

PUBLIC

THE LEGISLATIVE COUNCIL GOVERNMENT ADMINISTRATION COMMITTEE A SUBCOMMITTEE INQUIRY INTO FINFISH FARMING IN TASMANIA MET ON TUESDAY, 8 SEPTEMBER 2020.

Ms LIA MORRIS, AND Mr PETER HOPKINS, MAST, WERE CALLED, MADE THE STATUTORY DECLARATION, AND WERE EXAMINED.

CHAIR - (Ms Webb) - Thank you for coming in and giving us your time today. I would like to introduce you to Rob Valentine, the member for Hobart; Ruth Forest, member for Murchison; and shortly we'll be joined by Mike Gaffney, the member for Mersey. I also introduce you to Jenny, Ally and Roey, who are assisting us today.

Before we begin, I remind you that evidence taken at this hearing is protected by parliamentary privilege. Any comments you make outside the hearing, though, may not be afforded that same privilege. You have a copy of the witness statement to provide you with information. The evidence is being recorded. A *Hansard* version will be available and published on the website once it's ready. The hearing is also being broadcast today.

If you'd like to begin with an opening statement you're very welcome to. Then we'll probably have a series of questions for you following on from that.

I also should have mentioned before that if there are any matters that come up that you feel would be best heard in camera, you are welcome to request that of the committee and we'll consider that request.

Ms MORRIS - Thank you for inviting us. As an opening statement I want to give some clarification to the jurisdictional boundaries of Marine and Safety Tasmania and how we are involved with marine farming. Sometimes there is a little bit of confusion. Obviously, we're a statutory authority and section 6 of the Marine and Safety Authority Act is to ensure the safe operation of vessels, so that's where our jurisdiction lies. In terms of the Marine Farming branch of the Department of Primary Industries, Parks, Water and Environment - DPIPWE - they consult MAST on navigational safety issues when preparing marine farming development plans or any amendment to an existing farm plan. They also require advice from MAST on the marking requirements for a lease to ensure the safe navigation of vessels.

When we're asked for advice there are a number of considerations we take into account when assessing the location of marine farming zones identified by marine farming development plans and the specific marking requirements of marine farming leases. These include things like well-known anchorages, point-to-point navigation, the number of lights required on the lease, the flash codes, the proximity to navigation aids, if there has been increased boating activity in the particular area, mooring areas, the proximity to shoreline to enable safe navigational small craft between the boundary and the shoreline. We also liaise with TasPorts when required. That was a case in point with the Storm Bay development plans.

MAST treats marine farming marks used for navigational safety as moorings under the Marine and Safety (Moorings) By-Laws. We charge an annual registration fee for these corner marks. We audit these marks on a regular basis, ensuring they are in the correct position and they comply with IALA requirements. The audit process also involves circumnavigating the lease to ensure there is no marine farming equipment outside the lease.

PUBLIC

Ms FORREST - Can you spell out the acronym you used there?

Ms MORRIS - IALA, International Association of Marine Aids to Navigation and Lighthouse Authorities, formerly the International Association of Lighthouse Authorities. It just rolls off our tongues because we do it on a day-to-day basis; it is the worldwide requirements. On top of that, we have a mooring GIS system on our website and we have added all the fish farm corner marks to that website. Information on the type of mark and flash codes is provided, together with a photo and ownership and contact details. An individual recreational boater can click on the marine farm corner mark on our GIS and it shows who owns the lease and the contact details within the companies to contact if there is an issue.

The other issue we get involved with under the Living Marine Resources Management Act - DPIPWE has authorised two MAST officers to issue infringement notices under the provisions of the marine farming planning regulations. This is subject to DPIPWE's standard operating procedures. This authorisation allows MAST officers to monitor and respond to breaches where identifiable marine farm equipment is found outside marine farm lease areas and floating in the water. We do not have the authority to enter any of the leases.

Ms FORREST - To clarify, identify items in the water: what about on the shore?

Ms MORRIS - No, that is not MAST's jurisdiction; while they are in the water it is the agreement with DPIPWE. If we can identify the marine farming equipment, we can issue an infringement notice.

Ms FORREST - If it is washed up, you can't.

Ms MORRIS - No, that goes back to section 6 of our legislation in terms of safe operation of vessels. In terms of safe operation of vessels, it is not just recreational vessels we are worried about, it is also the marine farming vessels. They are out there 24/7 so they need to be mindful of debris in terms of safety.

Our authorised officers have issued 10 infringement notices since August 2018. The penalty for these breaches is \$688. We receive reports of marine debris via phone, Facebook, email and the Salmonid Growers Association hotline and mobile app. Where required, we issue a notice to mariners to alert mariners of the dangers posed by the debris if it is floating in the water and can't be found. That is a summary of our position in how and where we get involved with marine farming.

CHAIR - Thank you. I would like to hear more about the part you play at the front end of things, when you are consulted at the planning stage. Could you talk more about the nature of the involvement, that consultation with you? If there is a new application for a new area, for example?

Ms MORRIS - Peter would be better to answer that because he has been doing that for 20 years.

Mr HOPKINS - If there is a new development plan, it will come to us. Quite often it will come to us before the plan is put out because that will save some time. We will assess potential zones. We will look at the position of those zones in relation to what Lia explained in here: existing navigation marks, boating fairways such as anchorage to anchorage from boats

PUBLIC

leaving marinas to particular anchorages. We will do all that on straight line navigation. If there is an issue with the position of one of those zones, if it's right in front of a major landfall mark and is going to inhibit the safe navigation of boats, we will go back to the Marine Farming Branch and say, 'No, we do not think that area there is good enough'.

There have been examples down the Huon near Hope, Faith and Charity islands where we said no to a particular zone, and there have been numerous others as well where we've had input into changing the location or the lay of those zones and releases to ensure safe navigation.

CHAIR - So there has been a responsiveness to the input you have provided on that?

Mr HOPKINS - Absolutely.

CHAIR - Just to clarify, you said there are times when you have said no, but technically, are you just consulted or can you actually prohibit something going ahead in a particular area because of a concern identified?

Mr HOPKINS - No, not really prohibit; we can give advice to the Marine Farming Branch and it is up to them as to whether they heed that advice or not. We haven't had anything we've put up there where they've said no, it is still going to go ahead as planned.

Ms MORRIS - That advice is based on safety, of course. Our primary concern is the safety of all vessels on the water.

Ms FORREST - You've mentioned zones as well as potential leases. Obviously there are two aspects here - there is a zone, and we are still trying to figure out how the zones are actually agreed, which areas are grow and no-grow zones -

Ms MORRIS - In terms of the salmon farm, the growth industry plan?

Ms FORREST - Yes.

Ms MORRIS - I can't answer that.

Ms FORREST - I am just saying we haven't been able to get to the bottom of how those areas were determined. With the areas that are indicated to be potential, where there are no marine farms now, like up around Stanley and places like that, and even King Island, what role do you have in that process, or did you have any role in that process of determining the grow and no-grow zones?

Ms MORRIS - We had no involvement in that.

Ms FORREST - Okay. Since that map was developed, Petuna has been given exploration licences, or whatever they are called, to have a look at Three Hummock Island and around that area. When they started that process of assessing reasons, why they couldn't go in certain places? What was your involvement with them being granted that right to investigate the area?

Mr HOPKINS - Our only involvement was that they showed us where a potential zone might be and we advised them on navigational grounds only. From memory, that one just to

PUBLIC

the east of Three Hummock wasn't an issue in regard to navigation from our point of view, and that was basically from Three Hummock back into Stanley and that sort of thing. We take it on point-to-point navigation to determine whether or not it is a safety issue as such.

Ms MORRIS - Prior to putting anything formal into the marine farming branch, Petuna came in and asked what would be acceptable to MAST in terms of safe outcomes.

Ms FORREST - They did an overlay of all the various aspects. So you didn't say that they couldn't go into that area at all, there were no safety issues as such to prevent them expanding into that area?

Ms MORRIS - Not where they showed us they were going to locate at that particular time.

Ms FORREST - I'm not sure exactly where the lines are without a map in front of me, but they are looking at going quite deep out because of a whole range of other issues further in, not to do necessarily with safety, so what does that pose if they're further out?

Ms MORRIS - In terms of -

Ms FORREST - Have you been asked that question if they are further out to sea?

Ms MORRIS - No.

Ms FORREST - So at what point would you be asked, then, about safety in that particular area? At what point, if they put in a farming plan -

Ms MORRIS - Safety from what aspect?

Ms FORREST - Marine safety, like ships coming through there to visit - it's a boating area.

Ms MORRIS - We have been asked in terms of what has been proposed to date, but we just respond to requests for advice.

Ms FORREST - So you don't get to review the proposal for a licence to put fish in the sea?

Ms MORRIS - We are asked for advice on the proposed zones and that -

Ms FORREST - The broad zone? The zone is a large area -

Ms MORRIS - and then in terms of the actual lease areas, that is the marking requirements relative to the lease.

Ms FORREST - So anywhere within the zone is okay? You provide advice on safety within that whole zone which is a large area?

Ms MORRIS - Yes.

PUBLIC

Ms FORREST - Then you don't have any further role until there's a farm there and you need the markings.

Ms MORRIS - Correct.

Mr HOPKINS - There are two stages to the zone. There is the preliminary marine farming development plan where we would have input into whether we think the location of that zone impedes safe navigation. If it does, we go back to the Marine Farming Branch and say, 'We've got a concern with the location of that zone', and they would then come back to us and say, 'How about this one?', and we'd say, 'Yes, that's fine'. Once the development plan goes through and there's an application for a lease within that zone, we would give the marking requirements for that particular lease. There are two stages - the marine farm development plan and once that's all gone through, they start the lease process, and that's when we'd give our marking requirements for that particular lease within that zone.

Ms FORREST - So the markings are the buoys on the top?

Mr HOPKINS - Yes.

Ms FORREST - What about the anchorage points below? That's not your jurisdiction?

Ms MORRIS - That's not our jurisdiction.

CHAIR - To follow up on that, you mentioned it's the department you interact with to provide advice, so you don't interact with the proponent when they're developing their draft proposal at that very early stage?

Mr HOPKINS - We have from time to time. Quite often they'll come and talk to us and say, 'What do you reckon about this?' It doesn't happen that often but certainly through the Marine Farming Branch of DPIPWE they'll give us an indication of where a zone might be going. Once that development plan is accepted then the lease position within that particular zone is determined by the application and then they go to the Marine Farming Branch who come to us to ask for the marking requirements for that particular lease. Invariably they are a yellow special mark with a two to three nautical mile range. There have been leases where we've put port hand marks in such as Creeses Mistake coming into Nubeena to make it safer for people transiting into Nubeena. The majority of them are yellow special markers but there have been times where we've used ordinary cardinal marking requirements.

Ms MORRIS - We introduced lighting in the D'Entrecasteaux Channel to increase the safety of vessels transiting D'Entrecasteaux Channel in terms of flash codes so they could see because there is a proliferation of marine farm leases in that area. That was something we worked on together with the marine farmers.

Ms FORREST - My next question was about the lighting, Lia, which you mentioned in your opening comments. One of the complaints we've had to the committee is about the lights. I'm not sure if it's the lights from the lease or the lights from the boats and the onshore facilities that seem to be the biggest problem here, but could you talk about the lighting that you require?

Ms MORRIS - We haven't actually ever received any complaints from vessel operators or owners in relation to the lighting of the marine farm leases.

PUBLIC

Ms FORREST - What about neighbours, though?

Ms MORRIS - I have heard feedback in terms of lights from the marine farming vessels that may be of concern to some people but in terms of the flash codes, Peter can take you through the process we went through to introduce those, because we worked collaboratively with the marine farmers on that, didn't we?

Mr HOPKINS - Yes. When we identify what type of corner mark or lighting should go on the corner of the lease and what that flash code might be, we again look at surrounding landmark navigation lights. Obviously we don't want something that's going to be similar to that. Down the Channel, for instance, we've split up three different areas and that is the far south, such as Lippies, the lease at Butlers Beach. Then we've come up further to the mid-Great Taylor Bay area and then we have another section of leases near the mouth of the Huon. They've all got the same flash code; they all come on at different times, so if you're in the far south coming up on a boat, you'll see a group of lights come on for those particular leases. They'll go off, then the next ones will come on and then the next ones will come on, and they're all synchronised, so they're all coming on and off at the same time on each corner mark of each lease.

Ms FORREST - So it's continuous, it's not like it's motion-sensored? I don't know how you'd do that on the water.

Mr HOPKINS - Yes, it's all programmed in, whereas years ago we were getting a lot of complaints from people getting lost because the corner marks weren't synchronised and there was just a bunch of flashing lights going on and off. We now synchronise those so they are coming on and off at the same time and then the next one comes on and off, so if you're coming up on a boat it is like a Christmas tree light, but synchronised, I guess.

At Storm Bay we have requested a greater visibility light out there for obvious reasons because you have bigger shipping. West of Wedge we have asked for a brighter and more visible light for their special marks but by and large they use a special mark. They are a yellow light as opposed to a white light. On a dark and stormy night there is not a lot of difference between a yellow and a white light. The yellow light is designed to blend in with that special mark as opposed to a major landfall light, which is primarily a white light so hopefully you will not get them confused.

The actual lighting on the lease with marine farm equipment has nothing to do with MAST whatsoever. We are only responsible for the lighting of the corner marks and that is where we start and finish.

Ms FORREST - In terms of the brightness, though, this is one of the complaints.

CHAIR - I don't think it would be the corner marks.

Ms FORREST - If you are saying a brighter light west of Wedge, how bright are we talking?

Mr HOPKINS - When I say a brighter light, I mean a light with greater visibility. It might be four miles as opposed to two miles but west of Wedge you're not going to see that from a home, I wouldn't imagine.

PUBLIC

CHAIR - That is important from a shipping perspective because big ships transit that area.

Mr VALENTINE - We received a private submission, number 19, from Andrew Boon. Are you aware of that submission?

Ms MORRIS - We know Andrew.

Mr VALENTINE - He raises some concerns with regards to charts and how it is really important that full information is available. I will read you a couple of paragraphs so you get the context of what he is getting at. He says -

To be useful for navigation, charts should show what is actually in/on the water. Fish farm leases (when occupied) are no-go areas for recreational and non-fish farm vessels. Showing the active Lease areas is considered to be the minimum requirement. Zones indicate to the mariner that there may be a lease somewhere (and sometime) in the zone area. But navigation is permitted within a Zone as long as it is outside the Lease.

He goes on to talk about the current situation -

The information currently shown on the charts is inconsistent and inadequate. In the Huon and Channel area, Norfolk Bay and Okehampton Bay, the official charts display (mostly) the farm Lease areas. With one exception, none of the lease boundary marks is shown on the charts. All the salmon farm marks are IALA Special Marks (yellow, with a yellow 'X' topmark).

In Storm Bay, Wedge Bay and Port Arthur, the official charts show the MFDP Zones and display none of the boundary marks. All of the marks around Huon Aquaculture's leases are IALA cardinal marks, some of Tassal's are port lateral marks and the remainder are Special Marks.

He goes on to talk about a number of those things, but clearly the information available on the charts does not seem to be sufficient for recreational or any other boats - the boating fraternity, I suppose - to be able to clearly avoid or know which side of the light to go. Do you have any comment on that?

Ms MORRIS - There are two comments. First, we do not control the charts - that is the hydrographer's office; second, we have been working with Andrew and we understand his concerns. The problem with paper or electronic charts is that it is very hard for them to be kept up to date with the marine farming operations because they often move corner marks on leases for mooring works et cetera. We put out notices to mariners to let them know that those lease corner marks have been moved for *x* period of time while they do mooring works underneath the lease. To have those charts updated all the time would be very difficult and I think that is part of the hydrographer's office's concerns.

Having said that, we listened to what Andrew was saying and that's why we've done what we have in terms of the MAST GIS, which has all the corner marks. Every time mooring works

PUBLIC

or anything are being done on a lease, those corner marks move accordingly and you can click on those corner marks on our MAST GIS and see exactly what the mark is. There is a picture of it with all the details in terms of flash codes or whatever else they may need.

Mr VALENTINE - So can anyone with electronic equipment access that? Is it publicly available?

Ms MORRIS - Absolutely, it's on our website, and we have received a recent proposal from Andrew, which we will look at as well, in terms of how our MAST GIS could potentially integrate with LIST and electronic navigation equipment. We are constantly talking to him but, unfortunately, we don't control the charts.

Mr VALENTINE - You talk about infringement notifications. Can you give us some understanding as to the number of notifications that go out per month?

Ms MORRIS - The notice to mariners?

Mr VALENTINE - Yes. What sort of quantity are we talking about? Do you have any details?

Ms MORRIS - It's not up to date, but the most recent one we were asked for was through an RTI, which shows that between 1 January 2015 and 31 December 2018, we had 128 reports -

CHAIR - Reports of debris?

Ms MORRIS - Yes.

CHAIR - That were related to fish farming or may have been related to other activities?

Ms MORRIS - That's a good question because it's not always identifiable to salmon farming.

Mr VALENTINE - Is it increasing or decreasing over time?

Ms MORRIS - I would say that you have spates. Weather events cause debris, but I think overall they have improved. We have had 27 notifications this August.

Mr VALENTINE - Do you have something you can provide in terms of the frequency of those notifications that we can table?

Ms MORRIS - Yes, definitely. We could go through our notices to mariners and provide that for you.

Ms FORREST - And are you able to break down the source of the debris?

Ms MORRIS - That's not always possible because sometimes you can guess that it might come from a finfish farm but it's not always identifiable and that's because -

Mr VALENTINE - It's not your role to do that?

PUBLIC

Ms MORRIS - We don't set the rules in terms of the marking of equipment for the finfish farm - that's DPIIWE. They're working on a register and trying to move the farmers to have everything identifiable, but there is equipment out there that is still not marked.

Mr GAFFNEY - With those 128 incidents or -

Ms MORRIS - Notifications.

Mr GAFFNEY - Yes. On the form, does it say there was a floating buoy? What makes a notification? How much debris is it worth putting in a notification for? I just want to know what scheme we are looking at.

Ms MORRIS - It comes from a variety of sources. Sometimes we get the finfish farmers themselves ringing us to say they've misplaced a length of pipe and that's when a notice to mariners will be issued. Other times there could be a recreational boater who has sighted some floating pipe or grid can or some rope, and they have evidence. They usually send us a photo and give us a rough location, so they're the types of things we would react to.

CHAIR - Then what happens? Talk us through the process after the notification, after somebody alerts you to that.

Ms MORRIS - We issue a notice to mariners.

CHAIR - Do you have a threshold that has to be met? You mentioned rope a minute ago, so if it were a piece of rope, is that something you would issue a notice for?

Ms MORRIS - Most people who notify us are quite discerning, so they wouldn't ring us if it was just a metre of rope. They do it because they're concerned for safety, so it's usually a substantial piece of rope or a piece of pipe.

CHAIR - So you issue a notice to mariners and is that where your role ends? What is the next step, for example?

Ms MORRIS - We issue the notice to mariners; in many cases the fish farmers will be out there looking for that piece of pipe - sometimes they will find it and then they will notify us and we will cancel the notice to mariners.

CHAIR - You mentioned you've issued 10 infringement notices since August 2018. What then elevates something to going from putting a notice out to marinas to issuing an infringement notice?

Ms MORRIS - The key is to be able to identify the equipment. If we can identify the equipment and trace it back to an owner, that is when we will issue an infringement.

CHAIR - How would that identification come about? Do you go and look at the piece of whatever it is?

Ms MORRIS - Yes, and sometimes we have found it ourselves when we have been out there doing audits.

PUBLIC

Mr HOPKINS - It could be identified on the register as well. We have, for instance, issued an infringement because a boat off Point Home got a substantial amount of rope caught around its propeller. We were able to identify that particular rope from the gear register and we issued an infringement accordingly to the company involved.

We know that the Huon Aquaculture Group - HAC - is only using white feed pipe now - the majority is white feed pipe - whereas the other company, Tassal, has a black feed pipe with a blue or green stripe through it, which is quite identifiable. There is still equipment on the marine farms that is not in the register. I know the Marine Farming Branch is working to update that register all the time.

CHAIR - Can I check on the proportion that progress to infringements? It sounds like it might be one in 10. Would it be less than that, one in five maybe?

Ms MORRIS - The key for us as authorised officers is that we need the evidence on the water and we have to be able to link it back to the owner. If we don't have an identifiable piece of equipment, we cannot issue an infringement notice, because whom do we issue it to?

CHAIR - I understand that. I am trying to get a sense of the proportion of cases of being notified of something, then identification is able to happen and flow through to an infringement. I am asking you if you could put a figure to it, just a ballpark figure to it? Is it one in 10 times or is it one in five times? Will we be able to see that from the data you might provide to us perhaps?

Ms MORRIS - The data we are providing is notice to marinas - that is everything that comes in from all different sources and the notices we issue as a result. This is just us; two authorised officers from MAST have issued only these 10 infringement notices. Obviously, infringement notices are issued by DPIPWE as well.

Ms FORREST - Were those notices you issued just to marine farm owners or have they been to ships? Things fall off ships, too.

Ms MORRIS - No, just to marine farms because that is what we are authorised under the living marine -

Ms FORREST - You can't issue an infringement notice to a ship that loses something overboard?

Ms MORRIS - No, that is Commonwealth legislation.

Mr VALENTINE - When you put out those notifications and, for example, somebody rings or radios in saying there is a huge pipe floating somewhere in Storm Bay and you send out the notification, do you also alert DPIPWE to that as a part of your process?

Ms MORRIS - Yes, we do.

Mr HOPKINS - And the company. If there's a long piece of pipe floating around, we will notify DPIPWE and we will notify the closest farm in the area and ask them to go out and have a look for that particular pipe. They would anyway.

PUBLIC

Mr VALENTINE - Regardless, the closest farm to where the pipe is even though it may have come from a different lease?

Mr HOPKINS - The companies work in conjunction; they do that together pretty well because they understand it is important that people are kept safe out on the water.

Mr VALENTINE - Thank you.

Mr HOPKINS - The companies are now going to the extent of putting up choppers when gear comes out of their leases. They will ring us up and say, 'We have just lost a length of pipe'. Only last week or the week before Tassal lost some equipment out of West of Wedge, a 40-metre length of pipe. They actually put a chopper up and they found it a couple of days later. That is how intent they are in making sure that this stuff does remain in the lease.

CHAIR - Was that the same piece of pipe reported by a boat that nearly hit it?

Mr HOPKINS - No, a different pipe.

Ms MORRIS - They are also looking at new technologies to track their equipment, putting geofences around certain leases so that alarms ring if pipes and things go missing. They are working towards improving that.

Mr VALENTINE - Explain that a little. When you talk about geofence -

Ms MORRIS - One of the big companies has trackers on their mamba pipes already but they're also looking at trackers on their equipment. They can then put a geofence around an area and if they have the trackers on the equipment and they fall outside that area, they get alerted. They are working on these types of things.

CHAIR - Based on the reports you typically get, are those trackers going to be the most commonly encountered sorts of debris currently reported to you?

Ms MORRIS - I can't answer that. One company's trialling it at the moment. How they actually deploy that if it's successful, I'm unsure. That's something that we don't control.

CHAIR - Are you aware of what kind of equipment those trackers will be attached to or relevant to? Is the equipment that will be associated with the trackers the kind of debris that is most commonly reported to you? Is there a confluence there?

Ms MORRIS - I think there would be in. Pipes are probably the most common thing and grid cans, and maybe corner marks because sometimes they can move out of position.

Mr VALENTINE - Do you record the location, the distance, of the debris from its source when it's found?

Ms MORRIS - If we can, yes. Definitely, if we can. Mobile phones are quite useful for that.

CHAIR - Can I ask you more about the way you report on these things? You mentioned you have the two officers who are the doing the infringement notices. DPIPWE also has

PUBLIC

officers who are doing that. Is there a common data source and reporting source for the totality of those infringement activities?

Ms MORRIS - We let DPIPWE know what we've done. I imagine they'd keep a central source of information.

CHAIR - Do you report in some public way? Obviously you provide it to DPIPWE but do you make publicly available your data on notifications received, notices given, infringements given?

Ms MORRIS - No, we haven't at this point but we're happy to do it if anybody asks.

Mr VALENTINE - Can we get a copy of the form that you fill out every time you get notified? Do you have a pro forma that you fill out every time a notification comes in?

Ms MORRIS - No, we don't have a proforma; it's just put on a spreadsheet. We can give you all the information we hold. We're happy to do that.

Mr VALENTINE - Thank you.

CHAIR - Can I ask more about the infringement amounts, the penalties? Is it a flat penalty that doesn't increase with further infringements or is there some sort of escalation of the penalty that's applied?

Ms MORRIS - To clarify, we are authorised under DPIPWE's legislation, so it's their territory. Having said that, the breaches are four penalty units - that's in their legislation - and that's \$688.

CHAIR - It's a flat rate, regardless if it was the tenth infringement for that year for that particular company or entity?

Ms MORRIS - I think DPIPWE has other measures it can implement and other tools it can implement regarding marine farming lease and licence conditions in relation to that.

Ms FORREST - You're limited.

Ms MORRIS - We are limited because we're authorised officers under their legislation and that's what they've authorised us to do.

Mr HOPKINS - That's only for outside the lease area. We are not allowed inside.

CHAIR - I understand that. You made it nice and clear that your jurisdiction is outside the lease areas.

Is there interaction directly from the app and the hotline through to MAST in reporting the debris?

Mr HOPKINS - It comes through to my email.

PUBLIC

CHAIR - The automatic forwarding of something that's uploaded onto the app or a phone call that comes in through the hotline?

Ms MORRIS - Yes.

CHAIR - Did MAST have some involvement in the establishment or development of the app?

Ms MORRIS - Yes. We sat around the table with the salmon farmers and TSGA, and had some input into that.

Mr VALENTINE - With regard to the safe operation of vessels, is that your jurisdiction? You would have various regulations that you expect vessels to comply with.

Ms MORRIS - It's a little bit complicated these days because the Australian Maritime Safety Authority is involved now. We used to certify all commercial vessels and now AMSA certifies commercial vessel operations. It is Commonwealth legislation. They certify vessels for their structural integrity, their operational areas, the safety equipment they have on board and the manning of those vessels. All of that is under AMSA's jurisdiction.

Mr VALENTINE - What about the movement of vessels?

Ms MORRIS - We manage waterways; we have waterways management responsibilities under that are split between Commonwealth and state legislation.

Mr VALENTINE - Are aquaculture vessels included? They'd have to abide by the same rules that every other vessel would have to abide by under your jurisdiction.

Ms MORRIS - They do.

CHAIR - You receive notifications there is debris. Is there a way we can track to see whether that debris was either collected and removed, or washed up somewhere or washed out to sea? Can we see in data anywhere what the end result was for each piece of debris that has been reported?

Ms FORREST - The recovery rate.

CHAIR - Basically I am asking how do we know how many of those are actually recovered?

Ms MORRIS - I think from our data you would be able to see what notices to mariners were issued and what were then cancelled. That is probably as much as we can give you.

CHAIR - In terms of them being cancelled, would that be because recovery has occurred?

Ms MORRIS - Correct.

PUBLIC

CHAIR - What about if it has just disappeared, because it may potentially have washed up on a shoreline or has been washed further out to sea and disappeared? Would we be able to distinguish that?

Ms MORRIS - Probably not.

Ms FORREST - Do you cancel the notices if you don't find it?

Ms MORRIS - No, because it could still be out there floating somewhere. There was a case in point a few years ago where a big mamba pipe actually ended up in New Zealand.

CHAIR - So the cancellation would be an indication that collection had actually happened and recovery had occurred. What proportion of your notices to mariners end up being cancelled and what proportion end up unresolved?

Ms MORRIS - I'm not sure at this time but I can find out for you.

CHAIR - It would be excellent to see that so we have an understanding of the rate of successful recovery and the ones that still remain. They may have washed up on the shore.

Ms FORREST - There is an awfully large rubbish tip in the middle of the Pacific Ocean so there is probably a fair bit there.

CHAIR - Yes. I know you made clear earlier, for example, that if it washed up on the shore it is no longer in your jurisdictions so it is not something you are tracking or aware of.

Ms FORREST - But are they reported to you even if they are, because people find them?

Ms MORRIS - Sometimes people will report stuff they have found on the beach and we direct them to the Marine Farming Branch.

Ms FORREST - But do you then look at your list to see if it was on the notices to mariners?

Ms MORRIS - Because it's just pipe and some of it's unidentifiable, you don't know whether you've issued a notice to mariners for black pipe and that same black pipe is on the shore. That's the difficulty.

CHAIR - Could you give a better understanding of why things are not readily identifiable now? You've said tracking technologies are coming and that sounds very positive, but right now, from what I have heard you say today, a large proportion of what is observed and reported isn't able to be identified in terms of where it has come from.

Ms MORRIS - No.

CHAIR - Why is that?

Ms MORRIS - Because not all the equipment on the farms is marked and therefore identifiable. As Peter said, the Marine Farming Branch is moving towards a register and the MAST board has been very supportive of that and would like to see all equipment marked.

PUBLIC

CHAIR - So at this present time there's not a requirement on the industry to have all its equipment marked?

Ms MORRIS - Not specifically is my understanding, but that's probably a question you need to -

CHAIR - That's fine. In some instances you say the colour of the pipe can be very useful. Some of the companies have moved to have quite identifiable colouring but that has been up to the companies to implement, as far as you're aware, so some have progressed with that and others not yet.

Ms MORRIS - There is a register that the Marine Farming Branch holds in terms of the gear that has been marked; we are aware of that, which is why we are able to issue infringement notices to the ones we can clearly identify, but not all farming equipment is marked.

CHAIR - Is the clear identification of a piece of debris the only basis on which you can issue an infringement notice? For example, if you had a piece of debris that was in such absolutely proximity to a fish farm you could quite well assume it came from that fish farm, but it couldn't, in some tangible way, be identified as belonging to that fish farm, either through colouring or markings, can you issue an infringement in that case just because of proximity?

Ms MORRIS - It could be readily challenged. We could, but it would be very readily challenged.

CHAIR - So the delay in having adequate markings, which allows for what sounds like a fairly high proportion of pieces of debris to be unidentified at time, is continuing?

Ms MORRIS - Yes, that's our experience.

CHAIR - We have finished with our time. Thank you so much for coming today. Are there any final remarks you want to make or things you feel would be useful for us to hear before you leave that we haven't covered yet?

Mr HOPKINS - Just the importance of marking gear, especially mamba pipe at regular intervals.

CHAIR - Thanks, Leah and Peter, we appreciate that.

THE WITNESSES WITHDREW.

PUBLIC

Mr ANDREW PAUL, CHAIR, **Professor COLIN BUXTON**, **Mr PHEROZE JUNGALWALLA** AND **Mr JOCK CAMPBELL**, MARINE FARMING PLANNING REVIEW PANEL, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

CHAIR - Thank you very much for coming. This committee hearing is protected by parliamentary privilege. I will remind you that comments you might make outside the hearing may not be afforded that same privilege. You have a copy of the information for witnesses available to you. If you don't have that and you would like it, we can provide it to you. The evidence you are presenting is being recorded; the *Hansard* version will be published on the committee website when it becomes available and we are also broadcasting the hearing today.

Would you like to begin, Andrew, by making an opening statement?

Mr PAUL - I thank the committee for the opportunity to appear before it. As you know my name is Andrew Paul, I am a former longstanding general manager of Clarence City Council. I have qualifications in environmental health and management, and am a fellow of the Australian Institute of Company Directors. In addition to other board roles, I am the current chair of the Marine Farming Planning Review Panel. I was appointed to this role in November 2019, only some months ago. As a relatively new member of the panel I thank the committee for allowing me to be accompanied today by longstanding panel members who I would like to introduce if I may.

To my left is Emeritus Professor Colin Buxton. Colin has extensive experience in fisheries, aquaculture, marine science and marine resource management. He currently serves on several state and national boards, including the Tasmanian EPA; the Fisheries Research and Development Corporation, where he is deputy chair; he is chair of Southern Rocklobster Limited - SRL; the National Fishing Advisory Council, where he is also chair. He was the inaugural director and professor of the Tasmanian Aquaculture and Fisheries Institute - TAFI - the University of Tasmania; and the director and professor of the Fisheries, Aquaculture and Coasts Centre when TAFI became the Institute of Marine and Antarctic Studies - IMAS.

Mr Pheroze Jungalwalla started working in the aquaculture industry after graduating in 1976, initially with trout, then with oysters and mussels and later with salmon. Since that time, he has served with various companies in senior operations and research manager roles. Pheroze has extensive knowledge of marine farming, having been a pioneer of the salmon industry in Tasmania. Pheroze is now retired from full-time employment but remains the owner and operator of the aquaculture consultancy business, Access Aquaculture. In this capacity he has served on several state and national boards relating to aquaculture, aquatic animal health and welfare and biosecurity.

To my far left is Mr Jock Campbell, a former longstanding councillor and mayor of Clarence City Council. Jock was the managing director and owner of Plastic Fabrications Pty Ltd and designed, manufactured and supplied finfish pens and aquaculture infrastructure throughout Australia and internationally.

I would like to make a brief opening statement.

The Marine Farming Planning Review Panel is a statutory body established under the Marine Farming Planning Act 1995. The functions and powers of the panel are set out in

PUBLIC

section 9 of the act and the members of the panel are appointed by the Governor. The current membership of the panel is as follows. Do I need to read out the membership of the panel?

Mr VALENTINE - What I would like to know, if I can, is which person is appointed according to the list in the act?

Mr PAUL - I was appointed as chairperson. Mr Mitchell Clark, who is not here today, is a person with ability and experience in planning issues who was nominated by the chair of the Resource Planning Development Corporation - it's called something else now; Joanne Fearman, as a person other than the director of the EPA with ability and experience in environmental management; Dr Rod Andrewartha, as a person other than the director of the EPA with ability and expertise in fish health and biosecurity; Professor Colin Buxton, who I've outlined as a person with ability in marine resource management; Mr Terry Long, as a person with ability to assess boating, recreational and navigational issues; Mr Pheroze Jungalwalla, as a person with experience in marine farming; Mr Neil (Jock) Campbell, as a person with expertise in local government issues; and Heather Chong, as a person nominated by the minister.

Can I say at the outset that the panel did not make a submission to this inquiry or when submissions were called. As a statutory body, it was the view of the panel members that the panel's role was to work within the legislative provisions as enacted by the parliament from time to time. I also understand - and I stand corrected on this - that no specific request was made to the panel to make a submission at the initial calls for submissions in October 2019. The panel, however, welcomes the opportunity to appear today.

In appearing before the committee today we are aware that numerous submissions made by interested parties to the inquiry have referenced or commented on a number of matters that have been considered by and been the subject of panel consideration - specifically, what we would call the Storm Bay proposals.

In relation to these submissions we are concerned that some submissions appear to have incorrectly represented the actions and determinations of the panel. I would ask that Professor Buxton and Mr Jungalwalla be permitted to respond to those matters. The submission from Professor Buxton and Mr Jungalwalla is eight pages in length and can be presented in full detail or in summary key point form. We would seek guidance of the Chair regarding this. Either way, we wish to table a full copy of the written submission to the committee, if that's acceptable?

Additionally, prior to concluding our evidence to the committee, Professor Buxton and Mr Jungalwalla would, with the agreement of the committee, seek to give further evidence in camera in relation to matters previously given in evidence by other parties to the committee.

Finally, for the information of the committee I would like to table, if I may, the panel reports for each of the three Storm Bay proposals. We are happy to take questions in relation to any other matters as the committee wishes.

Thank you.

CHAIR - Thank you very much. You're welcome to table those three reports and you're also welcome to table the longer version of the statement that Professor Buxton would like to

PUBLIC

make. We would like to hear the summarised version of that so that we could interact with you about it while we're here.

Ms FORREST - Mr Jungalwalla as well.

CHAIR - Yes, both. A summarised version of the lengthy statement. We will consider the matters in camera at a later stage of the hearing that you feel is appropriate for us to consider that. Thank you.

Prof. BUXTON - Thank you very much. The key points we would like to make in relation to the assessment of Storm Bay are first, that the panel is an advisory body to the minister. Its powers under the Marine Farm Planning Act 1995 include an ability to reject a draft amendment - that's section 33(4)(b) and to reject a draft plan, which is section 29(2)(b).

The second point is that in our assessments all members of the panel are given the opportunity to contribute to panel reports.

The third point is that issues raised by the subject experts during the deliberations of the panel are thoroughly discussed and edits, once agreed by the panel, are incorporated into our reports.

The fourth point is that the previous statement was definitely the case in the evaluation of the Storm Bay proposals. The work of the panel resulted in very significant changes to the draft amendments and to the plan.

The fifth point is that much has been made of the resignation of two panel members during the process of evaluating the expansion of salmon farming into Storm Bay. We believe their comments and the reasons for their resignation reflect poorly on the workings of the panel. They question the integrity of other panel members and have contributed significantly to an erosion of public confidence in the panel. As such, they merit a response.

Both Professor Nowak and Ms Cherrie were party to the finalisation of two of the reports - they being the draft amendment No. 5 to the Tasman Peninsula and Norfolk Bay Marine Farm Development Plan, and draft amendment No. 3 to the Storm Bay North, Trumpeter Bay, North Bruny Marine Farm Development Plan, and they were party to the finalisation prior to their resignation.

The seventh point is that the above two reports and the recommendations therein were unanimously approved by the panel. No dissenting views were recorded.

Professor Novak and Ms Cherrie resigned from the panel towards the end of the assessment of the third report, which is the draft Storm Bay North Marine Farm Development Plan; however, they were both very involved in the assessment of that plan by way of edits up until the time of their resignation.

Lastly, following their resignation, the panel determined there was adequate expertise remaining on the panel to complete the assessment, particularly in the light of the fact that most of the drafting of the report and contributions by members of the panel were complete.

PUBLIC

I will take your guidance now as to how much more detail you would like, as I can address those points in summary form, and certainly we would like to submit the full document to you.

CHAIR - You are welcome to table the full document; we will certainly accept that. WE may ask questions to elicit further detail, unless members would like to hear more detail now on elements of those points.

Mr VALENTINE - It would be good to complete it, I think.

CHAIR - Okay. If you would like to go into a little more detail, that's fine.

Prof. BUXTON - In relation to statements we hear from time to time that the panel has no teeth, in one of the submissions to the inquiry from the Tasmanian Conservation Trust, they state that -

The Marine Farm Planning Review Panel has very important responsibilities to decide on the areas that are made available for finfish farming.

That statement is incorrect. The panel does not determine the areas to be made available for finfish farming; however, as an advisory body to the minister we do have power both to reject the draft amendment and to reject a draft plan. They occur at a particular point in the statutory outline of the act.

In relation to the Storm Bay proposals, the panel began the process of assessing these proposals in June 2016. Very early in the piece we wrote to the minister, noting the complexity of the process, given that there were three separate proposals, two amendments, two existing plans and a new plan area for Storm Bay and all of them obviously related to the same water body, and the panel noted to the minister that the proposals should be considered as a package.

Part way through this process there was a change in panel membership, notably with the addition and strengthening of expertise on the panel, and that included Barbara Novak and Louise Cherrie.

Mr VALENTINE - What date was that?

Prof. BUXTON - It was towards the end of 2017 that they came onto the panel.

Ms FORREST - Was that because of the perceived complexity of the three assessments being undertaken at once, or was there some other reason?

Prof. BUXTON - No, I think at the time there was a belief that the panel in conducting its business could be enhanced by including the specific expertise these two people brought. I believe it was publicly advertised and they were selected based on merit.

Ms FORREST - So not a perceived gap in the skill set, then?

Prof. BUXTON - I don't think so, just an additional complementary skill set.

Mr VALENTINE - Was that by expression of interest?

PUBLIC

Prof. BUXTON - I am subject to correction on this matter, because I wasn't involved in the selection of these panel members, but I believe the way this is done, other than the direct appointment from the Governor, is through an expression of interest.

CHAIR - Can I clarify in terms of the timing of adding those two members that it was after the process had commenced in terms of the applications for Storm Bay?

Prof. BUXTON - That is correct, and that's a very important question because the panel had already passed the stage at which we would have been in a position to reject an amendment or reject a plan.

CHAIR - Particularly, what stage is that? Just to be very clear so that we know when you talk about that opportunity to reject, where does that lie in the actual process?

Prof. BUXTON - This is like being in an exam.

CHAIR - I have a lovely diagram.

Prof. BUXTON - I think it's in section 3 of the act; it's early in the piece. If I can explain in general terms, the minister will receive, either from a proponent or the Government, a proposal to establish a plan. The minister, through his officers and presumably consultation with government, makes a determination as to whether that plan should proceed. The minister obviously has an opportunity to refer that matter to the panel and it's at that stage that a plan could be refused. We've passed that stage.

In relation to draft amendments, the panel will receive a draft amendment and under section 33 of the act has the right to reject an amendment. Further on in the process, once the approval has been provided by the minister to proceed with a plan, the panel then goes through the evaluation of that plan and once again the panel has the ability to reject a plan, at which point the plan would go back to the planning authority for amendment, which would then come back to the panel, and that could on a technicality become an endless loop if the panel were not satisfied with what was in front of them. The panel has power to reject and to make significant changes to plans and amendments.

CHAIR - Can I just pick up on that a little further? You are saying that you were already past the stage of the potential to reject the plan when the two new members were added?

Prof. BUXTON - That's right.

CHAIR - So you'd already conducted hearings and engaged in that process?

Prof. BUXTON - No, we hadn't conducted hearings. What would have happened is that we would first of all receive information that these proposals were on the table. We as a panel would have a contribution to make to the guidelines for the drafting of an environmental impact statement. The proponent would then, in collaboration with the planning authority, go out and draft that environmental impact statement. Once the panel was satisfied that the impact statement was fit for public exhibition, it would go out for public exhibition. The panel also has an opportunity to make a determination as to whether they want to hold a hearing or a public inquiry, and then that process proceeds; we hold a hearing, we take that information together with the planning authority's section 40 report, which details the objections and the

PUBLIC

responses and mitigations to objections, and all of that is put together towards the end of the process in a report written by the panel that then is submitted to the minister with a recommendation.

Mr JUNGALWALLA - Can I add something at this point? As to your earlier question about at what point did it happen, I don't have the details in front of me, but I recall we were provided with a flowchart of exactly the process you're talking about.

Prof. BUXTON - Yes.

CHAIR - I have a flowchart here and it looks to me as though the point at which you're able to reject a plan is after everything has been considered, after hearings have been held, and that's where that is in the process. So that we have a context in which to understand information we've received from different sources, I'm just trying to clarify something about the two new members who joined after that time. After you've made a recommendation - either a rejection or an approval or perhaps a modification - then there is no further role for the panel, so why would the new members have been involved in the process?

Prof. BUXTON - No, that's not entirely correct. The point at which those two members joined the panel would have been prior to us making a determination either to reject the draft amendments or to reject the plan.

Again, subject to correction here, I believe they were serving members of the panel when we chose to reject the plan.

Ms FORREST - Can I clarify? There are two points. One when you first get the draft amendment, or the draft plan. That is earlier in the piece under sections 15 and 16 of the Act, which is Part 3, Marine Farming Development Plans.

Later on, after you have accepted the amendment or the draft plan to assess it, then, from section 41 on, is where you have done the work; you have had the public hearings if you are having them, and all that process.

Then you make a report to the minister where you may recommend that they don't proceed, or that they do.

CHAIR - It is the minister's decision about whether to grant the application or refuse the application for a plan.

Mr PAUL - To clarify, the latter point you are referring to - and correct me if I get this wrong, Colin - the panel doesn't have the capacity to reject it out of hand. They have the capacity to reject it in the current form, and request further modification, which is the continuous loop, as Colin termed it.

Prof. BUXTON - It's different for a plan and for an amendment, obviously, but the panel does have an ability to reject a draft amendment. That part of the process had been passed when Louise Cherrie and Barbara Nowak joined the committee.

PUBLIC

Ms FORREST - Reject the consideration of it. You'd passed the point where you could reject the consideration of it. So when they joined, they joined at a point where you were about to consider the plans.

Prof. BUXTON - That's correct. A very substantial amount of work needed to be done, including the hearings associated with that process.

CHAIR - I think there's confusion here. I recognise that this is very complex. But the panel doesn't have the authority to reject the consideration of a plan. The minister has the authority to do that, at that earlier time.

Prof. BUXTON - That's correct for a plan.

Mr VALENTINE - For a plan or an amendment?

Prof. BUXTON - The panel has the ability to reject a draft amendment, under section 33 of the act.

The panel doesn't have the ability to reject a draft plan. It has the ability to send a draft plan back to the planning authority for amendment, until it is satisfied that the draft plan is fit for purpose.

Ms FORREST - In a never-ending loop.

Prof. BUXTON - It could be in a never-ending loop. That is the technicality I thought merited some mention.

CHAIR - To clarify in relation to Storm Bay, which is where we began this part of the discussion, the things being considered there, are you saying they were amendments or they were new?

Prof. BUXTON - There were two amendments. One was an amendment to the operations of Huon Aquaculture. One was an amendment to the operations of Tassal. One was an entirely new plan, which was to accommodate the operations of Petuna.

CHAIR - The two reports that those two new members were involved in writing were related to the two amendments?

Prof. BUXTON - That's right.

CHAIR - And the one at which they resigned, prior to completion, was the new plan?

Prof. BUXTON - That's right.

CHAIR - And you are saying that they had joined the panel at a stage in relation to those two amendments where a rejection option no longer existed?

Prof. BUXTON - We'd passed the point at which the panel had the power to reject a draft amendment.

PUBLIC

Mr PAUL - If that is rejected out of hand, they still have the capacity to recommend to the minister that the amendment doesn't proceed. That is a very clear point that needs to be made.

CHAIR - Those members weren't there for that. They were there for the latter part of those two amendment locations.

Mr PAUL - The panel at that point could have recommended to the minister that those amendments not proceed.

CHAIR - They were there for the entire process in relation to the new plan that was being sought for Petuna?

Prof. BUXTON - Correct.

Ms FORREST - If I might, Chair. With the amendment that the two members were there for - past the point of rejection out of hand, saying we are not going to look at that. Were they involved in the process of assessment and preparing a report? They were there right to the end of that preparation of report and there were no dissenting comments in the report regarding the amendments?

Prof. BUXTON - That is correct; they were there through that entire process. That gets to a formal point whereby the panel has to make a resolution to approve or to make a recommendation to the minister to approve an amendment. They were party to that recommendation and there was no dissension.

Mr PAUL - That recommendation was unanimous from the panel.

Prof. BUXTON - That is correct.

CHAIR - Do you want to pick up on where you were up to?

Prof. BUXTON - I think we are covering some of the points I wanted to make. I will pick up in saying, again, that the deliberations of the panel led to significant changes being made to all three of our reports and to the proposals on the table.

However, Barbara Nowak and Louise Cherrie in their submission to this inquiry stated that -

Poor functioning of the Marine Farm Planning Review Panel includes the inability to apply sound science, an unwillingness to discuss and learn from changes (e.g. Macquarie Harbour, emergence of POMV [the pilchard orthomyxovirus]), and the propensity to not only provide advice operationally and the propensity to only provide advice operationally convenient to the salmon industry.

As I have said these resignations were seized upon by the press and by others and have been reported in several other submissions to this inquiry, notably from Environment Tasmania, the Tasmanian Conservation Trust, the Greens and the Environmental Defenders Office, as evidence of the poor functioning of the panel.

PUBLIC

The reasons for their resignation, however, were only provided in a letter to Mr Barnett some three months after they had resigned and they were leaked to the press from sources unknown. I suppose it was the contents of that leaked document that we believe reflected very poorly on the workings of the panel, that certainly questioned the integrity of other panel members and we believe have contributed significantly to an erosion of public confidence in the workings of the panel.

Their concerns over the wording of the act, which in their view at the time limited the powers of the panel, to my mind reflected a poor understanding of the act itself and the point of the process at which they joined the panel. They should have come into the process with some knowledge of the act. They should have properly understood where it was in the process that they were making a contribution. We were certainly past the point, as we have already mentioned today, at which the panel had the power to reject either those amendments out of hand prior to evaluation or to reject the plan.

Ms FORREST - To clarify: didn't you just say you can't reject the plan?

Prof. BUXTON - We can't reject a plan, correct; that is a power the panel does not have. The panel could make a recommendation to it.

Ms FORREST - After the assessment, but you can't reject an assessment of a plan.

Prof. BUXTON - Yes, that is correct. The second point that they make - the absence of base information on which they could provide evidence - was very well understood and appreciated by the rest of the panel. However, in our deliberations, the panel came to the view that this could be accommodated and we noted several things. We noted that Huon Aquaculture was already operating in Storm Bay and that Tassal was also operating effectively by way of contributing nutrients to Storm Bay in its current operations.

There was considerable amount of information on Storm Bay in the work done by IMAS and CSIRO that describes the underlying conditions - that there were commitments from all three companies to establish a robust research program that would further provide information on this farming activity; that the historical development of salmon farming; and other aquaculture ventures in Tasmania and Australia in general had proceeded without perfect knowledge and had been regulated under an adaptive management framework that, might I say, is considered to be internationally best practice. The regulator had clearly articulated a slow ramping up of activity while this significant research program was underway, so the argument that there was insufficient base information on which to proceed was by way of our discussion as a full panel rejected, and we proceeded. Their third point - that the panel showed an undue propensity to support what is operationally convenient for the aquaculture industry - is a highly subjective statement. No evidence was led to support the statement and we don't think it merits a response.

They elaborate in their letter to the minister on the reasons for their resignation, and I have responded to that in this document. Do you want me to elaborate on those reasons?

Ms FORREST - I think so, a little.

Prof. BUXTON - Okay. The first point is that they claimed there was a lack of a biogeochemical model upon which to determine the carrying capacity and nutrient transfer

PUBLIC

within the lower Derwent Estuary, and that was a fundamental shortcoming which prevented us from proceeding any further.

Again, this was very well understood and thoroughly considered by the panel. The panel noted the existing farm inputs via Huon Aquaculture and Tassal, which I mentioned earlier, were existing inputs through current operations. Huon Aquaculture, for example, wasn't asking only to expand its production in Storm Bay - they were already there; they were operating, their pens were in place and they were making a contribution to the area.

The panel's job at that time, in the case of Huon Aquaculture, was primarily to look at concerns levelled around biosecurity issues and how we managed the onset of POMV, which was becoming an increasing problem within that farming industry. The lack of a biogeochemical model, in the opinion of the panel, was insufficient for us to say, 'Stop - no further. We have to do an enormous amount of research work to get perfect knowledge and then only proceed with farming'. That is not how adaptive management works; in fact, that is not even how the precautionary principle should be applied in an agricultural context.

Mr VALENTINE - I was going to ask that question. Is there a difference between adaptive management and precautionary principle management of -

Prof. BUXTON - Certainly there is a difference.

Mr VALENTINE - No, but is it that the people who resigned had the precautionary principle as their main thesis while the panel was operating under an adaptive management approach?

Prof. BUXTON - Neither of them specifically stated they had problems with the application of the precautionary principle in the context of Storm Bay, but Louise Cherrie was certainly concerned that the adaptive management framework under which salmon farming is conducted in Tasmania was insufficient, not fit for purpose; I will deal with that later on.

At this point, I should state that the industry aspirations for Storm Bay, when initially stated, were to produce 80 000 tonnes of fish. The applications we were reviewing in total were addressing an increase or a production limit of 40 000 tonnes.

The EPA took it upon itself, prior to going any further, to limit that further to 30 000 tonnes, and that included the existing production of Huon Aquaculture. If the panel were looking at this from the perspective of a precautionary increase in farming in Storm Bay, we already had about 8000 tonnes of production from Huon Aquaculture contributing to that 30 000 tonnes. We were clearly of the opinion as a panel that if they were approved to go ahead, Tassal would take time before they could actually occupy that space, and Petuna was much further behind in that race to occupy the space.

In terms of the state of knowledge we have in Storm Bay and whether it was sufficient to proceed in a careful way, our view as a panel was that we had plenty of time to do research to understand issues like nutrient inputs that you get out of biogeochemical modelling.

Mr JUNGALWALLA - My memory is that the 30 000 tonnes was a staged increase to that point; it wasn't straightaway. Is that a correct, Colin?

PUBLIC

Prof. BUXTON - Absolutely.

CHAIR - We have to be mindful of our time. We have a lot of questions and we're not necessarily again prosecuting the decisions made there; we're interested in the process certainly and it's where I think our questions will be directed, most likely. By all means, keep going but be mindful that we will get to a point where we can -

Prof. BUXTON - So keep going but speed up. Okay. They make five points as reasons for their rejection. I am not going to go through all of those because they're outlined in this thing. They were concerned about a biosecurity plan. Again, the panel considered that thoroughly. They claimed there were no regulatory guidelines around which to define standards to which we should be holding the operators. We reject that on the grounds that the management controls stipulate those standards.

As I said earlier, Louise Cherrie in particular was concerned about the adaptive management strategy not being fit for purpose, and I deal with that in some detail.

Last, they claim that there were no natural values for Storm Bay and that these were not considered and mapped. Again, that's incorrect because there's been considerable mapping of the natural values of Storm Bay, and they are described in some detail in the Integrated Marine and Coastal Regionalisation of Australia, version 4.

In terms of their functioning on the panel, I think we have said enough about our view that both of these panel members consulted extensively on matters of concern in the drafting of our reports. By way of example I'd like to table an appendix that outlines in some detail those contributions. Because it was a complex evaluation and all of us were struggling to keep abreast of everything that was going on, we were evaluating three things concurrently. The planning authority did an excellent job of keeping us on the straight and narrow by documenting every time Pheroze Jungalwalla, for example, came along with a list of edits and how they were dealt with. By way of an example, this is just for the Trumpeter Bay assessment, and you can see pages and pages of editorial, which is a clear demonstration that they made significant contributions -

Ms FORREST - Which guided the writing of your report at the end of the day.

Prof. BUXTON - This is the writing of the reports and our consideration of all the individual issues contained within the environmental impact statements which leads to the substance behind our recommendation to the minister.

Mr VALENTINE - This is a document to pull all that together, not something produced earlier?

Prof. BUXTON - No, this is just a document for me to demonstrate to you that -

CHAIR - The sequence of events when you were writing your report.

Prof. BUXTON - Yes. The editorial and other changes the panel made were derived through discussions. This assessment involved seven meetings of the panel, four of which were full-day workshops, extensive email exchanges between panel members - we use that as a methodology of discussing things - and 15 separate expert briefings from the likes of the IMAS,

PUBLIC

the Chief Veterinary Officer, the EPA, DPIPWE, industry proponents, and Professor Larry Hamel, an international expert on biosecurity. All that is pulled together, summarised in this document and is the substance of our report.

As we have stated before, these reports and recommendations, at least for the two amendments, were finalised and unanimously approved. I have given you an example of an email exchange that I'd really like you to look at. Not only is it a respectful and detailed analysis of a particular issue, it concludes with a statement from Barbara Nowak that says 'Great minds think alike'. Hardly the sort of thing that you would expect from somebody who is thoroughly disaffected by the process.

CHAIR - You're tabling those two documents with us? Thank you.

Prof. BUXTON - Yes, they are a part of my submission. These probably have scribbles on them; Andrew, can you -

Mr PAUL - I have full sets of that to hand up.

Prof. BUXTON - It is disingenuous and plainly wrong for these panel members, Barbara Nowak and Louise Cherrie, to state that they were not allowed to do or say anything during our deliberations. Through discovery, it is very clear that is an incorrect statement.

As I said before, in any event they could have recorded their opposition or abstention from any individual resolution taken by the panel. It never occurred.

Ms FORREST - On that point, you would have copies of minutes of each meeting where decisions were made?

Prof. BUXTON - We do, yes.

Ms FORREST - Maybe for completeness, you could send us a copy of the minutes.

Prof. BUXTON - Of the entire set? We can do that.

Ms FORREST - How many meetings are we talking about?

Prof. BUXTON - I think we're talking in excess of 26 meetings. I think they are probably on the departmental website. Can we take that on notice?

Mr PAUL - They are kept by the Marine Farming Branch. We will inquire and ask them to forward them.

Ms FORREST - Thank you.

Prof. BUXTON - With specific reference to pilchard orthomyxovirus - POMV - and the global salmon conference you have probably heard about - this relates to biosecurity concerns we all had about three companies farming in Storm Bay - the panel considered these issues very carefully.

PUBLIC

We took advice and we took the edits of Barbara Nowak in particular on numerous occasions. All of these things were carefully considered and were signed off by the entire panel through resolution. Again, I will keep repeating: we had no dissenting views in the lead up to the acceptance of our reports.

It is fair to say that world's best practice in the salmon industry suggests that as far as possible you should have a single operator in a single water body. There are practical impediments to doing that. There are particularly practical impediments to doing that in a case like Tasmania, which has very limited spaces to go farming. However, that is not the only consideration that relates to virus security concerns. This is where we used the expertise of Larry Hammell quite explicitly. There is a very long list of things that companies should do in order to minimise or mitigate the risks associated with disease transfer in a single water body.

Mr VALENTINE - Could you remind us who Larry Hammell is?

Prof. BUXTON - Larry Hammell is an international expert on biosecurity risks in salmon farming. He is from the -

Mr JUNGALWALLA - Prince Edward Island. He consults internationally. He was brought out to give us some advice.

Prof. BUXTON - The panel looked at all the issues associated with biosecurity management. I won't list all of them, but it is things like all fish in, all fish out, adequate following -

Ms FORREST - Little fish in one spot, big fish in another.

In terms of having one operator in one water body, would you say that having more than one in one water body, Macquarie Harbour, was part of the problem there?

Prof. BUXTON - Certainly, it was perceived to be a risk, and it will still be a risk. There are lots of things we believe can be done to minimise that risk and they are all contained in the management controls recommended by the panel.

Mr JUNGALWALLA - Can I add something at this point in terms of biosecurity specifically? The panel was presented with a modelling of circulation of Storm Bay, seasonal variation and inter-annual variation by Rod Andrewartha, and it showed, to put it bluntly, there is no area in Storm Bay which could not experience some fish pathogens being there. As Colin has said, biosecurity is not just one item. If you can't keep pathogen hosts apart, there are other things you can. On that basis there is nowhere in Tasmania really where you can say, 'Oh, we only have one operator' as opposed to other countries.

Prof. BUXTON - You cannot eliminate the risk, you can manage it.

Mr JUNGALWALLA - There is no such thing as zero risk.

Ms FORREST - I am not suggesting that, but I am saying that more than one operator in Macquarie Harbour contributed to the damage done there. It was trashed, we know that.

PUBLIC

Mr JUNGALWALLA - I guess it would have been easier had there not been three operators, but one operator operating individually could also have caused a problem. It is a risk assessment.

CHAIR - In clarifying that, I hear what you are saying - that it is not just a matter of a number of operators in an area or potentially the proximity of the operators in the area but there are other factors that come into play to either minimise or exacerbate the risk. In terms of Storm Bay, the decision to have three operators as opposed to two - is that what you were referring to when you said there are particular circumstances in Tasmania that have to be considered? As in, you can't leave one operator out?

Prof. BUXTON - No, what I meant was that if you had the luxury of, in a simplistic way, farming salmon in a fjord and you had three companies and three fjords separated geographically, the smart move would be to put one company in each of the three fjords. That is what goes on in other parts of the world. We know that the proximity of companies in South America led to significant disease problems and the industry there coming to the verge of collapse. It has taken a long time to recover.

Notwithstanding all that, if you are forced to accommodate three operators in a single waterbody, quite a large waterbody I might say, there is a whole list of things other than physical separation that very strongly mitigate the risk of disease.

CHAIR - I have heard you say that. What I am interested in though is this concept that we are forced to accommodate three in a single body. What is the imperative that forces us to accommodate three in a single body? We could, I am assuming, contemplate two or one, any of the options. If science indicated two were safer and more appropriate than three -

Prof. BUXTON - I think that is a valid point, but it is certainly not the panel's job to try to drive that.

CHAIR - Was the panel then instructed to accommodate three in Storm Bay and have that as an underlying assumption to decision-making or advice provided?

Prof. BUXTON - The panel was not asked to make the determination that three companies would exist in Storm Bay.

CHAIR - That is not what I asked you. I understand that was not your decision, but were your instructions as fundamental as three companies would be accommodated in Storm Bay and the panel had to provide advice and make its analysis and assessment on the basis that three would be there?

Prof. BUXTON - Yes, that is a fact.

Mr PAUL - I think we are misinterpreting the question. I do not think the panel was instructed to provide; I was not part of it but having read the history of it.

Mr JUNGALWALLA - If I may, the Government declared a no-grow zone and a grow zone as part of the plan. A large area in Storm Bay was excluded and a large area was included. My understanding is that three companies put in proposals. I know for a fact that where the companies chose to go was subject to a lot of discussion between the companies and the Marine

PUBLIC

Farming Branch, and they had to move and accommodate because many things were taken into consideration.

There were shipping channels, recreational fishing considerations, rock lobster reefs et cetera. Where they ended up was subject to quite a lot of negotiation and juggling. We were not party to that. So there was no instruction from anybody to say, 'You will have three people there.'. We were presented with this as what had to be assessed. That would be my summary of where it came from.

CHAIR - My question really related to the fact that international understanding of best practice would be separate areas for separate companies, but that is not always necessary or possible. Given that there were two companies already there and you were asked to assess a third, is it your understanding that the expectation was a third would be accommodated regardless of what may be best indicated around biosecurity and those other factors that they would be accommodated into that area?

Prof. BUXTON - The panel did not make the determination that there would be three companies operating in Storm Bay. The panel received an instruction from the minister to evaluate both the two amendments and the plan. In that sense, the panel was requested, instructed and clearly understood that there were three items for consideration on the table. We could have made a recommendation to reject any of those things at an appropriate point in the process. First of all, we were not asked that question in terms of the plan, which related to Petuna's presence in Storm Bay.

CHAIR - You weren't asked what question?

Prof. BUXTON - We weren't asked to comment on the approval of the plan. We were asked to evaluate the plan.

Mr PAUL - To be clear, I don't think the panel was ever instructed, as part of that request from the minister, to consider it a third company per se. It was put forward as three proposals. The operator is, by and large, irrelevant. There were three proposals that the panel was instructed to evaluate.

CHAIR - My understanding would be, though, that as part of your assessment of risk around biosecurity, the fact that there was more than one company is a very pertinent factor to be considered.

Mr PAUL - You're absolutely right. I'm just trying to differentiate that the panel wasn't instructed to allow three operators. They were considering three proposals and inherent in those, the panel's consideration was that it was three different operators. They weren't instructed to provide for three different operators.

Mr VALENTINE - So you were asked to assess the three proposals individually, as opposed to collectively?

Prof. BUXTON - We were asked to assess them individually. We wrote to the minister requesting to assess them as a package, and particularly with respect to the hearings, we asked that we could hold the hearings concurrently so that members of the public could get their heads around things as well.

PUBLIC

Ms FORREST - Did you also want to assess the combined impact?

Prof. BUXTON - Absolutely. The combined impact was critical to all of our evaluations.

Mr VALENTINE - So that's not outside your brief? You can look at the combined impact of those three, even though you're looking at each one as a separate plan.

Prof. BUXTON - I think the way the act is written we are expected to evaluate each proposal on its merits independently. The fact that these proposals came in pretty much at around the same time and were pertinent to the same waterbody prompted the panel to request that we do much of the evaluation concurrently. When you are talking about farming in the same waterbody, what applies to one applies to the other. If you scrutinise the management controls, for example, they are very generic in terms of what we wanted all three of these proponents to do by way of operating in Storm Bay.

I mentioned earlier that I had a bit to say about adaptive management. Several of the submissions to this inquiry address concerns around adaptive management and a lot of them make particular reference to failures in Macquarie Harbour. For example the Tasmanian Alliance for Marine Protection, the World Wildlife Fund and the EDO as well as the submission from Louise Cherrie contend that adaptive management has failed in Macquarie Harbour and as an inadequate management strategy, that is out of step with contemporary industrial operational practices - these are Louise Cherrie's words.

Louise claims to be an expert on the subject and asserts that she formed the view that Storm Bay developments should not proceed but that she was unable to influence the panel. We categorically reject that statement. Louise was very involved in the two assessments and made significant contributions to the report we wrote on the plan, and was able to influence us where it had merit in terms of what we did.

Ms FORREST - The minutes will reflect these decisions, clearly?

Prof. BUXTON - Absolutely. As you will see, they were unanimous and there were no dissensions.

In the interests of time I won't go through what I've written here, I'll leave that to you. Louise summarises what she sees as good adaptive management in her submission. I've provided a statement against each of those three comments which I believe arrive at a different conclusion. We believe as a panel that there is a clear regulatory framework for the salmon industry in Tasmania through the Marine Farm Planning Act and the Environmental Management and Pollution Control Act, and in this context it can be argued that the adaptive management regime proposed for Storm Bay meets the above objectives, particularly in the context of the precautionary ramping up of production in the presence of sound monitoring and research.

The application of the precautionary principle must be accompanied by some sort of scientific evaluation of risk. A mere fantasy isn't sufficient for the application of the precautionary principle. The application of good and sound adaptive management is again something you do in the context of an activity. You can't begin to apply adaptive management and derive an outcome if there isn't an activity, so it's almost nonsensical to suggest that

PUBLIC

adaptive management was insufficient, particularly with reference to Macquarie Harbour. I don't believe the panel made any mistakes at all in its recommendations to go ahead with the development in Macquarie Harbour. What is clear with 20/20 hindsight is that we didn't have a proper understanding of some of the environmental conditions in that waterbody and they have led to significant environmental damage, but I stress -

Mr VALENTINE - Doesn't that point up that the precautionary principle might have been best applied there rather than the adaptive management process?

Prof. BUXTON - Not necessarily, because the precautionary principle suggests that you need some scientific evaluation based on data of a threat of irreversible harm. That did not exist when we went into that expansion in Macquarie Harbour. It exists now and we would very definitely operate differently to what we did in Macquarie Harbour, but all the way through this we need to bear in mind that what has happened in Macquarie Harbour is not irreversible harm. We've gone in; we've done something; we've learnt our lesson, and we're applying a different management regime and a different stocking density and it will recover. It might take time, but it will recover. Irreversible harm is what we are trying to avoid. Macquarie Harbour is a very different waterbody to Storm Bay. There's no comparison between the two.

CHAIR - I don't think anyone's making a comparison. I'm just going to pick you up on a couple of things there to go into a little bit more detail.

Irreversible harm is an extreme, and you stated just then that we didn't have irreversible harm in Macquarie Harbour, but we had a hell of a lot of harm. I think most people's reasonable objective would be to reduce harm as much as possible rather than just avoid irreversible harm. To come back to that, the thing that is similar potentially between Macquarie Harbour and Storm Bay is that you have stated there wasn't potentially sufficient scientific understanding of the environment before the activity was put into that environment and then had adaptive management applied to it.

I think the argument we are being presented with by some people in submissions and hearings is that the same set of circumstances, from their observation, has applied in Storm Bay - that there hasn't been sufficient baseline data and scientific understanding of that environment before the activity was put into it or significantly expanded in it. While adaptive management of course applies once an activity has taken place, there is a precursor to effective adaptive management, and that is a sufficient and robust understanding and baseline data. That is the argument being made to us, I believe - and correct me if I am wrong - by various people.

Can you respond to the lack or insufficiency of the data and the scientific understanding? Why aren't we just mirroring in process the same thing that happened in Macquarie Harbour, even though it's a different environment, but the process being understanding activity then?

Prof. BUXTON - We proceeded in Macquarie Harbour based on a model that had been constructed by industry which we now know with hindsight had some fundamental flaws in it. Models are garbage in, garbage out; they're not a perfect understanding of any system. By necessity, they have to be a simplification of a system.

The experiences, both locally and internationally, suggested to us that we could go in based on that model and begin to ramp up production. We could not have anticipated the

PUBLIC

number of things that led to the dramas we had in Macquarie Harbour. We could have had a better model perhaps, but we need to understand that the federal government placed a significantly lower limit on the expansion of Macquarie Harbour than was being proposed by either the industry or this Government, and with that highly precautionary -

Ms FORREST - Which would have had a better outcome had they stuck with that.

Prof. BUXTON - Well, not necessarily. It's very easy to sit here now and suggest that it is bleedingly obvious that we did the wrong things in Macquarie Harbour, but I'm not sure that is a fair assessment.

CHAIR - We are looking at how we have learned from that and therefore how an argument could be made, potentially, or defended, that the process for Storm Bay, the starting point, was a sufficient understanding, a sufficient amount of data and sufficiently accurate appropriate modelling. Rather than reflecting back on Macquarie Harbour, which I am not asking you to re-prosecute, I am asking you to reflect on how that is taken forward.

Prof. BUXTON - Okay. In a very general sense, Storm Bay is a very different waterbody to Macquarie Harbour. If we were going to learn lessons about farming in the open ocean or the marine realm, we wouldn't be looking at Macquarie Harbour as being an example of how we should be proceeding.

CHAIR - I am asking you to reflect on lessons learned about process, not scientific lessons learned about similar environments.

Prof. BUXTON - Okay. Sorry, I didn't mean to misunderstand your question. I don't think the panel can be accused in any way, shape or form of an inadequate process in the assessment of either Macquarie Harbour or Storm Bay. We followed a very clear path and took all the information at our disposal. I was involved in that assessment. It was a very careful and very thorough assessment and we believed it could progress under the adaptive management framework that existed in Tasmania.

CHAIR - You had enough information available, there was enough modelling, enough data -

Prof. BUXTON - We had enough information, but the panel at the time highlighted deficiencies in our knowledge and, once again, we went out and insisted that the approval of expansion in Macquarie Harbour was accompanied by a robust research program which we now have at our disposal that makes it much easier for us to say we could have done it differently.

Mr JUNGALWALLA - Briefly, to try to answer your question - and please correct me - my understanding would be that the development proposed in Storm Bay is based on much more information about the system in Storm Bay than it was in Macquarie Harbour and the steps of gradual expansion are much more modest in Storm Bay than Macquarie Harbour. Does that answer your question?

CHAIR - That is useful information in response to my question.

Mr JUNGALWALLA - Is that correct, Colin?

PUBLIC

Prof. BUXTON - We certainly know quite a bit about the basic models around Storm Bay. There has been some baseline information; there is an existing farm in Storm Bay which is being monitored regularly. There is quite a lot of science around the impacts of Huon Aquaculture's activity in Storm Bay. The fact that it is open ocean and a highly dynamic environment suggests that the risks are much lower. The particular issues we were confronted with in Macquarie Harbour simply do not exist in Storm Bay; they are not low DO levels and all of that sort of stuff.

Ms FORREST - The difference here is we are not trying to compare the two. As the Chair said, we are trying to learn lessons about the assessment process. To drill down to a couple of points there, from what you have said, it seems there was inadequate data on Macquarie Harbour to fully understand the impact and the nature of the waterbody. There has been more work done since which gives you more information. What is an adequate level of baseline data that you require before being able to fully assess and either recommend or recommend rejection of an amendment or a plan?

Prof. BUXTON - As is outlined in the environmental impact statements, there is a number of criteria the proponent needs to address in terms of our basic understanding of the environment, things like whether there has been a survey of the benthic environment over which this farming is going to take place.

Ms FORREST - Within what period of time would that be needed? This is the sort of information we need. What is adequate baseline data?

Prof. BUXTON - That sort of information needs to be done prior to our evaluation. We need to have some basic understanding of the environment and the likelihood of impact on critical habitat like reefs or important fishing areas. That stuff has to be done beforehand.

Ms FORREST - And if it's not?

Prof. BUXTON - We would just reject it.

Ms FORREST - Even though it is a plan? You can't reject a plan. How can you reject it?

Prof. BUXTON - We would send it back to the planning authority.

Mr PAUL - That is the loop; you can't reject it out of hand. You keep sending it back requesting further information.

Ms FORREST - I get that. I go back to the question: what is the adequate baseline data that you need to enable you to undertake the assessment and prepare a report?

Prof. BUXTON - Off the top of my head I can't answer that question other than to point to the numerous things that we assess in an individual environmental impact statement.

Ms FORREST - Is there something you could put together for the committee that outlines what would be considered to be adequate baseline data in terms of what you need in terms of the environment? For example, in the north-west there are no farms at this stage, so

PUBLIC

what do you need before you can assess a plan that is put on your table at some stage in the future by Petuna to say, 'We want to put a farm here'?

Prof. BUXTON - The planning authority will give a proponent a guideline on which the proponent will have to write an environmental impact statement. It will include a number of specifics that need to be ticked in order for the -

Ms FORREST - No, I want to know what the panel believes is adequate information regarding the baseline data that would enable you to do your job without having to keep going back to this loop of frustration.

Mr PAUL - I can answer that in a slightly different sense. Is it appropriate to provide for the committee the initial response - and I am sure it is available somewhere - from the panel back to the planning authority in terms of their initial request of the company in relation to what data needed to be provided as part of the EIS?

Ms FORREST - That might be helpful.

Mr PAUL - I am sure an original draft EIS was prepared and the panel would have commented on that as part of the Storm Bay process.

Ms FORREST - What we hear repeatedly, within the hundreds of pages of submissions we have, is that there is inadequate baseline data.

Prof. BUXTON - I think that baseline refers to our understanding of the benthos. It is suggested there was inadequate baseline data. That is a survey of the area which is usually done by IMAS and would include everything from the depth profile, the sediment profile, the flora and fauna profile and the proximity to critical habitat. All those are what we would call a baseline knowledge set against which you could say, 'This is a good place to go farming'.

Mr VALENTINE - Is that called a biogeochemical model?

Prof. BUXTON - No.

Mr VALENTINE - It's not the same?

Prof. BUXTON - No, a biogeochemical model is something completely different. It's a model that actually predicts what would happen in this environment if you were to add significantly more nutrients predominantly.

Ms FORREST - Let's go back to the baseline data. I just want to keep going on this until we get to an end.

Prof. BUXTON - The baseline data, for example, for Okehampton Bay was a survey conducted by IMAS that produced a report which stipulated the characteristics of the area - that the baseline data, it stipulates -

Ms FORREST - Do you need to have that? This would include currents; it would include temperature, it would include all those other measures.

PUBLIC

Prof. BUXTON - That's right.

Ms FORREST - Over a period of time, is there a requirement you have two years of data or -

Prof. BUXTON - No, it's a requirement to have a sufficient understanding of the environment within which we work. I don't think it's two years of data, but we would expect there to be some seasonal data relating to current and temperature so when we look at these things we have a report and it's part of the environmental impact statement that actually shows us what is the current regime. It shows us what's the likely diffusion that was done through the simplistic column model. It shows us the depth profile; it shows us the proximity of important reef habitat life; it shows us where other operators -

Ms FORREST - So you need at least 12 months if you're going to get seasonal data?

Prof. BUXTON - You'd need 12 months if you want it to be seasonal.

Mr JUNGALWALLA - I think we're going around and around this discussion. You're looking for a numeral answer of how long do you need and what data do you need. With the utmost respect, I don't think anybody can actually provide a definitive answer to that because what it amounts to is looking at an appetite for risk. What appetite for risk does the state, the country, the industry -

Ms FORREST - Who sets the appetite for risk?

Mr JUNGALWALLA - The Government has to set it.

Ms FORREST - Right.

Mr JUNGALWALLA - What I am saying is that I don't think anybody can produce a numerical value of how long or exactly what data is required, because you can always ask for more or you can always seek more. At some point you've got to say, 'We've looked left, we've looked right, we're going to cross the road or not cross the road'.

Mr PAUL - For the guidance of your committee, the initial panel's comments to the draft EIS request that would have gone to the proponent would be helpful.

CHAIR - To pick up on that, are you then, as a panel, provided with an indication of appetite for risk such that then you can decide, 'Have we enough information to be able to make an assessment according to that risk appetite or not?'

For example, you mentioned earlier, Colin, that the lack of a biogeochemical model in relation to Storm Bay was decided by the panel to be okay because you felt you had enough other information available to you.

Prof. BUXTON - The lack of a full biogeochemical model was not perceived to be a requirement. We had a preliminary model which modelled diffusion within Storm Bay and gave us a good sense of just how connected these farms might be. It gave us an understanding of what the fate of nutrients might be, where would they go. We had that kind of baseline

PUBLIC

understanding but we demanded that the Government needed a far more thorough understanding if it was going to regulate this activity in its entirety.

CHAIR - But that would be developed over time while the activity was expanding and being undertaken.

Prof. BUXTON - Yes, that's right.

CHAIR - To come back to that in terms of setting the appetite for risk, how are you instructed, informed, provided with an indication of that to take into account?

Prof. BUXTON - It's not the panel's responsibility to assess -

Mr JUNGALWALLA - To answer that question, we are not provided with the appetite for risk. My view - and perhaps view of other panel members - certainly is that we give advice based on what we are looking at here - do we think it's a reasonable proposal to recommend to the minister? The minister decides yes or no. So the appetite for risk in itself is not our concern. What I can say is that the panel resolved in all these cases to say, 'On balance, we think this.'. That applies to environmental management as well as biosecurity.

Prof. BUXTON - And everything else. It applies to social and economic criteria as well. We as a panel evaluate whether these proposals are going to have any impact on other marine activities.

If they are going to have an impact on sailing, we spend a lot of time working out what we can do to mitigate those concerns. It is not just an environmental issue.

Mr PAUL - There is no line drawn in the sand; this is where our risk appetite sits. The panel makes its own collective judgment as to whether the level of risk is acceptable or practical.

CHAIR - I am mindful of time. We have 10 minutes left. Did you want to request to go in camera for part of this briefing, or would you like to cover more material in the open hearing.

Mr JUNGALWALLA - I'd appreciate it if we could have at least five or 10 minutes.

Prof. BUXTON - One of the representations you received from Rebecca Howarth criticised the behaviour of the panel in a hearing. We would like to submit a recording of those hearings which you can listen to. As a panel, we reject any assertion that the hearings were conducted in a disrespectful manner.

CHAIR - Thank you. You have tabled that there. We will collect that.

Mr PAUL - The three reports - it is noted there separately the relevant section in relation to it.

Ms FORREST - If you want to go into camera. You can send an answer to this to the committee.

PUBLIC

We have the eternal loop of frustration. I am wondering if, you as a panel believe there needs to be any amendment to the current act to make the role of the Marine Farming Review Panel more effective, more efficient and more able to achieve the outcomes? Including even pie in the sky expectation that you can actually reject a plan later on once you have done all the work, rather than have to recommend to the minister, for example, that it shouldn't proceed, you can reject it.

I want you to think about that and provide that information to the committee later.

CHAIR - That could be a long conversation.

Ms FORREST - Which we don't have time for now.

Mr PAUL - What extra consideration would -

CHAIR - We'll send that to you in writing, to respond to.

Mr PAUL - That would be good, just to make sure we are answering the right question.

CHAIR - I take it you would like to make a request to be heard in camera?

Ms FORREST - You need to explain why. What is the need for it to be in confidence, and we can deliberate.

Mr JUNGALWALLA - It's to do with what we perceive as inappropriate behaviour, unprofessional behaviour, by the two people who made representations.

Mr PAUL - In particular in relation to a perceived conflict of interest that was not declared.

CHAIR - We're going to ask you to leave the room for a moment while we deliberate on that request.

We are going to turn the broadcast off, thank you.

[IN CAMERA EVIDENCE GIVEN FROM 11.09 a.m. TO 11.17 a.m.]

CHAIR - We are out of camera and will get Rob's question on the record.

Mr VALENTINE - Can you just describe how you deal with conflicts of interest whenever you are dealing with a matter? If I can set some context, obviously you each have different interests in terms of your roles in other places. I think you mentioned lobsters and a few other things, but I wasn't quite sure exactly how many there are. Can you describe how you deal with that?

Mr PAUL - I'm going to ask my colleague because whilst I've been the chair for a short time, I have only chaired one meeting to date. That's all that's occurred. I will add something in a minute.

PUBLIC

Prof. BUXTON - The panel has a conflicts of interests register that is regularly updated, and at the start of any meeting the chair asks whether there are any declared interests associated with the business of the meeting and if there are, they would be handled in an appropriate way.

Mr VALENTINE - What would the appropriate way be?

Prof. BUXTON - The person who had declared the interest would be asked to leave the room and the panel would then discuss whether that was a perceived or material conflict of interest and make a determination as to whether that person should be present during that discussion and particularly the decision-making of the panel. I think that is a fairly standard way of handling conflicts of interest, but I might also add that the panel has been given the opportunity to do a course in handling conflicts of interest.

Ms FORREST - Special development.

Prof. BUXTON - That's what I was looking for, thank you.

Mr PAUL - Can I also add that in my capacity as chair, going forward my expectation is the old maxim, 'If there is any doubt, get out' in terms of participating in a particular matter, and that is a -

Mr VALENTINE - So does declaring an interest and staying in the room depend on what level of interest it is?

Mr PAUL - Correct, but if there is any question in my mind, my expectation is that the panel member would exclude themselves from that.

Mr VALENTINE - Would it be up to the panel member or you as chair?

Mr PAUL - I suspect my firm advice would be if in doubt, get out, if I can paraphrase it that way.

Mr CAMPBELL - The other point is that the agenda always lists quite clearly interests, so that it is not -

Ms FORREST - 'Declarations of interest' appears on your agenda.

Mr PAUL - It is on the agenda itself, always has been.

Mr JUNGALWALLA - At the time of appointment to the panel there is also a request to declare anything of interest. For instance, my wife and I had shares in Huon Aquaculture, \$6000-worth. I was required to sell them, and that was fine, not a problem. Anybody on the panel is supposed to declare any pecuniary interests and we are told that.

Mr PAUL - That is a preliminary matter to being appointed to the panel.

Mr VALENTINE - Is it only pecuniary interests that you do conflicts of interest on or is it other things as well?

PUBLIC

Prof. BUXTON - I think it's all related interests.

Mr VALENTINE - Thanks for answering that.

CHAIR - One quick question, and you may need to provide this to us later in writing if we don't have time for a full answer, but I am interested in the independence of the panel. There are stakeholders involved that you have direct interaction with and you would be interacting directly with the marine branch and the department. You have processes where submissions are made and hearings held where members of the public and other groups interact with you. What does it look like, in terms of interaction with industry, with the companies? Are there particular defined and accountable points of interaction and contact between the panel and companies or industry, or is there an open interaction there?

Prof. BUXTON - I would characterise it as being formal, so the panel will make a request of industry to appear before the panel in a preliminary sense - for example, to outline a particular amendment or plan. They will come in at a specified time on the agenda, make a presentation, be given an opportunity to answer questions from the panel and then get out. If we come across a technical matter, we have the ability to call on anybody to appear before the panel, and that happens on a fairly regular basis, but it is certainly not restricted to industry. We pull experts in on a regular basis to help us.

CHAIR - In terms of communication between the panel members and industry, would that always be on a formal basis? Would we always be able to see in an accountable way those points of contact, either in formal correspondence or formal agenda items and interactions in meetings, so there wouldn't be regular or informal interactions or communication about the business of the panel with industry separate to those formal channels?

Prof. BUXTON - No, I think it is all formal.

CHAIR - Thank you. I think we've gone a bit over time but thank you for your time today; we appreciate you coming here and having the discussion with us. I know we have asked to follow up with you about couple of matters. We will put that in writing and send it through so it is clear what we were asking for in terms of further details.

Mr PAUL - I think I have captured those but if they could be put in writing, that would be good.

CHAIR - Andrew, is there anything you would like to say in closing before we finish?

Mr PAUL - No, I think we have covered every matter, other than these matters which I will hand up, copies of the reports. I will get you the requested information as soon as practicable. Thank you for the opportunity to be here today.

CHAIR - Thank you, gentlemen.

THE WITNESSES WITHDREW.

PUBLIC

Mr HAYDN SLATTERY GENERAL MANAGER, AQUAFEED WAS CALLED, MADE THE STATUTORY DECLARATION, AND WAS EXAMINED.

CHAIR - Welcome, Haydn. My name is Meg Webb; I am the member for Nelson and the chair of this inquiry. Joining me is Rob Valentine, member for Hobart; Ruth Forrest, member for Murchison; and Mike Gaffney, member for Mersey. We have also Jenny and Ali, and Roey from Hansard assisting the secretariat.

Thank you for your time today and for getting the technical matters sorted, so that we can hear you if not see you.

Mr SLATTERY - Thank you.

CHAIR - Let me begin by introducing a couple of formalities. This is a public hearing for the Government Administration Committee A Subcommittee Inquiry into Finfish Farming in Tasmania. The evidence taken in this hearing is protected by parliamentary privilege. I remind you that comments you might make outside the hearing may not be afforded such privilege. The evidence is being recorded. It will be recorded by Hansard and put on the committee website when it's available. It's also being broadcast. You do not need to be sworn in because you are not in Tasmania. Would you like to begin by making some opening remarks?

Mr SLATTERY - Yes, I will. My name is Haydn Slattery. I am the general manager from the Aqua Feed division of Ridley Corporation. Ridley Corporation is the largest commercial provider of animal feed in Australia, with 21 manufacturing sites across the country.

In particular, we manufacture ingredients for the aquaculture, dairy, poultry, pig and pet food industries. Our company has been operating for over 75 years in Australia.

In particular, Aqua Feed has been operating for over 30 years, providing salmon feed into the Tasmanian industry, predominantly from our site here in Brisbane. However, that changed in 2019 when we built a brand new site in Westbury. Over the years Ridley has invested many millions of dollars in research and development, particularly around salmon farming and helping to improve salmon farming processes in Tasmania.

Ridley recently secured a \$10 million project which received federal funding support to investigate temperature effects on salmon, which is quite important for the meeting we're here today to discuss. That investigation is to really dig into the temperature effects, the physiology and the health effects on animals, in particular in warm environments.

The Tasmanian industry, as you'd be aware, has around 2500 direct jobs and around 6000 indirect jobs, and is a leading industry in Tasmania. Ridley is concerned that the proposed salmon grow zones provide few opportunities for the industry to expand. In particular it's concerned that some of the areas are in zones where the temperature of water is outside the ability for salmon to grow and thrive, and that oxygen levels in those areas would not maintain the healthy growth of animals.

The industry understands that good farming site selection is imperative to enable healthy growth of salmon, in particular ensuring that the right infrastructure is also available in those

PUBLIC

areas. Ridley is further concerned that some of the zones are in areas that are not accessible for people to be able to [inaudible] the jobs but some of the sites are too shallow and have little exchange of water.

Ridley's Westbury site, the new site we built in 2019, was supported by the Tasmanian Government with a \$2 million grant. Ridley is very committed to ensuring that it grows the industry. During construction the new zones came out. Ridley's concern is those zones will put strain on the ability for that plant to reach the full size it was expected to be and to deliver on the investment to the Tasmanian industry as well as Ridley.

The site at the moment contributes 25 full-time jobs to the Tasmanian district and will provide another 15 if it's able to grow to its full size.

In Ridley's opinion the grow zones published part way through the construction of the Westbury site limit growth opportunities for the salmon industry, Ridley's new site, and the ability to grow and ultimately invest in Tasmania. We'd like to submit that the committee reconsiders some of the zones and works with industry to put forward alternatives.

CHAIR - Thanks very much for that, Haydn, much appreciated. Could you describe any opportunities you've had to provide input into the defining of these grow and no-grow zones?

Mr SLATTERY - The notice of the new zones came out halfway through our construction so our ability to -

CHAIR - When was that?

Mr SLATTERY - The construction of the new site started in 2017 and was completed in 2019.

CHAIR - Thank you; sorry, I interrupted you. They came out when you were already in construction phase?

Mr SLATTERY - They came out when we were already in construction phase. The first involvement Ridley had was late in 2019.

CHAIR - Are you aware of the process that was undertaken to define these grow and no-grow zones? Is that something you had an understanding of?

Mr SLATTERY - Personally, no, I don't.

CHAIR - When you look at the map which outlines those grow and no-grow zones that has been published, are there are particular areas you'd like to point to that you think would be more available that are currently indicated as no-grow? From what I gather from your opening statement, you're quite interested that there is further growth and that at the moment there's a constraint on that because of the zoning?

Mr SLATTERY - Certainly the detail I have from our technical people is that the warmer zone temperatures, the zones that are in the north of the state, are less inclined be ideal for salmon. We would be proposing that the majority of the sites are in the lower half of Tasmania, closer to people and infrastructure.

PUBLIC

One of the other challenges the industry experiences and Ridley experiences is getting the skilled employees into the regions. Having sites in areas that are inaccessible or difficult to access just reduces the ability to attract employees.

Mr VALENTINE - You may or may not be able to answer this but in terms of the content of the product that you produce, can you give us a breakdown on the source of the ingredients? Broadly, obviously you may have some commercial issues but whatever you can, to give us an understanding as to what is exactly involved.

Mr SLATTERY - The majority of our ingredients are sourced from within the Australian agricultural industry so around 15 per cent of our product is sourced externally to Australia, the rest is grains and products available within the country.

Mr VALENTINE - Did you say 16 per cent?

Mr SLATTERY - Sorry, 85 per cent is sourced within Australia and 15 per cent is sourced externally to Australia. Ridley is the largest buyer of grains in Australia. We have a mix of around about half of that 15 per cent is brought in from overseas.

Mr VALENTINE - You say 85 per cent is Australian and that you are the largest purchaser of grains. Are you only dealing with aquaculture products or are you dealing with other products?

Mr SLATTERY - Our aqua division also deals with pet food, dog food as well as another product that we make. That's for the aqua division; the Ridley-wide business is a very large supplier to the ruminant and monogastric industries within Australia as well.

Mr VALENTINE - A question with regard to antibiotics, which is always of interest to a lot of people, can you give us an understanding as to the percentage of antibiotics you add to your feed and/or whether that is added at a later date by the companies that are purchasing your product?

Mr SLATTERY - I am not briefed on what percentage of antibiotics or types of antibiotics are put into our feed. I don't know that.

CHAIR - Perhaps you could provide that to us separately as a follow-up. We can write to you about that.

Ms FORREST - The other additive worth knowing about is: are there any colouration additives to promote the colour in the flesh?

Mr SLATTERY - Yes, we do. Again, I am not a technical person so I can put it into some lay terms. We do add a pigment enhancer, which is a natural one, to our feed for salmon.

Mr GAFFNEY - Can you explain to me the process, I think it is called husking, where you have to take the shell off the grain?

Ms FORREST - Dehusking.

PUBLIC

Mr GAFFNEY - It has been raised that quite a few of our growers in Tasmania would be able to do that but they have to send their grain to the mainland to be dehusked and then it has to be returned, so it is cost prohibitive. Would you like to comment on that scenario?

Mr SLATTERY - It's an area I am not an expert on. We will buy our grain dehusked; we will buy grain in as a raw ingredient and then mill that down to add into the feeds. I know that we buy dehulled but I can't comment on the cost of dehulling back onto the mainland.

Mr GAFFNEY - What percentage of product with the grains do you source here in Tasmania?

Mr SLATTERY - I would have to take that on notice as well.

Mr GAFFNEY - That would be okay. It has been put to me by some people in the industry that one of the negatives about the Tasmanian industry using the product here is that we don't have a machine in Tasmania that does the hoeing or whatever you call it, and therefore a lot of our product is not used because it is not viable for Tasmanians to send their product over to the mainland to be dehulled and then returned because of the cost involved.

It was also put to me that if there were some government investment in that area, it wouldn't be out of the range of a stimulus to provide one of those machines here in Tasmania so more of our Tasmanian grains could be used other than mainland grains to value add to the industry. If you don't have any comment, would your company be able to provide some information to the committee about that scenario?

Mr SLATTERY - Yes, we would be happy to find some information on that. Sourcing locally would be a preference for us.

CHAIR - We will put some specific questions around that to you after the hearing for following up.

Haydn, I want to return to your initial comments around the opportunities for expansion of the industry in this state. Clearly for your company an expanding industry is a positive because it's more to supply with your product. Have you been involved in discussions about potential opportunities to expand the industry and what that might look like in the future?

Mr SLATTERY - Not beyond attending here today, but we would be interested in participating further if the opportunity were there.

Ms FORREST - You indicated at the outset that your company has been called on to do some research into investigating the temperature impacts on salmon - did I hear you correctly on that?

Mr SLATTERY - Yes, just recently Ridley was awarded a federal government grant to participate over three years in a research project into farming in high-temperature environments, mainly aimed at what the industry needs to do about the effects of global warming. That project is about to start soon with CSIRO, Ridley and several other universities.

Ms FORREST - Who is leading that research? Is it the CSIRO?

PUBLIC

Mr SLATTERY - Ridley is the lead in the research with CSIRO, the University of Queensland and Deakin University.

Ms FORREST - Why would they make a manufacturing company the lead researcher in that? With all due respect, I know nothing about the capacity of the company to be the lead researcher.

Mr SLATTERY - We are leading the research with the researchers. We have about four doctorates on site, two of them have PhDs in tropical species and two have PhDs in temperate species, so we have some prominent people within Australia to head this research. We have been doing research into salmon for close to 30 years in conjunction with the various universities, as well as the main growers in Tasmania.

Ms FORREST - It just seemed odd without that explanation as to why you would be asked to do the research.

Mr SLATTERY - I suppose Ridley is putting up a lot of the money. The \$10 million project is only partially funded by the federal government, the rest is funded by Ridley, so it is a part of our commitment to the industry.

Ms FORREST - I assume part of the motivation behind that is because, as you identified earlier, some of the areas identified by the government as being potential grow zones may not have enough flow and have higher temperatures, so there is a benefit if salmon can grow and thrive in higher temperatures. Would that be the case?

Mr SLATTERY - That would be the case, if we are able to find how they can feed. The problem with salmon in high temperatures is they stop feeding. As the water temperature gets too high and the oxygen level too low, the salmon will stop eating. Part of this research is to identify what modifications can be added to feed to make it more appealing to eat the product so they continue to thrive.

Ms FORREST - You comment that the no-grow zones are probably too extensive or inappropriate. If you could grow more in the sites that have been proposed as potential grow zones, would you then need to look at other site, if the research shows you can adapt the fish to adjust to higher temperatures, for example?

Mr SLATTERY - I suppose the research is very early; as I said, they've just started. The type of zones where we are talking about, salmon aren't grown in those equivalent zones anywhere else in the world. It is a very challenging environment in those warmer waters. Yes, the research could eventually help in finding a solution but that is a three-year project with an undetermined outcome. All we can say is at the moment it is detrimental to the animals to be grown in those zones.

Mr VALENTINE - Haydn, is it only confined to salmon or are you looking at other species as well?

Mr SLATTERY - For this research?

Mr VALENTINE - Yes, like kingfish. Is it only salmon that you're looking at?

PUBLIC

Mr SLATTERY - It is only salmon. The CRC project is aiming at salmon farming in high water temperatures.

Mr VALENTINE - Thank you. I just wanted to clarify that.

CHAIR - Thanks very much, Haydn, we've come to the end of our questions for the time being. Is there anything you would like to say in closing that we haven't covered that you think might be useful for us to hear before we finish up?

Mr SLATTERY - No, just thank you for the opportunity to come here and talk to you today.

CHAIR - Thank you very much for your time also.

THE WITNESS WITHDREW.

Mr GEORGE HARRIS, PRESIDENT, HUON RESOURCE DEVELOPMENT GROUP, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Welcome and thank you for coming to the hearing today. I am Meg Webb, member for Nelson, and I am chairing this inquiry. I have Rob Valentine, member for Hobart; Ruth Forrest, member for Murchison; Mike Gaffney, member for Mersey; and we have Jenny, Allie and Roey assisting the secretariat and Hansard.

Before we begin I would like to make it clear that the evidence taken at the hearings is protected by parliamentary privilege; however, once you are outside the room, you may not be afforded that protection, so be aware of that. There's an information sheet for witnesses that I think you have available to you. The evidence is being recorded. It will be recorded by Hansard and put up onto the committee website when it's available. It's also being broadcast.

Would you like to begin with some opening remarks?

Mr HARRIS - Yes, I would. I have written this as I would speak it. It is four pages but I think I can get through it quite quickly.

I want to expand on just a couple of points we made in our submission. Essentially, we said what we meant and we meant what we said. We said quite strongly that we thought this inquiry was a waste of time and we continue undiminished in that point of view.

Since being called, this inquiry has been delayed by the COVID-19 pandemic and that will run it even closer to the next reporting date for the Sustainable Industry Growth Plan for the Salmon Industry. How the two will relate is an added burden for administrators that we believe they don't really need.

Before I forget, I would like to send a cheerio to Geoffrey Swan. I know he is listening, he messaged me to that effect. Hi Geoffrey. Excuse me, a little light moment there.

PUBLIC

I begin by noting that of the 224 submissions listed, 20 were positive, nine could be said to be neutral, and 195 expressed opposition to the industry or aspects of it. We anticipated this and surprise, surprise, all the usual suspects have come out. There have also been a lot of submissions that are form letters distributed by green groups.

Some of the people who have submitted or contributed to submissions to this inquiry have appeared in person before some of you in the past, and they have lied to your faces. We believe some of these people have malicious intent and do not care, and have never cared, about the damage they do, either to businesses, workers, families, or whole industries.

We are now seeing some groups and leading individuals gearing up for what looks like a major campaign to damage Tasmanian salmon farming businesses right across the Australian seafood market. Some of them are the same people who have lied to your faces in the past. Our group has been a direct witness to that.

There are some environment groups seeking to have a major impact on this inquiry and it would concern us greatly if members of this select committee do not have a good working understanding of who is driving these groups, who is funding them, what their agendas are, and some of the details of their past behaviour.

Further, it would disturb us even more if any current or prospective members of the Legislative Council were to be cultivating the support of these groups or be allowing themselves to be cultivated by them.

We became aware only yesterday that Environment Tasmania - ET - is going to be giving a presentation to the group Neighbours of Fish Farming - NOFF - immediately after that group's annual general meeting on Saturday, 19 September, in Cygnet. The topic is, 'A National Boycott of Salmon? A Chance to Hear More.'

Have a close look at who is involved in ET and NOFF. Most NOFF members live around Cygnet, the Channel and the Huon district, with Bob Brown and Greens MHA Rosalie Woodruff having had strong involvement.

The Australia Institute Tasmania's Leanne Minshull has previously been a keynote speaker at an earlier NOFF AGM. I witnessed that because I snuck into the back of the room and attended their AGM.

Market campaigns have been spectacularly successful in damaging the timber industry in Australia, and particularly in Tasmania, and to us. Environment Tasmania's Laura Kelly seems hell-bent on achieving the same level of damage against the salmon farming enterprises. They have tried to get it going on previous occasions with traffic light-style advertising symbols.

The Markets for Change group had spectacular success between 2011 and 2018 in damaging Tasmanian timber industry companies in their marketplaces. Environment Tasmania was closely associated with that group.

We noted in our submission to this inquiry that key individuals seem to have common membership of multiple organisations and use that to their advantage.

PUBLIC

As we have said in our submission, the so-called environment groups we mentioned, raise a lot of money, and they spend a lot of money, mostly on themselves.

I was told by an associate who pays the fee to download the annual returns of the Bob Brown Foundation that they bring in about \$1.4 million annually. They pay about \$700 000 in wages, and they pay \$67 000 for office space. They are on the fourth floor of a building up in Bathurst Street. They spend lavishly on travel.

We have copies of the financials for Environment Tasmania. The comparisons for the years 2013-14, 2014-15 and 2015-16 make very interesting reading.

I am told Environment Tasmania went back and tried to change some of its annual returns. They have raised the ire of the federal Audit Office. Environment Tasmania had a massive leap in income when they received some federal environment grants. We know that having a look at how well those grants were acquitted would be rather surprising, especially for rehabilitation of harvested forest areas that were given over through the forest agreement.

We believe some of the administration fees and general profitability of those exercises has been transferred to their current campaigns against the salmon industry.

All these groups have a need to raise money to continue what they are doing. All need to gain publicity in order to generate funds. Creating and maintaining conflict in our community is essential for their business model because it generates publicity and brings in donations.

More recently, we have seen a trend by them to pursue large donations from high net worth individuals, celebrities, offshore companies and foreign organisations. We have seen wealthy individuals like Graham Wood and Jan Cameron giving generously to Tasmanian environment groups, often for specific campaigns and specific actions.

We know that some entrepreneurs who have donated have also had investments in ventures in products and all products in aquaculture, which seem to us to be in competition with the interests of the Tasmanian aquaculture companies. Some of those investments in aquaculture ventures are in other countries, including Thailand.

We note that the Bob Brown Foundation, and Bob Brown himself, have made submissions to this inquiry. We note the Bob Brown Foundation has received a lot of funding from the US-based clothing company Patagonia, including for films that have been screened internationally. They even screened it on the front of the parliament building one night while parliament was still sitting, although being specifically told not to, or specifically asked not to.

We note a lot of their publicity has an interesting concept of what constitutes truth, accuracy, relevance and currency. We know from a pro-forestry colleague who went unrecognised to a training session for the foundation's activists, who were about to illegally enter and disrupt a forestry coupe in Tasmania's north-west, that they had fresh information that the particular coupe was not going to be harvested, but they continued with their crowdfunding appeals anyway. This is actually contrary to the guidelines of crowdfunding.

Meanwhile, our group, the Huon Resource Development Group, receives no money from any companies, industry associations or from grants. Our funds come only from our

PUBLIC

membership subscriptions and our annual raffle at the Huon Show to which some local businesses donate prizes.

We mentioned the Canberra-based think tank the Australia Institute in our submission and its sole Tasmania-based researcher, Leanne Minshull. We note she has made a submission to this inquiry.

We describe how she was defendant No. 4 of the Gunns 20 for her role in attacking businesses in the timber industry. We note that Leanne Minshull also travelled overseas as part of market campaigns to convince customers to stop buying timber products from Tasmania. As we predicted, she and the Australia Institute ran true to form and used sophistry and their usual tricks with statistics in their submission.

On page 3 of her submission she says that '99 per cent of Tasmanians do not work in the salmon industry'. Well, we could say on the industry's behalf that the area of leases for salmon farming is quite small, amounting to only a few hundred hectares, and the area in which active farming is occurring is even smaller, and that less than 99.5 per cent of all waterways in Tasmania's inshore administration zone has no active salmon farming currently occurring. The things you can do with statistics.

The Australia Institute (Tasmania) is also trying to writedown the associated jobs or indirect jobs we know have been created and are continuing as a result of the establishment and growth of this industry, which didn't even exist just 35 years ago. It is now the biggest single primary industry sector in the state.

We know about the multiplier effect in the timber industry, but we can say the multiplier effect in the salmon industry is far greater - in fact, it's the greatest multiplier effect I can think of. In forestry, the native forest provides the trees and the ground they grow on and everything they need, but in aquaculture everything has to be created and brought in, from the fish themselves to the pens that house them, and we have seen this industry create many other enterprises in the supply chain, whether for feed or specialised boats and marine equipment necessary to grow, harvest and process high-quality seafood for distribution and human consumption.

We applaud the contributions the salmon farming industry has made to Tasmania. It has provided vitally important living wage jobs throughout our community, especially in the regions where they are sorely needed and greatly appreciated. If only the tourism and hospitality industry could more of that - living wage jobs, that is. They seem to have the greatest examples of underpayment and wage theft and all sorts of other things.

We appreciate submission 47 by Glenn Arnol of Triabunna. The salmon industry has provided jobs that are highly skilled, with many requiring tertiary qualifications and we congratulate that. There is a lot of scope for advancement and promotion within the salmon farming industry, and the industry contributes a lot to schools in regional areas in the way of information about careers and opportunities within the industry.

We note that Environment Tasmania and Laura Kelly have been prominent in criticising the salmon farming industry, and we note their submission tries to present a regard for science that to us does not ring true. We note that in 2011 activists from Greenpeace dressed in hazmat suits broke into a CSIRO research facility's greenhouses with whipper-snippers and destroyed

PUBLIC

a genetically modified wheat crop, causing \$300 000 in damage and setting the research back years. Of two women involved, one self-identified, but the other didn't. Laura Kelly was quoted at the time as a Greenpeace campaigner defending the action. This is part of the public record; I have a number of news clippings and publications detailing all of that. There remain questions about that raid that have never been answered and it colours our attitude.

Ms FORREST - Chair, we're getting short of time. This inquiry is about salmon, forestry. I think we need to focus on our terms of reference if we might.

CHAIR - Yes, thank you, let's do that.

Mr HARRIS - I have almost finished. I have some photos here that I took of a pro-salmon industry rally that took place outside on the lawns of Parliament House on 19 January 2017. I noticed how all the workers left promptly to go back their workplaces, but Laura Kelly remained behind and participated in interviews with journalists. Being on the ET payroll she was able to linger longer than most and I was interested to see how much she was getting cosy with the journalists. I also noted her disdain when one of the union members approached a trio of them to add some parting comments.

In conclusion, I point out that it is the job of the Government and the Legislative Council in review to ensure that any and all industries operate under appropriate legislation and appropriate regulation and control. It is the job of government to devise that framework of legislation and regulation and to ensure compliance with it, as much it is the responsibility of industry players to comply, and all of this is enhanced by good communication and engagement. What we do not need is interference by those with destructive agendas for whom malicious exaggeration and untruthfulness are their weapons of choice. Thank you.

Ms FORREST - George, thanks for your submission. I would like to address our terms of reference and make a couple of points in the context that you understand. You referenced the need to visit sites around the state. I can assure you that all members have, individually or as a group. We are very familiar with the various sites around the state.

Mr VALENTINE - Some a couple of times.

Ms FORREST - Some of us have been three times to some sites. It is interesting that you make the point that we should do so because we have. One point you make in your submission is that 'the Legislative Council committee is making hostile recommendations', but the committee is nowhere near writing a report yet, so I am not sure on what basis you make that statement.

Anyway, we will move to the terms of reference. I am sure you have read the submissions, which is great to see because it takes a while to get through them all. We have heard from a number of people in their submissions but also in public hearings about the process around the assessment the Marine Farm Planning Review Panel undertakes and there have been some suggestions that the process is very torturous at times because when there are new plans received by the panel they can't reject it if the information is not there. They have to keep asking for more and more information on a potentially never-ending cycle rather than saying, 'No, come back when you have the information'. Do you think the act needs reviewing to streamline the process that sits under the act, which is one of the acts you rightly identify is

PUBLIC

part of this whole process of assessing new applications for new farms or amendments to existing ones?

Mr HARRIS - We believe in and have always believed in the concept of continuous improvement and review; anything felt necessary to improve how both industries and government work we would support.

Ms FORREST - What sort of things are you talking about? I am interested in what you think might be needed because that is a very broad statement, George. What we are looking for is specifics to help us with our committee's deliberations to understand how the law might need to change. You talk about there being enough red and green tape but regulation is important in this industry. We saw what happened in Macquarie Harbour and we do not need that to happen anywhere else in the state because that is going to take a long time to recover. Would you accept that?

Mr HARRIS - Yes, but we would also say Macquarie Harbour is a waterway that is not fully understood. It is a very complex waterway that has a huge volume exchange quite regularly; it has a lot of stratification in it -

Ms FORREST - I am saying there is a need for regulation to ensure that those sorts of things do not happen again, regardless of the waterway. They are all different. Macquarie Harbour is very dissimilar to Storm Bay, for example.

Mr HARRIS - Yes, it couldn't be more so.

Ms FORREST - Yes, so what sort of changes do you believe might be needed to enable a process that ensures we do not see what happens at Macquarie Harbour happen anywhere else?

Mr HARRIS - What we would say is that it might be a good idea to approach the scientists and scientific bodies and ask them if there is a way in which they can be more proactive where they can see that better preparedness can be achieved. I am not an expert on public administration

Ms FORREST - Do you think the panel should be able to reject a new plan application if there is not enough information at the outset and say, 'Look, let's not go on this endless cycle of we need this, we need that?' It's a bit like going to the council with a DA and not having enough detail in your plan.

Mr HARRIS - That is a good analogy. I would say, perhaps you should have the capacity to reject a plan or a proposal and say that this needs more work. Equally, if you are going to do that, you need to ensure that, and this would come from a better understanding of the overall industry situation, if they have growth in demand they need to fill, then perhaps the whole -

Ms FORREST - Who is they?

Mr HARRIS - The industry - a system of going out proactively and saying, 'Where can we see some more areas that perhaps we would approve?' Leases or lease extensions, or dormant leases being re-established or something to that effect.

PUBLIC

Ms FORREST - Do you have any insight at all in how the map - I don't have the map - in the submission was determined? You are saying that if there is increasing demand, there is a whole heap of Tasmania that can't be - I'm not sure I would want to have one up the west coast, quite frankly - but there are other, more accessible areas that are clearly no-grow zones under the Government's suggestion here. Do you know how that was decided?

Mr HARRIS - I don't. Just looking at some of those areas, it is to our dismay that some of them have been completely rejected.

Ms FORREST - Do you know on what basis those decisions were made?

Mr HARRIS - I don't.

CHAIR - To clarify, in terms of the salmon industry growth plan, the one year review that's happened and subsequent reviews to come, has your group been involved in either the original development of that plan, or providing input into the review at any stage?

Mr HARRIS - No.

CHAIR - Ruth, can we move on from there, is that okay?

Ms FORREST - Yes.

CHAIR - George, I'm going to read something from your submission. I'd quote the page but there's not a page number on it. It's the final paragraph on about the fourth page in -

No broad scale human activity around resource-based industries can take place without generating at least some environmental impact. The issue is one of ensuring that any environmental impact of any activity is as minimal as it can be managed to be, and that it is within appropriately decided limits. This means that sufficient and comprehensive baseline data is available prior to developments or expansion, together with appropriate environmental priorities, (such as threatened or endangered species, or particular sensitivities), and that sufficient monitoring and adaptive management is undertaken, together with the enduring pursuit of constant improvement and progressive best practice.

Interestingly, I feel that paragraph is one we may have been able to read quite easily in any number of submissions made to us by people who are raising concerns about the industry. I think the sentiment you have expressed there is actually very well agreed upon. I would infer and perhaps you could confirm, when you made those comments in that paragraph, are you asserting that those things are all in place sufficiently at the present time, and the path we're on is adequate to deliver the outcome you are describing there?

Mr HARRIS - Some of them haven't been in place and weren't in place when the industry started and where some areas of farming have been occurring. That is because it is a relatively new industry. In a lot of cases the scientific investigation was catching up. Certainly you can say that is the case in Macquarie Harbour. We support good and thorough resourcing of the

PUBLIC

scientific bodies that have the job of looking at these things. We want to see it done properly as much as anyone.

CHAIR - Would you say then that in terms of arriving at appropriately decided limits and arriving at a shared understanding of what would be sufficient and comprehensive baseline data and the rest, that is an ongoing conversation that needs to be had as we move forward on whatever pathway we're moving forward on?

Mr HARRIS - Yes.

CHAIR - And that all stakeholders around the issue would have a role to play in that conversation. So there's a role there for, potentially, some of the things we've been hearing for example in this inquiry from people raising concerns. I know you've pointed to certain groups and motivations but if I direct your attention away from those ones you have a clear issue with to quite a significant swathe of submissions and communications we've had that are from people who would be regarded as fairly regular Tasmanians and in some cases quite eminent scientists. Concerns raised from regular Tasmanians and/or eminent scientists as part of a community conversation, would you regard that as part of continuing to progress towards this outcome you've described as being optimal?

Mr HARRIS - Yes. As we say, we'd like to see that all the scientific bodies that are and should be consulted are being consulted but also members of the public, people who are in the neighbourhood of these activities, certainly. As you can see from what we're saying we have had long and bitter experience of a lot of groups that are just driving us to despair.

CHAIR - Do you have a suggestion or something that you could point to for an alternative to perhaps what's happening now? That you could say, 'This is the way we could engage with the community effectively'. Perhaps, not necessarily with the groups you have an issue with, but because we would want to see genuine engagement with, as you say, the local communities and regular Tasmanians. Do you have a vision for how that could better occur?

Mr HARRIS - Only in general terms. As I say, it comes back to asking the scientific bodies to be a bit more proactive and accepting that they themselves are not necessarily experts in public administration or engagement. Perhaps there are more professional people who need to be brought in to assist it.

Ms FORREST - On that, George, the review panel relies on expert opinion like scientists and other expert opinion about a particular body of water that they're looking at. The make-up's outlined in the act; it's fairly extensive. Do you believe there are other skills that should be on that panel that aren't?

Mr HARRIS - As I've just said, perhaps around the area of community engagement. Modern communication media has changed so much in a relatively short time and a lot of scientists, in my experience, are not fantastically skilled communicators.

Ms FORREST - Just on that, George, the panel is made up of nine people. You might have more than one skill in one person in the number of different skills required. There isn't anyone specifically, there are some with local government issues which may or may not have the public facing approach, but if there were someone from the broader community who represented the community's views, do you think that would help?

PUBLIC

Mr HARRIS - I think that could help, but I'm alluding more to professionals in the area of communication that could assist bodies like this.

CHAIR - That's an interesting point. You make the point about better communication as a solution toward the end of your submission. I think it was the third page from the end. I will quote a sentence or two –

The solution is better communication, with an obligation to engage on concerns, for the media to report fairly and without sensation, and for the genuine issues of stakeholders to be aired in community forums.

I think that is an interesting and quite a fair comment you have made there. Could you reflect a little on what occurs now in those areas around communication, but also around how concerns are engaged with and how the genuine issues of stakeholders may be aired and how we could improve that?

Ms FORREST - The different views.

CHAIR - That's right, in terms of reflecting on the way that happens now. To contextualise it, my observation would be that to some extent certain concerns seem to be inflamed by issues around communication or not feeling there is a channel for those concerns to be aired. Could you reflect on that and what could be improved in that way?

Mr HARRIS - We've seen lots of examples of forums and meetings and things that are just not that helpful, and it depends on where they are and who is conducting them but it is still trench warfare to an extent. It would perhaps be good to see good engagement with really skilled moderators who are aware that there are competing points of view and can progress that in a useful manner, but I see so few examples of that.

CHAIR - Where would responsibility for facilitation of that interaction lie? At the moment, to my understanding, the industry to some extent conducts community engagement interactions. I'm not sure of the extent to which government does. Groups that you have mentioned sometimes have their own community engagement and interactions. Amongst that mix, where would responsibility for more effective, balanced interactions lie?

Mr HARRIS - I think the call for that has to come from government, but as to those who could provide it, I think you need to cast the net a little more widely around the communities of the universities that have people who are skilled in these types of processes but are not necessarily scientists or industry-based people or economists or anything like that. I think you have to look outside who is currently involved.

CHAIR - Have an independence to it, in that sense.

Ms FORREST - At what point in the process should this occur? The process of assessing, what our terms of reference are looking at. The process around assessing the farms or the amendments.

Mr HARRIS - I suppose it is a more general thing, and I know I am not being terribly helpful to your specific question. Perhaps it doesn't currently exist within the current

PUBLIC

framework to the extent that it probably could, but maybe some consultants could be brought in to say, 'This is what we're dealing with, can you see how we could progress it more usefully?'

Ms FORREST - The Marine Farming Planning Review Panel holds public hearings but they have the option to or not. It is not compulsory that they do that. I think, particularly with the complex ones where there is a lot of public interest, they tend to. Do you think they need to be held in a more moderated forum?

Mr HARRIS - Perhaps they do. If you bring in some moderators who can say, 'We know you want to concentrate on the areas of your expertise. We know that there is community process going on. Let's see if we can facilitate it better than it maybe currently is occurring.'. If we are looking to the future growth of this industry and we are supporting that occurring, let's see what we need to add to it to get it right.

Mr VALENTINE - In your submission you say -

No broad scale human activity around resource-based industries can take place without generating at least some environmental impact.

You have already been asked a question in that regard. I am interested in the statement just before your map, a couple of paragraphs before that, which says -

The sector is building community partnerships, encouraging visitation and inspection of its facilities. The industry is regularly providing grants to community groups such as sporting bodies, education groups and those promoting real environmental outcomes.

Could you give us some examples of those sorts of grants? Where you mention groups which are getting real environmental outcomes, I am interested in exploring that a little bit.

Mr HARRIS - I only have a very general awareness of that. I haven't had a lot of contact with that myself, and I am not the only one who has contributed to the writing of this submission.

Mr VALENTINE - That's interesting with regard to your group. Can you give us a description or understanding as to how many people are involved with Huon Resource?

Mr HARRIS - We are about 40 people. Some of our memberships are family memberships. We used to have hundreds. As you know, we have been in existence for 20 years and the Huon Resource Development Group was created to support the passage of the Southwood Development site through the Huon Council. It was shown to be necessary because it succeeded on a vote of five to four, and right from the early days we became affiliated as the Huon branch of Timber Communities Australia, although we retained our own name.

The area we cover has always been the municipalities of Kingborough and Huon, and Timber Communities Australia had a separate group on Bruny Island and we remain in contact with individuals from there. Timber Communities Australia was an Australia-wide organisation that crashed nationally over the Tasmanian Forest Agreement.

PUBLIC

Mr VALENTINE - We are not going there because that is about forestry rather than finfish farming.

Mr HARRIS - Since then, when Timber Communities Australia collapsed we prepared a new constitution and became constituted under the Tasmanian Associations and Corporation Act and we broadened our focus to look at all resource-based industries - agriculture, aquaculture, mining, forestry - and we continue to cover those municipalities.

Mr VALENTINE - Do you see the expansions into Storm Bay as part of your purview, if I can put it that way?

Mr HARRIS - We do inasmuch as Bruny Island is part of Kingborough and, as I said, the previous Bruny Island group crashed along with the rest of Timber Communities Australia. We would address ourselves to the question of Storm Bay.

Mr VALENTINE - With respect to Storm Bay, do you advocate for or against adaptive management versus the precautionary principle in terms of baseline data being obtained first?

Mr HARRIS - I have no real problem with adaptive management as long as it is addressed very carefully. If you took the precautionary principle to everything, no-one would get on a jet plane, or a lot of people wouldn't if you said we are going to adhere strictly to the precautionary principle.

Ms FORREST - You wouldn't get in your car.

Mr HARRIS - Our attitude to Storm Bay is that it is a very expansive area that is very exposed to a lot of onshore weather. We are a bit concerned that when you go out into areas like that, you have to have concern for the safety and survival of your workers. We are also seeing these large well-ships and we are also seeing much larger and more robust fishpens and you have a range of deeper water. I think the concept of going into Storm Bay completely reduces the impact of fish waste. I think that generally going in the direction of Storm Bay is a very good solution for the industry. Equally I'm a bit dismayed that some people can't stand the thought of inshore, more protected current and past leases where the industry started. They don't occupy a huge area. They're not, to my way of thinking, hugely a blot on the landscape.

Mr VALENTINE - Where do you think the balance is with regard to general recreational opportunities for members of the public versus salmon farming? There are people who dive and they might be collecting scallops or abalone or those sorts of things. They might feel that there's an impact of salmon farming because of what it might do to the foreshore or otherwise.

Where do you think that balance is between community use of those sorts of public spaces and salmon farming? Do you have any comment on that?

Mr HARRIS - It's quite a while since I've been out recreational fishing but I can see a huge area of undisturbed seascape all around the place. You wouldn't go recreational fishing too close to an active salmon farm. It's not as if you have no other choices. I know there are a lot of marine reserves that provide a lot of scope for certain types of recreational activity but not others. I believe there are plenty of opportunities for recreational fishing and diving, so I don't see the area or the active use of fish farms as being much of an impediment to those activities. Even factoring in a quite considerable expansion of the quantity that they produce,

PUBLIC

I still can't see it robbing too many people of really serious opportunity. There is just so much coastline out there.

Mr VALENTINE - Do you see the need for biomass caps and things like that, though?

Mr HARRIS - I think in certain circumstances biomass caps are important. They're very important in Macquarie Harbour and they would be quite important in a lot of closed waterways. Again, that is a question for the scientists. As always, the more resources we can give to them, any resources that they want, I would say they should have in order to do their job thoroughly, adequately and properly.

Mr VALENTINE - Thanks, George.

CHAIR - You expressed earlier very clear support from your group for expansion of the industry. In the growth plan there's a stated target of a \$2 billion industry. We haven't really been able to determine how that figure was arrived at. In your view, is there a particular aspiration you think there should be around growth of the industry? If so, how do you think we should arrive at such a number or a figure in terms of the right maximum amount of this industry in our state?

Mr HARRIS - I'd find it pretty hard to say exactly that specific number is the right number or an ideal number, or whatever.

CHAIR - Perhaps, more your reflections on a process for how we might arrive at an agreed growth target?

Mr HARRIS - Again, I would say it is a matter of being proactive and asking the scientific community what would they suggest would be suitable maximums across this whole suite of area that is potentially available. Then recommend how far can you go, how soon or what those limits should be. I'd be actually asking those sorts of questions and that advice from those organisations, rather than people who don't really have the capacity to say that this is what the numbers should be, and that is what it ought to be. It's more about having the correct process that says we can expand by this much over this period of time and these are the impacts we would find acceptable and these are impacts we would not find acceptable.

CHAIR - In an evidence-based scientific way.

Mr HARRIS - Yes.

CHAIR - Probably with consideration of community views and social values as well as natural values. Do you believe that is the process we have had to arrive at in our aspirations for growth in this industry?

Mr HARRIS - I haven't studied it in sufficient detail to be able to say that.

CHAIR - But you would support that kind of a process to arrive at that shared aspiration?

Mr HARRIS - Yes, but you would also need to give appropriate levels of weight to who was saying what on the basis of what our experience has been. What has happened has been pretty tragic.

PUBLIC

CHAIR - I will put something to you and you can indicate whether you agree with it or not. Taking an evidence-based approach and a community engagement approach that, in some sense, puts aside political thoughts and influences, and puts aside interest group thoughts and interests, would be a preferred way forward?

Mr HARRIS - It would be a better way to go, I think. If it's sufficiently robust, then I think everyone else, including the politicians, should say to whoever continues to be adventurous in their arguments against it, 'Look, this is the best way we have been able to device to proceed with this industry'. We must accept that some people will never be satisfied. At some point we have to say we have to go forward.

Ms FORREST - That includes the industry too, George.

CHAIR - So far, my observation would be, and we haven't been able to disprove this in the process to date, that it's the industry that has led the conversation about expansion and growth and set aspirations and targets. Some of the concern we have heard has been because of the perceived lack of a process that we just discussed as being perhaps the most effective and less inflammatory way forward. It is interesting. Would that be your observation, that industry has been the leader so far in the conversations around expansion and growth?

Mr HARRIS - I would have to say yes, there is a fair element of that. When you've got an industry that is successful, why wouldn't you? We have seen Tasmania-based companies now expanding into Queensland growing prawns. They can see opportunities elsewhere. I enjoy seafood and I particularly enjoy eating prawns, not all that often. If we have the capacity to engage in aquaculture that meets all the requirements of food safety and standard and health, why wouldn't you do it? We have all seen the impact globally of too much exploitation of the wild fisheries.

Ms FORREST - This is what this committee is trying to do. Our terms of reference are very clear about trying to find out whether the process we are operating under is the most effective one. Could it be improved, as we've discussed?

In your submission you made the claim that this is a highly political inquiry. Do you still stand by that because you have seen what we are trying to do here? On what basis did you make that claim, and do you still stand by it?

Mr HARRIS - I do, perhaps for reasons I don't particularly want to give too much weight to, but I know that in the general rough-and-tumble of politics. Some major parties didn't want to participate.

Ms FORREST - There are no major parties here.

Mr HARRIS - I know. I believe that if membership of both major political parties found themselves on this committee, I wouldn't have been surprised if they had pulled their participation in it. That is a feeling from my -

Ms FORREST - My question is: do you still stand by that comment that this is a highly political inquiry? You have looked at our terms of reference. You have read the submissions and people have differing views, and that is the role of the committee to hear. People have

PUBLIC

some quite extreme views on one side and some on the other. We sit through, we don't hear from all those people.

Mr HARRIS - I would maybe retreat a little from that, okay? I will concede that perhaps saying it was a highly political process -

Ms FORREST - And a Star Chamber?

Mr HARRIS - We have seen that in the past.

Ms FORREST - We are talking about this committee and the work we are doing in trying to find an appropriate way forward.

Mr HARRIS - No. I believe that description is actually probably a little less applicable to this than examples in the past that we have seen. As you can probably appreciate, what we went through in that whole process that drove the forest agreement was the most disgusting thing I have ever seen. I never want to see anything of its like ever again.

Ms FORREST - Let's not go back to forestry.

Mr HARRIS - That is what I am saying, a lot of things have coloured our attitudes.

CHAIR - We'll wrap it up, but I hope your experience of this committee has not contributed to that. I would invite you henceforth, in terms of future committees that may be inquiring into matters you are interested in, to hold an open mind as to your engagement with them, because those committees will, I imagine, as we have been, be keen to engage with you and to hear your points of view.

There are many things in the submission you have made to us that align quite readily with things we have read in other submissions that we might first think of as coming from opposite sides, but there is some interesting alignment there. I think that tends to be around the things we are particularly interested in from our terms of reference about how we improve from here around the processes, the arrangements and the framework that sit around this industry.

We have heard quite resoundingly that there is support for this industry from almost 100 per cent of the people who have sat in front of us or made submissions. There are different views about how to go forward and we have talked about the fact that there is an interesting discussion for what that process would look like, so that different views can be accommodated. So, thank you.

Mr HARRIS - I have to say I am very pleased with the way you have conducted this session today and I am impressed. I can see you are approaching it in a useful fashion and it is much more peaceful than a lot of other committees.

CHAIR - Maybe it is because we don't have political parties in the room.

Mr HARRIS - Even so, there is none of the usual suspects looking daggers at me from behind.

PUBLIC

CHAIR - I am mindful that we've gone over time with you, George, and I thank you very much. Are there any very brief things you needed to mention before we finish that we haven't covered?

Mr HARRIS - No, I think we've probably covered it all.

CHAIR - You gave us a good contribution at the beginning, so that has probably covered your key points. Thank you very much for that. We appreciate your time.

Mr HARRIS - Thank you all very much.

THE WITNESS WITHDREW.

PUBLIC

Mr WES FORD, DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY, WAS CALLED AND EXAMINED.

CHAIR - Welcome, Wes, you do not need to be sworn in again.

We are continuing with the second session with the EPA and following on from February, seven months ago. You would be aware we are recording this session, that it will be available in *Hansard* and is being broadcast, and that parliamentary privilege applies during this session.

Would you like to begin by providing an update or recapping to lead us back in to questions, Mr Ford?

Mr FORD - Yes, Ms Webb. To recap and to help frame the discussion for the next couple of hours, the role of the EPA in managing salmon is to be the environmental regulator. It sits in a system where the decision around planning is taken under the Marine Farm Planning Act by the Minister for Primary Industries and by the Secretary of the Department of Primary Industries, Parks, Water and Environment, and you will be obviously seeking to discuss other matters with it. Where matters are relevant for the department, I will refer to that as I go through any discussions.

Primarily, our task is to regulate the marine farming industry and the land-based aquaculture industry through environmental licences issued under the Environmental Management and Pollution Control Act 1994. To complete some of the work we do, I also make decisions under delegation under the marine farming development plans, of which there are currently seven I operate under in the state.

CHAIR - We spoke last time about an environmental standard being developed in this area. There was discussion on whether it would be a regulatory standard or a board-endorsed standard. Perhaps you could give us an update on the development of that standard? In our last hearing you said about five documents would be released in consultation with industry and community. Could you tell us where this is up to and what next steps are coming up?

Mr FORD - The Minister for Environment has endorsed that there will be a regulated environment standard for salmon, the salmon environmental standard, what it has been exactly called has not been resolved yet. The exact form of that regulation has not yet been agreed to with the minister but I anticipate it will be one of two forms - either a standard made by the minister or the Governor in accordance with normal subordinate legislation processes or a standard made by the EPA board where the regulations set up the requirement for the board to make such a standard. There is a process to go through with the minister and the Governor on which of those it will be. Materially what it will do, in my view, will be the same thing.

CHAIR - When we spoke in February, it was not finalised then; we are still at the stage where which of the two it will be is not finalised.

Mr FORD - Sorry, I would clarify that by saying that when we spoke in February, it was not clear the minister had endorsed there would be a regulated standard. The minister has now endorsed that there will be a regulated standard and has asked the EPA to draft a standard for his consideration. As part of that process we will present him with two regulatory options for him to then consider as to how he would want to do that. There are models for these sorts of things across other regulatory areas. For example, if you look at the building control area, there

PUBLIC

are a whole lot of functions undertaken by the Director of Building Control that might be his to make decisions about or there might be, if you look at some of the fisheries' management, for example, the minister makes the decisions by statutory rule.

Over the course of the next few months we will work through with the minister those options and when we at a point of presenting those options to the community they will be clearer because they will have to form part of the regulatory impact statement.

CHAIR - Before going to consultation with the community, we will know whether it is to be under statutory arrangements or a standard from the board?

Mr FORD - Yes.

Ms FORREST - Well, if it is a standard under the board, will it still have the disallowable capacity a regulation would? The builder control stuff doesn't.

Mr FORD - If the board were given the task of establishing the standard, what is disallowable is the instruments that support how the board makes the decision - i.e. the regulations themselves - but if the regulations effectively delegate power to the board, that, in my view, would not be a statutory instrument itself. I am not aware the board has any particular statutory instrument-type role where it creates something at the moment that then gets put back through the subordinate legislation process.

Ms FORREST - That is a way of avoiding scrutiny of the regulation or the rule or the regulated process. If you are just regulating how to do it rather than regulating the standard, they are two very different things, aren't they? You said the outcome would be the same, but I am not hearing the same; I am hearing quite a different process here,

Mr FORD - The process would be different. What I hope would be delivered in terms of the actual standard itself is the same sort of document, but ultimately in what you are suggesting is that when there are two different decision-makers who could be the decision-makers around owning the standard, and that is a conversation still going on at the moment. I hear what you are saying, but I cannot answer the question in relation to that.

Ms FORREST - I want you to clarify that if the standard becomes a regulation, you have a process to comply within terms of making the regulation, providing it to the Governor, then providing it to the Subordinate Legislation Committee, but if the regulation is just the process by which the board will determine the standard, there will be no scrutiny of the standard.

Mr FORD - There will be no parliamentary scrutiny of the standard; that is right.

You might anticipate in drafting the regulations that the board might be compelled to go through certain consultative processes around developing the standard, but those themselves don't result in a parliamentary opportunity to scrutinise a standard that would be prepared by the board.

Ms FORREST - It will be interesting to see how it plays out there.

PUBLIC

CHAIR - Staying with the standard for a moment, what is the time line now that these next steps for taking it to community consultation and then further implementing are anticipated?

Mr FORD - In terms of a stepwise process, our first step will be to provide a draft of the standard to sit down with industry and talk to it about how it would impact on them. Our second step would be to then sit down with a broader community group of people we might identify through a range of processes who would have an interest in what is in the standard. The third step would be a public consultation process that is the statutory process for developing the regulation itself with the supporting documentation.

At this stage we are hoping to get to the point of doing the first two steps this side of Christmas. Why we need to talk to industry first is that it needs to understand, particularly, the changes we are proposing in relation to the current arrangements. It needs some time to digest those. From a probity and transparency point of view, we will ensure we keep documentation and separate documentation so that we can demonstrate how a first draft might become a second draft and might become a third draft, should people be interested.

CHAIR - So people could see where the input and influence of industry may have come in at that point of the process. Presumably then, the next stage as well around community consultation and anything further that happens draft-wise after that.

Mr FORD - Yes. I do have a very first cut to start to work through in terms of pulling it apart and making sure it has started to capture everything I think should be in it.

Mr VALENTINE - I thought you were going to table it there, for a moment.

Mr FORD - No, I won't.

CHAIR - So, consultation before Christmas this year and then further progress next year, with the expectation it will be in place -

Mr FORD - The middle of next year is what I am looking for. It is obviously subject to a range of processes that go through in terms of developing regulations. I would like to get to the point of seeking to vary the licences in accordance with introduced standard in the second half of next year.

Ms FORREST - When do you expect the minister to make a decision about the actual form it will take?

Mr FORD - Within about the next six weeks, I think. We have to make that decision.

Ms FORREST - That is going to guide the way you go about it, isn't it?

Mr FORD - It guides particularly the regulatory statement. Certainly, before we sit down with industry I want to be able to tell it what it is going to look like from a legal document point of view.

Ms FORREST - With the regulatory impact statement, if the regulations are just the process and the requirements for the board to consider in determining the standard, it would be

PUBLIC

a completely different consultation process from the process it revolves around in the consideration of a standard as a regulation. Different questions will be asked.

Mr FORD - There will be. We will be trying to do the two at the same time so that we don't get public consultation exhaustion from the community point of view, so we will go out -

Ms FORREST - Isn't it dependent on which way the minister decides?

Mr FORD - It is. If we have a regulated standard made where the decision-maker is the minister making reference to the Governor, for example, I anticipate you would have a set of regulations that would give the minister the mandate to make a standard and then would probably invoke that standard as being some sort of order made by the Governor-type process. You have a two-part process - you have the regulating powers that actually make the standard themselves and then you have the standard. There's a third pathway - that is, of course, that the standard is just a set of statutory regulations.

Ms FORREST - That's right.

Mr FORD - Yes.

Ms FORREST - If the standards are made by a ministerial order, there is no scrutiny.

Mr FORD - Well, wouldn't it depend on how the regulations are written around whether or not the order is subject to the provisions of the Subordinate Legislation Act?

Ms FORREST - No, it's not. I don't believe it is. Let's just have a look in the act. You'd have to have a power in the act to make a ministerial order subject to the Subordinate Legislation Committee. I don't know that it actually covers that in this act. Maybe it's under your act?

Mr FORD - I doubt it's under our act because these are not legislative drafting provisions normally within acts; they're covered in things like the Subordinate Legislation Act.

Ms FORREST - At this stage, and this is going to the whole sublegal thing we've been looking at, generally ministerial orders, unless the act specifically says, are not statutory instruments for the purposes of the Subordinate Legislation Committee Act. So they're not referred to the committee, unless the act specifically says. If they're being made under your act, which I assume they will because they're an environmental standard, yes?

Mr FORD - The regulations have to be made under the Environmental Management and Pollution Control Act.

Ms FORREST - Right.

Mr FORD - Under EMPCA, it will be either a standalone set of regulations or an amendment to the existing individual licence regulations under EMPCA. That has to be resolved with the Office of Parliamentary Counsel as well. Is it significantly different enough that the OPC would recommend a standalone set of regulations or would OPC recommend inserting the amendments into the existing regulations? So you have one set of regulations that deals with licences. I anticipate those regulations would then lay out a mechanism that

PUBLIC

determines how the standard is actually made and the discussion with the minister through that process -

Ms FORREST - The regulations could stipulate it has to be scrutinised by the parliament?

Mr FORD - I believe you could draft it in such a way. That ultimately becomes the discussion the minister has to have about the level of parliamentary scrutiny he wants the standard to sit at. He could inevitably opt for saying, 'I want full statutory rule, parliamentary scrutiny over this', and it would operate as a [inaudible] set of regulations in its own right with a range of relevant schedules and so on.

Ms FORREST - Okay. We'll keep a look out for that.

CHAIR - We're going to stay with the standard for a little longer.

Mr FORD - A mechanism that could be pursued as an option is to look at a model that sits within the Waste Management Regulations. The Waste Management Regulations set a lot of functions for the director but give the director powers to create legal instruments to deal with particular issues that are as yet unknown and not yet predictable. The management of biosolids, for example. There's a process under the Waste Management Regulations that have only recently been remade that allows the director to deal with an approved management method - an AMM-type process. So that's one model we can use which is familiar to the EPA.

Mr VALENTINE - Would it be likely to include, for instance, disposal of high saline water or wouldn't it go that far?

Mr FORD - I expect the regulations would cover just above everything that is likely to impact the marine environment from a salmon point of view so, yes.

Mr VALENTINE - And depth of water that farms can operate in and all of those sorts of things?

Mr FORD - This would be one of the areas we have to look at in relation to the intersect with the Marine Farm Planning Act. If the Marine Farm Planning Act has determined that an activity or marine farming can occur in a particular location and that location is of a certain depth, it might be odd to have then an environmental standard that says it can't happen at that depth. These are the sorts of things we are going to have unpack along the way, around how the environmental standard intersects with the marine farm development plans under the act.

CHAIR - Once this standard is in place, what then will look different about the way ongoing regulation of the industry occurs? I would also like you to explain how it will fit into the planning and development side of things with new or amended plans coming through.

Mr FORD - The first issue is that the environmental licence themselves should end up being less complex than they are currently, because there are a significant number of conditions in the environmental licences that tell people how to do things. For example, how to undertake a video-monitoring tow to determine what the visual impact is. All that material will move into the standard, and the licence will then call up that standard and say, 'You are required to

PUBLIC

undertake video monitoring in accordance with the environmental standard.'. There will be a clear link between the licence and the standard.

CHAIR - Therefore those environmental licences are all reviewed and rewritten once the standard is in place?

Mr FORD - That would be the intent. There are two powers within the act that deal with amending licences. There is a power where the operator can apply to have a licence varied, and there is a power where the director can impose variations of his/her own volition - so the director intent would be to use those powers under the act to then make the changes to the licences to ensure the licences then align with the standard. We would look at doing that over a relatively short period, just by doing all of them in a couple of groups.

Mr VALENTINE - That's with new licences?

Mr FORD - That is with the existing ones. There is also an opportunity to vary licences at renewal, but I would not wait until the renewal process to vary them. I would be starting to vary as soon as the standard becomes more -

CHAIR - They will all be reviewed against the standard once it is in place, and that will be within a fairly timely period. Is that what you are saying?

Mr FORD - Yes, that is right. Moving through them, we would look at it in terms of priority leases, and we would do some sort of triaging around where we start. We probably wouldn't do them all in one day, but we would process as many as we could in parallel. We would probably do them in chunks. We might do a plan area - for example, we might start in Macquarie Harbour, or we might start down in the Channel.

CHAIR - The expectation is that they then become more aligned and able to be compared, and similarly assessed after that standard has been put there and they have been aligned with it.

Mr FORD - Yes.

Mr VALENTINE - Further to that, is it expected that if they do not meet the standard in some way, and they can't demonstrate they could be able to meet the standard, the EPA would have the power to stop that licence from being operated?

Mr FORD - The power and the impact on the individual operator will sit within the licence condition, not within the standard. That standard will say this is how the industry is operated. For example, presence/having a significant visual impact at a compliance point will be a licence condition - the standard will determine things like how many noncompliances you can have, or to what level of impact those noncompliances can be, and what the consequences are of those levels of impact.

The requirement to undertake monitoring will be a licence condition; the tiered level of monitoring will sit within the standard. If we have a three-tier system or a four-tier system - and we are currently toying with the notion of a five-tier system, which might be too complex; we can talk about that in a bit more detail about Macquarie Harbour - but, more generally for the rest of state, we will probably only have a three- or four-tiered system.

PUBLIC

The standard would lay out those tiers, and would relate a tier to a set of activity. If a company's lease moves from tier 1 to tier 2, they will know in advance what that means. It is not an arbitrary decision by a director on the day. They start to impose performance standards on industry that say, if you exceed this level, or your performance is worse than x , then y is the consequence. If your performance declines even further, the consequence increases.

This has been done in a number of countries around the world, where companies clearly get a benefit by good practice. So, if a company is managing its lease well and is not causing any particular environmental issues, it might reasonably expect to have a lower monitoring cost and burden upon it than if it is managing its lease poorly and has an increased level of monitoring on it.

Mr VALENTINE - You'd probably give them a period of time to rectify the issues?

Mr FORD - Following periods and consequences of impacts are the sorts of things you would start to write in the standard.

A key point for me in this space is that the purpose of the standard is to bring certainty, consistency and transparency. At the moment, the certainty resides in a 'How I am feeling on any day' sort of thing.

No-one really knows what is going to happen next week. They have nothing to point to other than past practice, or me acting in a reasonable manner - the consistency issue as we go over time, across directors, across staff. Everyone needs to be able to look at this and say these decisions were taken this year; they are going to be the same as the decisions that might be taken next year.

Transparency is about making it a whole lot clearer to everyone why these decisions are made.

Mr VALENTINE - Basically providing a framework for performance into the future.

Mr FORD - Yes.

CHAIR - We came to that discussion because you were describing what would change in the regulatory space when the standard was in place. Is there anything you wanted to add to that?

Mr FORD - I think it's worth noting, just from a regulatory point of view, that we are looking at a couple of models around how to regulate impact at a compliance point. The traditional approach used in Tasmania for more than 25 years now has been 35-metre compliance points away from the boundary, where the boundary is rectangular or square.

That system worked reasonably well in the low-flow environments in the Channel. It has proved not necessarily to be the best for Macquarie Harbour - and in higher flow environments and the deeper waters of Storm Bay, it may be proven to be problematic.

We are looking at other models being used by other countries. We are looking at one where you can actually try to model a zone, and then you can monitor in relation to that zone.

PUBLIC

If your modelling and monitoring align, things are okay. If they don't, we go back to the drawing board a bit.

We will start to adopt and implement those sorts of practices that have been used in places like Scotland and Norway, to give some options to the companies here.

We are looking at those areas in which we can have a range of prescribed options or prescribed conditions - or there may be some performance-based ones where they might, by doing A, B and C, be able to get a different set of monitoring conditions, or monitoring locations.

That is what we are looking at from the standard.

CHAIR - So you might move to a situation where it is not a set 35-metre compliance boundary, but it is an unusual shape due to water movement or other conditions? It might be further out on one side of a lease, and further in on another, for example.

Mr FORD - Yes. There is another area we are looking at a change in. At the moment, largely across the leases, if there are no issues on when they do their surveying under their pens at the end of growing cycle, they are only required to survey under the six pens that have the most feed applied - theoretically, the six pens that have impacted the bottom the most.

We look at practices in other countries and see people have departed from that and basically the way feed goes up, the amount of monitoring goes up so we will start to look at those sorts also. On the bigger or the more intensively utilised farms, you might reasonably expect there is going to be more monitoring on those farms at the points of peak production and finding the balance between when do you escalate. If you did 10 and 10 were fine that might be it. If you do 10 and five were problematic, you might have to do another 10 or another five or something.

CHAIR - Would it be fair to say you are seeing this standard delivers to you a more responsive and nuanced way to engage in regulation that is more responsive to the physical context and also the activity context of each lease?

Mr FORD - Absolutely, so what it means is that within a context of a set framework of certainty we will be able to manage leases in a more variable sense. The more problematic leases will get more attention; more straightforward, less attention - whereas at the moment, it is pretty much a standard set of licence conditions.

Mr VALENTINE - Would it include sound and light pollution issues for surrounding neighbours and things like that?

Mr FORD - We are certainly looking at noise in terms of how to incorporate noise into the standard because noise is part of the current licence conditions incorporated in the old marine farming licences. We are revisiting noise in terms of a condition within an environmental licence.

Lights are a bit more problematic in terms of how to actually regulate it. Anyone who lives on a busy road or something and gets lights of cars, trucks and so on would understand it is not an easy thing to be able to regulate.

PUBLIC

Mr VALENTINE - It is a problem because some might say they have been there before the fish farms were, as some of them have. I was interested to know whether you would go down that path.

CHAIR - We might come back to noise and lights a bit later.

In the second part I asked you to reflect on - when the standard is in place, how will that then sit; where will it intersect with the planning process so when people are bringing a new plan or an amendment to a plan?

Mr FORD - Under the planning process, under the Marine Farm Planning Act - I think it is under section 17A, there is a role for the director in the planning process at a couple of points, so there is a couple of touch points through that those provisions provide.

First and foremost, with any new development proposal I would be running against the standard. I would be looking at what the companies proposed, what sort of elements they are looking at in the draft environmental impact statement they would prepare under the Marine Farm Planning Act. I would ensure the elements I require from the point of view of compliance with the environmental standard they have incorporated in their environmental impact statement so I can basically provide a direction saying this information has to be assessed at the assessment point. There is a further touchpoint with the Marine Farm Planning Review Panel, where I can issue a notice on the Marine Farm Planning Review Panel that really requires them to look at certain things in the way that plays out. We are still finding our way through that because it is very early stages in the way those provisions have operated, because the Storm Bay leases were all developed before that process. There has not been a greenfield, brand new lease site that has gone through the process in accordance with the way the Government changed the legislation. If, for example, the environmental standard talks about things like buffer zones or needing to be big enough to be able to allow rotation through a lease area, you would reasonably expect that is going to flow back into the planning process because the environmental standard says there has to be an opportunity to follow the part of the lease and use another part of the lease. It is not much good planning a lease that is too small.

CHAIR - Those two points in that planning process are the points you see specifically the standard will then be - is that going to require changes to legislation or changes to the steps of that process at all?

Mr FORD - No, those changes have already been made.

Ms FORREST - I did appreciate the visit to EPA a little while ago to see all that footage and to see what you are actually looking at. I am interested to talk about the measurement of nutrient load in the water, because it seems to me there is a level of dissolved nutrient in the water you can measure through water sampling. There is a lot of nutrient in seaweed and other grasses that just hang in the water not being captured in the water sample because they are contained within them and washed up on the beach; they break down and then get washed back out to the water again. Is it not part of your remit to assess the nutrient load in those plants, particularly where there is additional growth at various parts of the cycle?

Mr FORD - I suppose over a decade, at least 15 years now, the Institute for Marine and Antarctic Studies has been looking at this sort of work in the broadscale environmental

PUBLIC

monitoring research undertaken in the Huon and the Channel areas. That work has continued, and the companies are continuing to monitor to try to find what a cause-and-effect relationship is. Marine nutrients are complex beasts and we were talking about the nitrogen in the range of different forms; whether it be in an ammonia form when released from fish or in a nitrate form or a nitrite form, it is fundamentally nitrogen, so when we talk about nutrients, we talk about nitrogen.

Take somewhere like Storm Bay, the Southern Ocean, the nitrogen loading from the Southern Ocean is huge in winter, driving into the system from the south. That is the nature of what happens in terms of nitrogen cycling from the air to the ocean. When you put something like salmon farming over the top of that, or sewage discharges or land run-off, forestry or agricultural practices, it increases nitrogen in the waterways. We can measure detectable changes in nitrogen in close proximity to a marine farm, say, within -

Ms FORREST - In the water?

Mr FORD - In the water, within tens of metres, it can measure changes in ammonia, changes in nitrogen. Once you get beyond half a kilometre, it is asserted you cannot detect the nitrogen changes so it is one of the reasons in Storm Bay, for example, why we are doing such an intensive monitoring and modelling program and observing at the moment.

How do you actually detect nitrogen? How do you detect nutrients to determine what impact there might be? Just because you have elevated nitrogen does not mean it results in an impact.

If you look up and down and around the Australian coast, at places like Bicheno, there has been over 30 years an increase in marine algae, particularly green algae which is unrelated to salmon farming, it is related to the warming of the oceans. Look at the changes occurring on the east coast because of long-spined sea urchins, then put salmon interactions over the top.

Take somewhere like Long Bay last summer down at Port Arthur - there are a number of nutrient flows into that area. There is all the human input from stormwater and wastewater coming out of the Port Arthur area. There are changes to the freshwater flows because of the changes to the river systems in that part, going south of Taranna into the upper end of Long Bay, plus marine farming, so you see algal growth changes kilometres away from the marine farm. Is it the marine farm? That is the challenge everyone has when you do a lot of monitoring, but in the absence of having some clearly identifiable trace of nutrients - say, if you had a radioactive form of nitrogen that you introduced through your fish feed, which you could detect at some other point, you might then be able to say -

Ms FORREST - We are not prepared to undo it.

Mr FORD - No, but it is the notion of the challenge. Trying to unravel where the nitrogen in an area has come from is incredibly difficult.

Ms FORREST - People who have lived in that area for a long time and observed - let's say, Long Bay - have noticed a significant increase in the green algae in the bay. According to you, elements of climate change relate to that. How do you separate it out? It is a significant change. There are some people who still don't believe in climate change - very few - but

PUBLIC

regardless, something is happening that is creating this significant increase that is not being measured by you, or is it?

Mr FORD - We are taking water quality samples.

Ms FORREST - This is the nutrient tied up in the green algae while it is floating in the water.

CHAIR - As in, do you measure the quantity of algae in the water in those locations?

Ms FORREST - There is a lot of nutrient bound up in the algae.

Mr FORD - There is no process accounting for what the fate of nitrogen is in terms of total abundance of growth, for example. It is not something has been modelled that I am aware of or researchers have a capacity to be able to assert.

I could turn it around slightly, what I am hearing you ask is: are we effectively measuring the biomass of marine growth associated with our marine environment? The answer is no.

Mr VALENTINE - To that point, some of our submissions have pointed to the fact that in some farming that exists you get this algal mat and bloom. For a number of years, it's gone away and then it comes back and has started again. Other sources might be coming into that bay but on their anecdotal observation, they are saying it is clearly associated with salmon farming.

Mr FORD - I appreciate their views. My understanding is there is also evidence from a scientific collection process that shows there's increased algae in the Long Bay area in years when there was no salmon farming, in the intervening period when Tassal was not using that lease, which was six, eight, 10 years. It is a complex process.

Even today, a challenge from a community or from a government point of view is when you grow fish in the sea, there are going to be nutrients that are going to be discharged into the ocean as a result of it. The majority of the nitrogen going into the ocean is going through from the gills of the fish, not from the faecal material. It is not just about fish faecal material on the bottom. The dissolved nutrients in the water column themselves are predominantly coming from the fish respiring and fish gills.

CHAIR - Given there is anecdotal observation in the Long Bay and Stingray Bay area on the proliferation of filamentous algae, and you are saying it is difficult to determine to what degree it is caused by the fish farming located there, are we then just putting our hands in the air and saying, 'That's too hard. We won't look further at that'?

There is obviously an impact from this proliferation of algae. We have had it described in the submissions that it is affecting seagrass and things like that. Because of the difficulty in determining it, are we abandoning addressing it? Or is there a plan to better determine -

Mr FORD - We are continuing to monitor, but there is no plan to better determine whether there is a cause-and-effect relationship.

PUBLIC

Out of the Storm Bay work being undertaken at the moment, those questions are being asked through that process. As a result of that work, we may get some indications in terms of where you can detect change. This sort of research is very long term. It's one of those challenges that, in the absence of any activity, you can do a lot of research and you may get a response or you may not get a response. Ultimately, the question from a government point of view is: if people are concerned about marine growth in terms of the impact on their amenity and there is a view that it is associated with marine farming, to what extent is it determined that marine farming is therefore not compatible with the particular location?

CHAIR - It might not just be a matter of their own amenity; it might be that they are concerned about the environmental impact it is having in the marine environment as well, affecting seagrass proliferating.

You said that you would continue to monitor, but you are not actually monitoring the algae now?

Mr FORD - No, we are monitoring the water, but we're not monitoring algae.

CHAIR - EPA, or others, I imagine isn't monitoring either? We don't know if there is an increase from last year, from five years ago; we won't know whether there is an increase two years from now or five years from now because it is not actually being measured. Is there a way it can be measured so that there is at least, even given the difficulty in ascribing where it is coming from, an understanding of whether it is increasing, decreasing or staying neutral? Is there a way we could be monitoring, which we are not now?

Mr FORD - I'm not a seaweed expert. There are seaweed experts around from whom you might be able to get some information.

My understanding is that monitoring the abundance of the biomass of seaweed in the marine environment and then trying to convert it to a number is fairly problematic because many of these weeds come and go. They are relatively short-lived. You probably hear about one type one year, not the next. An example of where this has been tried and not necessarily successfully: we had an introduced seaweed *Undaria pinnatifida* on the east coast. It came in with the woodchip vessels, allegedly in the early 1970s, to Triabunna. When they were looking at harvesting that, they were trying to do a monitor every year on how the population was changing. It was so impacted by changing climatic conditions that they couldn't come up with any predictive modelling that said whether it was going up or going down, or it's changing because of $x-y-z$.

There is a challenge in trying to monitor something like marine algae. You might collect a whole lot of it. You could collect it at high tide or low tide, or in different wind conditions; you could look at any of the east coast beaches and the way seagrass washes up on those beaches - it is based on storm events, but it comes and goes. Some years in a summer in the bays around the top end of Great Oyster Bay, you will get a whole lot of seagrass, and in other years you will get almost none. Is that because the storm events haven't been there? Or is it because the abundance of seagrass has changed? We just don't know.

Ms FORREST - Do you think there is any value in trying to monitor it then? In terms of the casual nutrient load dissolved in the water and captured in plants, particularly when it is variable and there is a whole range of contributing factors?

Mr FORD - If you take it from a locational basis and you looked at something like the D'Entrecasteaux Channel, and you tried to monitor what was happening there, we don't monitor the nutrient loads in the rivers; we don't monitor what is happening in the inputs; we don't monitor the agricultural inputs, we don't monitor the stormwater inputs -

Ms FORREST - At all?

Mr FORD - Stormwater, not at all; wastewater from TasWater, yes; agricultural run-off, no; forestry impacts, no - just land use impacts, land clearing or domestic use. None of that is monitored from the point of how it's changing the nutrient loading.

Ms FORREST - You do test the quality of the water?

Mr FORD - From an EPA point of view, we are only independently monitoring three sites, and so we're not independently monitoring the Channel. We've done some monitoring in Long Bay. We're doing monitoring at Okehampton Bay and independent monitoring in Macquarie Harbour.

Ms FORREST - What are your criteria for undertaking monitoring?

Mr FORD - Macquarie Harbour was commenced because of the operations from the mining industry 20-odd years ago. As part of looking at rehabilitation from the mining process, the EPA established a monitoring program in Macquarie Harbour. That has been continued, even though the mining operations have changed, because it was identified more than 10 years ago that it was a valuable dataset to continue to look at in understanding changes around things like the salmon industry or the operation of the Gordon Dam. It is a long-run dataset that is worthwhile continuing because of the historic nature of that data. It is now valuable with what's happening in Macquarie Harbour.

We established an independent monitoring regime in Okehampton to be able to validate what Tassal is doing in terms of its monitoring, so we're monitoring closely to its monitoring, and our monitoring is telling us the same thing. It's really a ground-truthing process that was established because there was some concern whether Tassal's monitoring was going to be valid.

Last summer we did some monitoring in Long Bay to start to get some independent baseline data, and we will repeat that again this summer, so we can start to build a picture of what's happening in the Long Bay area.

Mr VALENTINE - In terms of monitoring and the like, and fish farms' compliance, have you ever had the need to enforce operating hours on leases anywhere across the state?

Mr FORD - No is the simple answer, if you're talking very specifically about noise.

Mr VALENTINE - Nothing?

Mr FORD - No, if you're focused on a noise question. As the industry has grown and more operations are occurring, night-time noise is becoming more of an issue for a number of residents, particularly in the northern part of the Channel where they're in close proximity.

PUBLIC

In somewhere like Macquarie Harbour or Storm Bay, noise is hardly going to be a problem for anyone because they're so far away.

The issue around noise is two- or threefold. One is the equipment they're using to keep either the lights going, because the fish need light at certain periods of time, or the air compressors, to move the feed through the feeding mechanism. You have noise associated with harvesting; you have noise associated with bathing; you have noise associated with towing the pens - and depending on where you are and what time of year and what time of day, various people will be concerned about noise.

Mr VALENTINE - Especially the towing of pens. Some of the submissions have talked about slow-moving vessels and the noise they create at night - and, of course, noise travels quite a distance over water.

CHAIR - Let's talk a bit about the EPA role in relation to setting up requirements around noise, and then monitoring and compliance around that.

Mr FORD - If you go back a decade, probably about 15 years noise, was identified as a concern to a number of residents, particularly in the northern end of the Channel - so the Marine Farming branch engaged the EPA for some advice about noise and noise-monitoring, and looking at the sort of limits that might be appropriate from an EPA regulatory point of view.

The marine farming process incorporated those sorts of requirements into some of their conditions at the time. Now that environmental management is our responsibility, noise is one factor that we need to revisit as we move through the development of the standard process.

One of the challenges with noise is determining what sort of limits are appropriate. If you look at other activities we regulate, we are in the media today about doing an abattoir in Scottsdale, so what are the appropriate night-time noise limits for operating an abattoir in a rural setting?

For the EPA, our standard set of noise requirements for night-time noise is generally 35 decibels, and for noise on the shoulder of the evening and morning can be 40 decibels - and this is at the nearest residence. General daytime noise can be around 45 decibels at the nearest residence - but that gets really quite complicated if you are in a rural setting. When the EPA did approval for Tassal for the hatchery at Hamilton, night-time was considered an issue, so there was a restriction of 32 decibels on that area. People will talk to you about needing to get to 19 to 20 decibels, but from a regulatory point of view that is not something we would impose. We would determine a reasonable wind will give you a reading of 25 to 30 decibels.

The challenge in managing noise, as Mr Valentine said, is that noise travels easily over water. People on north Bruny can hear people on the Shepherds [TBC] lease talking at 1 o'clock in the morning on a still night.

CHAIR - I imagine they do not speak for extended periods of time.

Mr FORD - This is the challenge. We might impose some regulatory limits from a noise production point of view, but many people will find those limits unacceptable, and that is a tension in terms of level of noise is acceptable in the community. If you are living in a house right on the uphill stretch of the Brooker Highway, the night-time noise you experience might

PUBLIC

be 40-plus decibels. You might have chosen to live there, or you might not have chosen to do that, but you are there and that is the noise, and you adapt to the noise.

The problem with noise is that it is not just how loud it is - it is the tone, the frequency, the irregular nature of it. This is why Sydney has curfews on flight paths. It is all about noise, to try minimise its impact on people. The challenge for industry - in this case the salmon industry - in particular locations is managing noise. If you had a similar conversation with people who live on the Tamar River on Beauty Point about the operations of the Bell Ball industrial site, there are noise issues there. The reality is wherever we have human activity within an industrial-scale operation, there is going to be noise.

I live on the hill in Geilston Bay, 5 kilometres away from Nyrstar, and I can hear Nyrstar because I know what I am listening for; others might not hear it. For a long time, people living at Lutana would say they are potentially affected by the noise.

CHAIR - Most people living in Lutana would not have been there prior to Nyrstar being there, so they probably moved there knowing that was the case.

To come back to that in a bit more detail. The 30 decibels at night-time -

Mr FORD - Thirty-five.

CHAIR - Sorry, 35. You said 32 for the hatchery in Hamilton?

Mr FORD - That is at the nearest house.

CHAIR - Is that not varied or it is varied according to the situation or context? For example, as you said, it might be quite acceptable to have that on the Brooker Highway, but in somewhere that would be regarded as a deeply quiet place, it is obviously going to have a lot more awareness around a noise, be more intrusive and have more of an impact, so do you adjust that according to the situation or context?

Mr FORD - Yes, to an acceptable level. As soon as you start having other inputs of noise that are going to add and are additive, it becomes challenging. It has been proposed there should be a limit of 19 decibels set on the marine farm operation north of Bruny.

CHAIR - On the basis of what?

Mr FORD - On the basis of that is what somebody thinks they were promised or is what somebody desires. In practical terms, you probably would not find an industry anywhere in the world that has a regulatory limit on noise that low at night because, yes, it is a quiet area, but there are lots of other quiet areas. The challenge in this area is ultimately you end up with a discussion about a resource allocation issue. The resource allocation issue governments have to address is do you remove noisy activity from an area so the people in close proximity have amenity to that area.

From an EPA point of view, our task is to look at what is a reasonable limit. What a reasonable limit might not be acceptable to a number of residents, but it might still be a reasonable limit from a statutory environmental nuisance point of view in terms of what would stand up in court as an environmental nuisance.

PUBLIC

CHAIR - It has been demonstrably reasonably and able to be equated to other limits that have been set elsewhere - is that what you are saying would be a common standard that might point to that?

Mr FORD - Yes.

CHAIR - Is there a difference then in terms of noise made on private land and private areas compared to public areas and public waterways?

Mr FORD - Not necessarily. Noise comes back to an issue around who is impacted and where they are impacted. You made a number of comments about people being there before the activity; that may well be the case, but there are other people who moved into the area knowing the activity was there, so it plays both ways in that sort of sense.

If you look at noise and noise problems in society - people on trail bikes, people with chainsaws, people on jet skis, rock music, loud parties - we see all of them. In terms of complaints, noise complaints make up the biggest number of public complaints the EPA receives.

CHAIR - What proportion of those complaints would be related to private activity versus commercial activity?

Mr FORD - The vast majority we receive are complaints about commercial activity because people generally do not complain to us about private activity.

It would be fair to say in this state there is no complete database of noise complaints compiled. People complain to the police, so if you are having a loud party at 11 o'clock two houses up, you do not ring the EPA or the council, you ring the police.

If you have motorbikes tearing around near your neighbours, you ring the police. A lot of private noise ends up being complained to the police.

CHAIR - Of the noise complaints the EPA receives, which are, as you say, more likely to be commercially-related. Do you provide or collect data and report it so it can be seen whether there are changes more or less over time and different areas and newly emerging issues and things like that?

Mr FORD - Yes, we do look at our complaints. We look on an annual basis where our complaints are coming from. We look to see what has changed. It can be the change of a few individuals.

The number of complaints two-and-a-half years ago against Nyrstar went through the roof and are still reasonably high. That was because one individual who had moved to Lutana was aggrieved by the noise of Nyrstar. We are tracking those complaints.

The person who established their glamping business at Beauty Point starting getting complaints from their patrons when the Bell Bay industrial site went up.

PUBLIC

We respond to complaints. If you look at the aquaculture industry and back to what we are talking about, over a number of years we have had complaints about particular activities. The operation of the *Ronja Huon* vessel when it first came to Tasmania - there was no power source available on the Port Huon Wharf. It took them some months to get a dedicated power source, so it was running its generators at night to keep power to the vessel and the constant generator noise was causing problems.

We have had complaints about a number of the operating sites. We have had complaints about both companies in the Channel. Uses of forklifts at night, loading vessels at night - they can be episodic so you can have one or two individuals in an area who will complain, but not broadscale complaining.

If you look at the noise in the north of the Channel or the assertions about noise coming from the Tassal's operation of the *Aqua Spa* vessel, we have a couple of people complaining to us about what is happening. We do not have tens or lots of people. We do not have a community complaining. It is always a challenge around who complains and why because some people will accept it, some will tolerate it and some are highly impacted by it at an individual level. When we get complaints information around what is happening at a particular time, we will follow it up with the company to try to ascertain: was there a problem; what was the noise; what is the characterisation; can they do something about it to try to minimise the impact?

CHAIR - In terms of other than having a decibel limit, are there other times you might say you cannot do that particular activity at night-time anymore, regardless of the decibel measure?

Mr FORD - If it came to a view that said this particular activity is not compatible with operation at night, can we impose controls? Yes, we can. How we get to those is going to be a process we have to step through. One of the challenges we have as a state is we have very few noise experts in this state and very limited.

Mr VALENTINE - Terts Pearu is about it?

Mr FORD - We have two or three decent consultants and ourselves, and our noise consultant's about to retire. Noise modelling and noise monitoring is a real physical science we in this state really struggle to have the capacity to do on a significant basis. We do it well with a very small amount of resources and the companies are the same. We ask the companies to go and do some noise monitoring and to even find anyone who can actually do it or the modelling, there a very few experts in the state that can do this. One of the challenges over the last six months is no-one has been able to bring anybody in from interstate as well.

Mr VALENTINE - What weight would you put on whether it is actually interrupting tourism, for instance? Somebody has been making a livelihood out of tourism, whether it is Airbnb or other sorts of things, something like a salmon farm comes along, sets up, creates this noise level. Clearly, they are going to complain. Do you take these sorts of things into account as well? Or is it simply that you stick to a metric of some sort and go with that?

Mr FORD - It becomes very difficult from an EPA point of view when we start to pick one commercial business and favour it over another commercial business.

PUBLIC

Mr VALENTINE - So the economics do not come into it?

Mr FORD - You go back to our glamping question. That operation knew that there was a heavy industry at Bell Bay, yet they expected some relief because they were setting up a high-value tourism industry.

In society there is a real challenge about unpacking: who came first and who has some proprietary right over impacting on - in this case, a noise space, the air shared associated with noise, and who makes those decisions and who makes decisions about whose business should prosper and whose should not.

CHAIR - Who does make those decisions?

Mr FORD - Ultimately, that is what governments are for.

CHAIR - Say, in terms of the operations of a fish farm in an area which may have been of a certain size when it first went through an approval process and was put in place, and people in that vicinity may have comes to terms with that. But then, there is growth, development. Something that may have happened one night a week is now happening four or five nights a week. In putting some constraints around that or assisting with public amenity to be acceptable - and again it might not come back to pure decibel levels. It might be either that activity is not appropriate at that time of day or it is only appropriate two nights a week. Have you implemented those sorts of controls in any situations where you have moderated the activity because it might have changed over time or increased over time? Not just about decibels but about frequency or presence.

Mr FORD - Not in a statutory licensed-condition sense. We have sought to negotiate with companies to make changes to their behaviour to reduce an impact. The challenge in those sorts of things is: How long do they last? Or what happens when the next group of people moves in and has a different view of the world? How do you find the balance? The challenge for us in that process is ultimately where you find balance.

I have to start with a position that says that a government has authorised this activity to occur. So my role is to find balance in terms of the environmental management, recognising that not everyone will get what they need or want out of that process. People will be disaffected by a business, whether it is the salmon industry or any other industry in Tasmania. The challenge as a regulator is how you find that balance and in what circumstances.

If you take the *Aqua Spa* operating at the north of Bruny - its recent introduction has had a number of complaints about its operations. How many nights a year should that vessel be allowed to operate in that vicinity? If it were to operate 35 nights a year out of 365 and cause impact, is that acceptable when it is not operating 90 per cent of the year?

CHAIR - Looking at that example, there were already fish-farming activities there prior to the *Aqua Spa* coming, which would have gone through a process of approval. Was there an additional process whereby the *Aqua Spa* was added to that business environment and farming activity, during which there would have been community consultation, opportunity for input, communication about expected activity and noise levels with the local community? Or did that just get added into the mix as a forgone conclusion?

PUBLIC

Mr FORD - There is no approval process required for the *Aqua Spa*, or the *Ronja Huon* or the *Ronja Storm* to operate as vessels.

As a consequence of those three vessels operating in the channel area, there is now less towing of pens and there is less noise. There are less vessel movements for the medium-size vessels. Part of both companies' strategy in using those large vessels is that you need to retire other activity. The whole purpose of bringing them in was to replace activity. They used to have to tow pens of water to bathe the fish in. By and large that activity doesn't happen. It will have to happen, in Tassal's case. If *Aqua Spa* stops working, they need to be able to revert to their traditional methods bathing fish, which means they will go back to towing pens of water.

The challenge in these processes is there are trade-offs. In order to change a practice in one way, a new practice is introduced. That new practice may have a different noise characteristic than the old practice; it may be less noisy. Certainly, the two large vessels, the *Aqua Spa* and the *Ronja Storm*, were both built with very high noise specifications.

Mr VALENTINE - Noise reduction.

Mr FORD - Noise reduction. Inherently those vessels are quieter than many other similar vessels worldwide.

That was because both companies came to talk to us beforehand. We said that you have to build these things in a manner that the noise from the vessels when they are operating within close proximity to a premises is going to be under 35 decibels. To have a vessel that is going to measurably noisier means that you are automatically setting yourself up from a regulatory failure point of view. If the monitoring data was showing that these vessels were operating at 40 dba at the residence, the companies are going to have a much more significant regulatory hurdle to get over.

One of the challenges we have at the moment is, because they operate periodically, trying to align getting the data, when we have relatively small sets and relatively small capacity in the state to do the monitoring. You have to be there when the vessel is there. With noise monitoring, you have to monitor for two or three or four weeks continuously and you have to have people there to be able to hear it. We are requiring the companies to look at their monitoring. They are undertaking noise monitoring so that we can validate the actual noise footprint, particularly again at North Bruny. What is the noise footprint at North Bruny at two o'clock in the morning on different occasions? What is the weather is doing and so on? So we can say, what it is in terms of a noise level.

Mr VALENTINE - You would look at the constancy of the noise as well.

Mr FORD - Yes. It's not just the loudness of the noise. It is the frequency's physiology. A lower frequency noise will vibrate your windows. You may not even hear it, but you feel it lying in bed, and you feel your windows shuddering. You may not even hear the noise. That obviously annoys people.

Higher frequency noise. Typically, if a bearing fails in something, you will get a high-pitched squealing noise.

PUBLIC

CHAIR - To pick up on your monitoring. There is an active concern in that area, presently, as you would be well aware, and we have heard through submissions. Why aren't you effectively monitoring there at the moment? So you can say, yes there is a problem, and here is what needs to happen. Or no, there is not a problem. Everyone needs to calm down.

Mr FORD - Yes, it is our intent to monitor when they start again. I had spoken to one of the complainants about undertaking monitoring, and within about three days the activity had ceased, because my understanding is that there are currently no fish at the Shepherds lease, so they've fallowed the lease. That means there is limited noise from compressors - they run some things, even though they have no fish there - but the *Aqua Spa* is not there, so there's no point racing out and putting in noise-monitoring equipment for two or three weeks when the vessels are not going to be there.

We need to align our monitoring activities to when we know when the next period of activity is going to occur, because we have to get real data.

CHAIR - You have that plan in place, for when they resume activity. When was the last time you monitored in that area?

Mr FORD - In my time in the EPA, we haven't monitored in that particular area.

CHAIR - That is a period of how many years?

Mr FORD - Five-and-a-half years. I am not aware there was any substantive monitoring in the north of Bruny for more than a decade.

CHAIR - Across that time, you would have been receiving complaints about noise?

Mr FORD - They have come and gone. Over the course of five-and-a-half years we've received a number of complaints from a number of individuals, and they tend to be very episodic, particularly with what's happening at the Shepherds lease. They have changed since the Simmons lease was recommissioned. This is one of the challenges -

Ms FORREST - The complaints have changed, or the activities?

Mr FORD - The number of complaints has increased, because now you have two leases on that -

CHAIR - Additional activity?

Mr FORD - Yes.

CHAIR - When did that begin?

Mr FORD - About 18 months ago. I think they re-established -

CHAIR - Complaints have been fairly regularly received from that area for the past 18 months?

PUBLIC

Mr FORD - Tassal has had far more complaints than we've had, because a number of individuals on North Bruny have spent a number of years trying to negotiate outcomes with Tassal, so they concluded that -

Mr VALENTINE - Directly with the company?

Mr FORD - Yes. They're more likely to get a positive response by positively engaging with the company, rather than just ringing us - whereas in the Port Huon area for a time, particularly when the *Ronja Huon* arrived, we got a spike in complaints around the *Ronja Huon*, but that's settled down again.

The challenge in trying to deal with those sorts of things is unravelling how many individuals, where they're located, and what might be driving any particular complaint on any given night. Why does one person complain, and the other 20 or 50 people who live nearby not complain? We don't know the answers to those sorts of things.

Mr VALENTINE - Do you consult with them when you're setting up where you measure?

Mr FORD - We have engaged with certain individuals about where we set up equipment. This equipment is expensive, and we tend to want to set it up somewhere where we know someone's going to want it to be there.

Ms FORREST - How big is the unit?

Mr FORD - It's a few boxes, the size of a briefcase.

Ms FORREST - It's not overly intrusive in itself?

Mr FORD - No, but it's portable and attractive - so going and doing clandestine noise monitoring possibly will result in the equipment disappearing if somebody doesn't want it to be there. Tasmania is not a very big place. When people turn up to start noise monitoring, everyone in the community knows about it. It is one of those things that has to be done openly and transparently with the support of the community, because if we need to put the equipment on someone's place -

Ms FORREST - Is that a barrier, Wes? When you look at some of these places, for example in the Huon, there are groups of people who are really supportive and don't want anything to interrupt the activities of the industry because of the employment it creates and so on, and then you have others who are vehemently opposed to it.

Mr FORD - At a general level, some of those things are barriers to any government monitoring - it doesn't matter whether it's this sort of monitoring. In a previous life, when I worked in water, we had similar challenges with establishing water monitoring or groundwater monitoring. Some people were reluctant to have the government traipsing over their property and coming in collecting data for a variety of reasons. Some people may have been pressured, some people may have just not wanted us there.

We are looking at our air monitoring arrangements in the state. We have many of those air monitoring arrangements on private land, where we have entered into some specific -

PUBLIC

Ms FORREST - Has this discontent, or differing views if you like, meant that you haven't been able to undertake monitoring in response?

Mr FORD - No, it has not impeded us in any way.

CHAIR - Just to clarify, for the past 18 months or so, there have been more complaints around North Bruny because of the two sites operating. The EPA hasn't done any monitoring during that time?

Mr FORD - No.

CHAIR - You pointed to the fact that the local community were perhaps engaging more directly with the company with their complaints and interactions, rather than with the EPA. It would appear this hasn't delivered an outcome they are happy with. Is it a preferable course to deal directly with the EPA, then? Would that result in a more definite outcome in terms of a commitment to monitoring, and then resolving?

Mr FORD - Not necessarily. We need the information, and our first response will be to work with the companies to try to understand what the problem is, and why has caused the problem.

CHAIR - Do the companies need to tell you when complaints have been made to them?

Mr FORD - The companies are required to keep complaints registers; that is one of the general licence conditions. It doesn't matter whether it's TasWater, Nyrstar, Tassal or Huon Aquaculture. How well they do, and how valuable that information is, is variable.

From my engagement with both Tassal and Huon Aquaculture, I think they do have pretty good complaints registers for noise complaints - in Tassal's case, in the north of Bruny, and in Huon Aquaculture's case, all around Port Huon. They have been dealing with these issues, so they do have good records of them.

CHAIR - Having to share those records with you, we can effectively regard people having complained directly to the company to also have complained to the EPA, because you eventually receive that information through the complaints register - so, the EPA has been aware of the level of complaint in that area for some time. What stopped you monitoring to actually ascertain the validity of the complaints?

Mr FORD - First of all, you need to have a capacity to respond. Take North Bruny, where activity has increased since about January with the *Aqua Spa*. In terms of equipment, skills and individuals, we are very limited in our capacity - and overlay that with COVID-19, we have not been able to work in the field for a whole variety of reasons. We have not been down monitoring that site. That is just the reality.

Mr VALENTINE - In the absence of COVID-19, you would be doing those measurements? It wouldn't be the company doing those measurements and giving them back to you?

PUBLIC

Mr FORD - It would be both, because long-term monitoring has to be undertaken by the companies.

If the Government wants us to do long-term monitoring programs of anything - whether it's noise, water quality, air quality - it has to be resourced.

If we turn to air for a minute, we run the smoke network that monitors air quality in the state. We have about 37 air monitoring stations. In order to resource and manage that - because there is a national commitment required under the national environmental protection measure for air, for monitoring smoke or air impact - it is our most intensive monitoring activity. It's very resource intensive, so you replicate that across noise, water and all sorts of other things, and our workload, our resourcing, would go up by 20 to 30 staff, plus all the equipment. At the end of the day we do what we can with the resources we have and balance those resources around the state. We work on a basis of trying to deal with noise as a complaints-based issue.

Mr VALENTINE - Do you have the arrangement where industry contributes financial resources as opposed to them doing the measurement. You are actually undertaking the measuring, but it is being contributed to by industry.

Mr FORD - If you look at entire state of Tasmania, we regulate not only the salmon industry - we just did some analysis for the EPA board at its last meeting and we recover less than 80 per cent of our direct costs of management, let alone the indirect costs of management. We recover less than 80 per cent of the direct costs of management from industry in Tasmania for environmental regulation.

You overlay that and look at salmon from an environmental point view where recovery is closer to a 100 per cent. From an environmental point of view, we recover more from salmon than we do from any other industry.

CHAIR - Yet you do not have the resources available to be able to fully respond necessarily to the complaints made or the situations being faced out there.

Mr FORD - That is a general challenge with all government services. There would not be a government service in this state that would not say they do not have adequate resources to do the work required.

I have a document if you would like me to table that summarises our complaints against the industry from 2016 to 2019. This provides a summary of all complaints which were received associated with aquaculture industry if you are interested.

CHAIR - Does it also indicate the responses made?

Mr FORD - A bit of yes and no in that. It talks about what the complaints are. In tabling this it has private names on it, so if you were going to publish, I would request you redact the name column of the complainant.

CHAIR - Absolutely, we will take that into consideration we will not put private information into the public domain.

PUBLIC

Mr FORD - There is a bit of both in those sorts of things about how we resolve. There is some summary on how we have resolved some of these things and a list of the complaints and a summary of them. Out of session if you want to follow up on any written questions about this, I am happy to also provide a response in writing.

Mr VALENTINE - For the record, the cooperation you do or do not get from the industry when it comes to these sorts of things?

Mr FORD - By and large it is positive generally. Their staff do not like getting calls at 3 o'clock in the morning saying the thing is noisy again, particularly if it is something they can immediately address, then they respond generally positively. If it is the mere presence of a vessel being there, it is a bit harder for them to respond. Regarding the *Aqua Spa*, if there was a discussion about a reasonable sharing effectively in how long is the *Aqua Spa* allowed to operate at Shepherds over the course of a year - I do not know the answer to the question, but is 35 days reasonable or unreasonable. The people being impacted by it may say it is unreasonable, Tassal might say 35 days is what we need.

CHAIR - The people impacted might quite liked to be asked and be participating in that conversation. Would I be right in thinking they have not had an opportunity to participate in such a conversation about what might be or not be acceptable?

Mr FORD - I would respond to say there are different views about the engagements between the companies and the private individuals. Different people have different views about how those engagements have been both through time and directly associated with *Aqua Spa*.

CHAIR - Potentially, then would that point to an appropriateness to that conversation and negotiation being facilitated through the EPA or through a government agency such that it can be had in an accountable way, can be well resolved, and arrive somewhere where everyone can -

Mr VALENTINE - Live with it.

CHAIR - That is right, and feel they have been involved in that process in an equitable way. That also has not occurred to date?

Mr FORD - It has occurred spasmodically around particular issues, but it is not resulted in a defined licence condition. We would take a view these sorts of things should be able to be managed by agreement and not have to be co-defined into a licence condition.

The underlying process in that would be if a company reaches an agreement with a community and that company fails to honour the agreement, that might be a trigger to say there needs to be a condition put on that licence in order to bind the company to what it is committed to.

CHAIR - How would that trigger be pulled? For example, we may look to the situation in that area at the moment, and it may be the community feels those interactions and negotiations have broken down to such an extent they are not going to resolve things in a fruitful way. Has that trigger been pulled at North Bruny and should there then be a process facilitated that looks at ultimately licence conditions?

PUBLIC

Mr FORD - What might seem like a cop-out answer, one answer might be, well, they are the sorts of things you would actually start to look at co-defining in the standard, to actually go back to that question around what is the certainty, what is the expectation. So, when (a) happens, (b) is the response.

CHAIR - Your expectation is that it would be something relating in that sense to noise in the standard.

Mr FORD - I would be looking at dealing with those sorts of things in a standard that actually gives a community a better understanding as to what they might be able to do and what the consequences might be.

Also, from the company's point of view, it starts to give them a conversation around saying, 'Well, how are we going to manage this?'. I would reasonably hope and start to require the companies to start looking at things like operational management plans around particular leases.

Trying to work out does this particular lease have a particular set of characteristics that says we should not be operating on this lease, or we will not operate in this lease area between *x* and *y* sort of thing.

The companies need to work those sorts of things out, because us telling them a fixed set of hours becomes a last resort.

CHAIR - We have spent a lot of time on noise, but it is something we have heard a lot about, so thank you. We will move on if that is alright.

Can I talk a little bit about information available from your monitoring and compliance activities through the EPA? Information that is proactively put into the public domain, available on request or has to be sought through formal channels like an RTI.

Can you differentiate in a general sense where information falls into those three categories?

Mr FORD - I suppose the easy end of the spectrum for me is where something has to statutorily be available. Under the act, they talk about registers. Our permits, or the conditions through that we impose on permits, and our licences, have to be statutorily available.

Part of that solution to making them available was moving them to a point where people had to apply, and pay for them, to move them into the public arena, by publishing them on the list.

For example, two years ago you would not have been able to get the permit for NyrStar, or the permit for Tassal's Margate fish processing plant. You would not have been able to get it easily. You would have to apply to the EPA. There are now all publicly available. That is the starting point for us.

The next point for us we are looking into is, how to make decisions around what else should be automatically in the public arena. If you take a topical issue that has been dealt with in terms of discussed in the public arena, Tassal's proposal to build a hatchery at Hamilton,

PUBLIC

when they proceed to build it, has associated with it a number of management plans: an irrigation management plan, in terms of how the wastewater is going to be irrigated; a noise management plan; an odour management plan. My view is that those sorts of documents also should be statutorily available.

CHAIR - They're not currently?

Mr FORD - No, they're not.

Ms FORREST - They might be in the standard?

Mr FORD - One way to deal with it is to the standard. Another way to deal with it is - you may or may not have had a look at the draft environmental legislation amendment bill that was out for public consultation in the middle of last year. We started dealing with this question around statutorily making more information available.

If you look at what's happened, we have an act that is 25 years old or something now. When it was written, the world was a very different place. Our ability to make information available is changing. For example, in just the last five years, we have gone from not requiring companies to produce an annual environmental report that is publicly available to now it now being a standard condition.

CHAIR - For?

Mr FORD - For everything.

CHAIR - Including salmon companies?

Mr FORD - Yes. It doesn't matter whether you're a quarry or a fish-processing facility.

CHAIR - As of when?

Mr FORD - That's been progressively implemented over the last five years. The current requirements are that they are publicly available, which means they make them publicly available. One of the challenges we have in that space is that we regulate 500 premises in the state, so it comes a huge task for us.

Ms FORREST - Making sure they have done it?

Mr FORD - One, to make sure they have done it. We do that through the audit process, but trying to find some of these things on people's websites and so on -

CHAIR - They are not required to provide it to you that you could then put it in a single, central repository?

Mr FORD - Some of them do, some of them don't. That is a question for us around how we make those sorts of things publicly available.

PUBLIC

We have a website that currently doesn't lend itself to any of that so rebuilding our website is a priority for us. But that is not something that happens overnight. We have to completely redevelop our website to make information more available.

CHAIR - What's your expectation on the time line for that?

Mr FORD - Late next year. We are in the sausage machine and trying to get IT development done. Everyone is in the same sort of challenge around here.

Ms FORREST - What is the status of the bill, the environment legislation bill?

Mr FORD - At this point, this bill may come back to parliament in the autumn session next year. It is certainly not scheduled for the spring session.

Ms FORREST - Has the consultation been completed on it?

Mr FORD - There was a round of consultation. Consultation was completed on that bill but the bill -

Ms FORREST - There have been amendments to it.

Mr FORD - Yes, there were. The bill was in a position where it could have progressed to parliament at the end of last year. The minister at the time decided that he wanted some further work done on it, so we would have anticipated it coming forward in the parliamentary session that's just disappeared.

Ms FORREST - No-one knew that was coming, did we?

Mr FORD - No, now the Government's parliamentary time frame has been rejigged. We have a new minister as well since the bill was prepared. So we will be working with the minister with the intent of that bill coming forward for autumn.

Ms FORREST - Is there a new draft out?

Mr FORD - No, we haven't revisited that version. The version you have is the public consultation version. Yes, there is a new version but the new version has not progressed anywhere.

Ms FORREST - Is there a plan to consult further on that before it does come to the parliament?

Mr FORD - That will depend on what further changes the minister now wants. It is like any bill process. We are now back in a process where we will need to go back to Cabinet and discuss the bill and take a lead from what Cabinet wants to do with it.

Ms FORREST - It is going to be returned so the information is made public?

Mr FORD - Yes.

PUBLIC

CHAIR - You're moving towards a range of information being statutorily required to be in the public domain - things like management plans and permits, licence conditions, those sorts of things - what else apart from statutory requirements?

Mr FORD - Then you start getting on to a whole lot of documentation of which I've got groups of it here. If you're interested in my tabling some of it, it's for your perusal.

One of the things we're discussing is how we deal with compliance information. If you take Macquarie Harbour. We may or may not get into Macquarie Harbour. I don't know what you want to do with Macquarie Harbour but quite clearly from what's in the public arena on Macquarie Harbour and what's on our website in relation to Macquarie Harbour, I have taken the view that I am going to basically publish everything that deals with the industry. The compliance information is there at an industry level. The biomass determinations are there. The statements of reasons for the biomass determinations are all on the website. What's not on the website is my interaction with each company on their individual compliance monitoring program.

In Macquarie Harbour they're doing compliance monitoring every four months. They provide us with a report. We analyse that report and we provide them with a response. That response might range from 'All is well, thanks very much' to 'You might have some minor issues' to 'You might have some major issues.'

How would I deal with the context of those letters? I would probably deal with it as active disclosure under the right to information process. If somebody's asked for a compliance letter, I would say, 'It's a letter I have generated' and I would release it. A compliance report submitted by the company would have to be dealt with as assessed disclosure because you have to go through the third party consultation process. I generally take the view that if it's my document and I've created it under legislation, it should be actively disclosed.

CHAIR - Actively disclosed or discoverable through RTI? Would you just provide it on simple request, rather than RTI request? Or would a member of the public, for example, have to -

Mr FORD - This is why the legislation changes are basically to protect me, but I want to get to a position to protect the process that says, 'Yes, I can give it out without fear or favour.'

At the moment, when somebody wants something actively disclosed, I require them to go through the RTI process so that then it gets disclosed under the RTI process. That is a legislative mechanism that protects me through the consistency process. If I'm giving out a document that might impact a company - and again this is not just a salmon issue, this is coming back to Nyrstar or TasWater - in the absence of a clear legislative pathway that says these documents are available and the person who is releasing them is protected at law, that's why I use the RTI process. When I use the RTI process the advantage is when we release something under active disclosure under RTI, it then gets published on the DPIPWE website.

We've had a few instances where people have come to us - not necessarily in salmon but there's been a few from the Tarkine coalition staff. There's a range of others to whom we have released documents. I take the view that if I'm going to release it to a person who might want to send it to the media or might want to do something with it, it is quite appropriate that document should be in the public arena. I don't believe it's appropriate for me to give a

PUBLIC

document to a person who might intend doing something with it and then not making it publicly available. So while challenging and frustrating for people, the RTI mechanism is -

CHAIR - Costly in some instances.

Mr FORD - Yes, but that's the current legal mechanism that I have and I am very careful not to step outside of a legal process that leaves the EPA exposed for potentially releasing information that might impact a company.

CHAIR - That step back where you say the industry-level data for the Macquarie Harbour region is something that you do make available in the public domain, is that via the EPA website?

Mr FORD - Yes. There is a lot on Macquarie Harbour on the EPA website.

CHAIR - Are you also doing that for the other areas in the state, not only Macquarie Harbour?

Mr FORD - Progressively we will. This has been when it comes to a need and who is asking. I do not really care why they are asking; it is really who is asking. There was significant interest in Macquarie Harbour for a whole variety of people, so it was entirely appropriate to have that information freely available.

People are currently not really asking about some of the other areas. This is a work-in-progress for us because people look at our website and say it is very hard to find, stuff is buried deeply and it is not well structured, which is all true. We need a better vehicle to be able to get information to people.

Ms FORREST - Information is published on the company website.

CHAIR - My understanding is it not done in a consistent way.

Ms FORREST - Some say it is, though. In terms of your protection, if it is published on their website, it is obviously a public document at that point. If you are asked for it -

Mr FORD - We were dealing with one the other day where someone came to us and said, 'I want the public environmental report for a company and I can't find it on their website.'. They had not published on their website.

Ms FORREST - They hadn't?

Mr FORD - They had not. We released that and did not require them to go through the RTI process, because it was a public document. All we did was -

Ms FORREST - That is what I was saying. You can do that without an RTI.

Mr FORD - In that case we notified the company we had a request, we did not say from whom, just from a no surprises point of view and a courtesy point of view, we advised company A there was a request for its last couple of annual environmental reports. We released them

PUBLIC

and, 'By the way, why aren't they available on your website?'. They got a please explain as well.

Mr VALENTINE - With respect to the Meadowbank hatchery, I am not quite sure where that is up to at the moment, but what part do you play in what has to be measured and who is going to measure it and those sorts of things?

Mr FORD - To answer your first question, it has all of its primary approvals and is now going through secondary approvals. Typically, when a board or a council, but in this case when the EPA board approved the facility, a number of management plans had to be submitted for the director's approval. That is what we treat as a secondary approval. By approval is, I cannot hold up the development without unreasonably - if they do not get me the document, they do not get a green light and they are generally conditions that say you cannot operate until you provided this, so they are going through those.

We will be doing any independent monitoring of that site? Not that we would plan to. Our response to independent monitoring on any site is driven by a range of issues. If we have complaints about environmental problems on a site, it does not matter whether it is this site or a sawmill, a vegetable process facility or wastewater treatment plan, we will only undertake monitoring where we perceive there is a problem the company is not adequately monitoring. It comes back to a general resourcing and process. All the conditions require them to do all the monitoring and to submit all the data to us for analysis.

Mr VALENTINE - Given quite a lot of public recreation occurs on Meadowbank Dam with secondary contact on that site - if that is what you call it - is this not something that might be taken into consideration as to who does the monitoring and what is monitored?

Mr FORD - You are talking about an area in a landscape that has significant agricultural inputs, with major dairies discharging straight into the waterways in that system. There is a major fruit growing area, so significant use of fertilisers and agricultural additives and all sorts of things that in the context of a facility in the landscape, the Tassal facility is effectively completely benign on Meadowbank Dam.

Mr VALENTINE - Do you do any baseline measurements prior to that facility starting up to see whether or not they are.

Mr FORD - No, and you will not find a signal from that facility within a few metres of the shore of Meadowbank Dam. You have a ephemeral creek that runs into it is surrounded by pasture that has beef cattle on it; you have sheep, agricultural fertiliser all draining down the same catchment. Trying to detect any change from a hatchery growing fish is going to be negligible.

Mr VALENTINE - You know we have had a submission on this which talks about the spraying of effluent over significant areas, human effluent as well. Are you saying that is not likely to pose a risk to uses of the Meadowbank Dam?

Mr FORD - This piece of land will be the second most highly monitored piece of agricultural land in Tasmania in terms of the practices that will need to be employed in terms of the Irrigation Management Plan. The human effluent - at the end of the day, it will be a

PUBLIC

small wastewater treatment plant. We irrigate treated human effluent over much of Tasmania both through level 1 and level 2 activities.

Mr VALENTINE - It is not uncommon?

Mr FORD - You drive past one every time you drive up the Midlands, you drive past the Oatlands Waste Water Treatment Plant on the left-hand side of the highway. If you travel around through Penna, the Midway Point Wastewater Treatment Plant irrigates out onto land on those flats near Penna. The reuse of treated wastewater out of human wastewater treatment systems is well established and a predominant way to deal with wastewater.

Mr VALENTINE - It is common for the company that is producing this to do the measurements, not the EPA.

Mr FORD - In all cases the operator of the licenced facility does the monitoring and it does not matter whether it is a vegetable processing works, TasWater, a mine, a mineral processing facility, a fish hatchery is no different.

CHAIR - I am mindful we are nearly out of time. One thing to have a final comment on and about the new standard coming. Would the fish farming operations potentially operating today, to come through under a new standard be approved? I know you are going to be applying the new standard to existing operations and leases. Are you anticipating you will be needing to put some significant changes in terms of monitoring, compliance and conditions to bring some facilities up to a standard?

Mr FORD - The simple answer is, yes. Whenever the law changes, there will always be activity that is now not compliant with the current law. When you think of the building code, most of our houses probably would not comply with today's building code because they were built before today's building code. As house owners we are not required to upgrade our houses. What we have to do is look at what the environmental footprint of old technology might be in that it does not matter whether it is TasWater or someone else. So if the standard changes, and changes the way the activity occurs, then we'll work with the companies to work out how you improve that particular arrangement.

Flowthrough hatcheries is an obvious one when we start talking about the freshwater side - notwithstanding that freshwater hatcheries won't be in the first version of the environmental standard. To be able to address that is another two years work in itself. You look at things like flowthrough hatcheries and you might say there's probably not a place for them in a modern, highly geared industry. All the new hatcheries that have been built are all high tech. They all have water treatment facilities, and when you look at the -

Ms FORREST - Recirculating.

Mr FORD - Yes. Whale Point is the newest facility, but you look at their Rookwood facility, the [inaudible]. By and large they have better wastewater treatment systems. Certainly the one at Whale Point probably has the best wastewater treatment system in Tasmania. It's probably better than any of TasWater's wastewater treatment facilities.

Ms FORREST - That is probably a fair call.

PUBLIC

CHAIR - Yes, when you're reflecting on the remaining flowthrough.

Mr FORD - In terms of what is the new standard, when you look at how the industry will adapt progressively, and the challenges, there is that tension between when do they proactively do it and when do they get pushed to do it? That's a constant race we run. Who has got their hand on the lever - industry or us?

It's all about ensuring people are operating with the best available technology that's affordable, in the context of what we're trying to do in terms of running or supporting an industry that is run in Tasmania.

CHAIR - It's a good non-answer, Wes.

Mr FORD - But it does start off as a yes.

CHAIR - Yes. The expectation is that there'll be some new requirements.

Ms FORREST - You might close down a flowthrough hatchery because it just can't comply any longer with the expectations of modern society?

Mr FORD - We'll deal with that when we come across it. The question at the moment around do we have any of those hatcheries in the state at the moment? Some individuals would say we have.

Ms FORREST - Some have said that.

Mr FORD - Yes, but the measurable science point of view is the challenge with some of these things. You look at the hatcheries that have been operating in the Wayatinah/Florentine for a long time. There are significant other uncontrolled nutrient inputs into that dam system.

Ms FORREST - That's not an excuse of adding to it when you can control it. There are some things you can't control.

Mr FORD - It comes back to what you can control about the new activity, versus the existing activity. Do you take action?

Ms FORREST - Let's just stick with the controllable activity, because you can't control how much nitrogen comes up from the Southern Ocean in winter. Good luck with that if you want to try.

Mr FORD - There are potentially other controllable activities that are not controlled outside of finfish farming.

CHAIR - I'm mindful we've gone over time. Thank you for the time you've given us today. We've covered a reasonable amount of ground. No doubt, we may have further conversations, or look for further information. There are probably a few things to follow up on from today.

PUBLIC

Mr FORD - When you are going through your deliberations and you need some examples of compliance reports or those sorts of things, just send me a request and we'll provide whatever you need to help you understand how we do our business.

I generated this small amount of paper for a small amount of stuff. If we printed copies of everything we did, I'd be bringing a wheelbarrow of paper in.

CHAIR - Thanks very much for that. We'll close it there and we'll stop broadcasting for the moment.

Mr VALENTINE - Thank you for providing us with the information.

Mr FORD - That's okay.

THE WITNESS WITHDREW.