS:** Interesting.

**Mr MAAS:** We have already talked about climate change as a potential threat. What are some of the other perceived threats to the Ramsar sites that you have? And further, what are you doing to address those threats?

**Dr Di LORENZO:** Just more generally, and again I will draw on further info as needed, the types of challenges or threats that are being managed on the sites are the ones that are being funded and the ones that are the legislative minimum requirements. They will be things like invasive species. They will be pests—foxes, rabbits, those types of things. They are the main things that are threats to these environments, if you put aside issues around salinity and climate change. So they are the things that we are managing for. They are the threats that are active on the sites. I am happy to draw on any extra information if needed. Anything to add?

**Mr WOODLAND:** I think you have broadly covered it for Seaford-Edithvale. The other one I would add would be urbanisation. Certainly pests is one we manage, and we actively work with Frankston council in Seaford to manage rabbits, foxes and the like.

**Dr Di LORENZO:** Yes, I am happy with that. Thank you.

**The CHAIR:** Thank you very much for your time today. As we said, a transcript for you to verify will be distributed to you shortly. We thank you for your time, and we look forward to visiting Edithvale tomorrow.

**Dr Di LORENZO:** Thank you.

**Witnesses withdrew.**