# THE LEGISLATIVE COUNCIL SESSIONAL COMMITTEE GOVERNMENT ADMINISTRATION A MET IN BURNIE, ON MONDAY 24 FEBRUARY 2020.

# **FINFISH FARMING IN TASMANIA**

Mr CRAIG GARLAND WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

**CHAIR** (Ms Webb) - Welcome to the Government Administration Committee A subcommittee inquiry into finfish farming in Tasmania.

This is a public hearing so all evidence presented is covered by parliamentary privilege while we are here. Once you are outside the hearing that will not necessarily apply, so I am just reminding you of that. We are recording today's hearing and there will be a *Hansard* of it available on the committee website. We are not broadcasting today because we are not at a location with broadcasting facilities.

If there is evidence you believe needs to be heard in camera, you can make a request of the committee for that and we will consider that request at the time.

You can start with some opening comments to the committee if you wish and then we will spend some time asking questions.

Mr GARLAND - I am here today because of my ongoing concerns with the state of salmon/finfish aquaculture in this state, stemming from the relocation of seals, which occurred for 27 years up to the point where I heard on the evening news they were expanding into the north-west. I have just spent the last eight years collecting samples for scientists of the fish that breed in that area, which is one of the most crucial fish-breeding and propagation nursery areas we have in this state, not only for finfish but also for sharks, skates and rays. The birdlife that relies on baitfish in that area is quite significant - you are talking millions of birds.

I have brought along today four reports that have been compiled, three by students of IMAS under the instruction of James Haddy. One is the population dynamics of the blue spot [flathead]. The others are the growth, mortality and reproductive biology of the snook; age, growth and mortality of rock flathead, and Dr Greg Jenkins's report on the King George whiting. Dr Greg Jenkins is from Melbourne University and is one of the most esteemed scientists in this country. He compiled a report in 2016 after we spent two years collecting samples and establishing what was going on in those waters.

I also have a map compiled by Petuna which lists fishermen and which has the areas shaded. I will hand these out.

**CHAIR** - Would you like to table those for the committee?

**Mr GARLAND** - I will table them, yes. They show a list of fishermen's names and the fisheries they're engaged in, in that area. As you can see from that, it is self-evident that area is crucial to shark, cray, abalone, calamari, all the finfish species. We have an abalone farm at the back of Stanley and, as you can see from that, this one salmon farm sits directly in amongst all those

crucial wild fisheries we have there. The fish larvae that float around in that area is quite significant and the nature of that larvae floating in the upper surface level - King George whiting and these three species here spend three months in the upper surface level - the larvae have to come to the surface to inflate their air sacs and that suspends them in the upper surface for a three-month period until they settle. If there is any barrier on the surface in any way, shape or form in the way of oil or foreign material, that larvae will not survive and it's a lottery from one year to the next, given our weather and conditions here, whether that larvae settle without impacts from an industrial nature. I'll leave it at that.

**CHAIR** - Would you like to table those reports with the committee?

Mr GARLAND -Yes.

**CHAIR** - Thank you for that. We might move into some questions. From your submission and your remarks just now, it sounds like the site selection of where salmon farms may be located is a key issue of interest to you. What is your understanding of the current process for making site selections for the industry and also the opportunity for people like yourself or other community members to be involved in that process?

Mr GARLAND - As far as I am aware not one fisherman was involved in this salmon growth plan. We weren't consulted through our industry bodies. One of the big problems we have is the conflicted nature of TSIC managing wild finfish and the finfish aquaculture at same time. It's adaptive management up against precautionary-based science.

We haven't had any opportunity to say this area is crucial and this is what is going on there. We found out about it on the evening news and, to my mind, that's a terrible way to run this state of affairs. The reason we have a division in this state and salmon farm conflict is because of this very nature. They've not taken us, the community, the stakeholders in these areas, along with them. They haven't talked to us. They've just thrown it at us and created another divisionary process which suits their political purposes, I believe.

**CHAIR** - Since becoming aware of the consideration of these areas for salmon farming, have you endeavoured to provide input into the process, or make contact with the industry or industry bodies to have those conversations?

Mr GARLAND - We are so frustrated. For 27 years they ignored us with the seal relocation thing and it was a mental health episode that finally brought that to an end. That was what it took to get some common sense. They went against their own guidelines, taking fish and fish products from one place to another and dumping them into our fisheries. We had no faith in those who were representing us and nowhere to turn to, and that's why I got political. I felt so frustrated with all this. The mental health side of things, we're only six small mesh fishermen here, but what we went through was devastating. Can you imagine running a farm and turning up every day and there's a truckload of dogs being offloaded into your sheep nursery with your ewes and what have you? We had to put up with that for 27 years.

They said there was no evidence to support it having any effect on our fishery, but they didn't look for any evidence. There was no baseline science done before they started taking these seals and dumping them into our area. One seal was attacking divers, and guess what? They rounded him up and dumped him at Sisters Beach where all our kids swim.

This is an industry that's gone mad on a profit margin, and they've all been seduced by that. We have some amazing things here that are being impacted, particularly in the north-west. This is world-class. There is only a small number of us fishermen out there, and if we could take everybody out there and show them what we have, they'd be lining up with us protesting. We felt like we had nowhere else to go.

I've met with Ruth and organised a meeting with Petuna. I met with Mr Alvarez and Tim Hess. I was gobsmacked at one comment from Mr Alvarez when I said to show us on the map where you want to go, because there was all this assumption and innuendo going about - they're going be here, they're going to be going there. In our industry that caused a lot of stress. I asked him to point out on the map where they were planning to go and he pointed midway between Three Hummock and North Point on Stanley, which is highlighted on that map. I said, 'Well, that's no good', and his comment was, 'Why? It's only sand out there.'. I was gobsmacked. How can you come into an area like that and say that there is only sand there when we have had generations of fish in there? We know the movements. The spider crabs come there to moult every year. You have seen that on David Attenborough's film. The thought of 10 000 tonnes plonked right there on top of all of this activity and knowing the science with the fish larval movements and its fickle nature, I thought how reckless and what an utter disregard for us in the industry and the community.

**Ms FORREST** - Craig, since the Government made a decision to cease relocation of seals, what are your observations?

Mr GARLAND - This is really interesting, Ruth, because I've had nine shots with my nets.

Ms FORREST - You've had, sorry?

Mr GARLAND - I have my fishing nets. A shot is where you run 600 metres and then you pull it. I had eight shots in areas where I've never been and not had seals present for the last 20 years; I had eight shots and did not see a seal. I had a seal on the ninth shot, but he was not engaging in pulling fish out of my net whatsoever. It was like 30 years ago where they'd come along and briefly lounge around, no threat, and didn't impact you.

Over that 27 years with the seal relocations we had aggressive seals. They'd see the boat, they'd take off, they'd dart in and grab the fish, wreck your net and it was just devastating for us. We've seen already they've stopped - was it a year and a half, two years ago? It would be nearly two years.

Ms FORREST - Yes, probably.

Mr GARLAND - I've said this from the start: once you stop tampering with the nature of things, the natural ecology will dictate what will happen there. Our fishery is back. Whether it stays that way, whether the seals come back and that, I don't know, but I've never had eight shots like I have and not have a seal.

**Ms FORREST** - There is a decent seal colony around Stanley; the tours go out to have a look at them. What does that mean for the fishery that exists now, without any fish farms or anything in the area?

Mr GARLAND - This is another thing. The seal population at Stanley has built up over the last few years. They are reliant on that whole North Point peninsula for food for their young and what have you - which brings me to another point. North Point, I took Sea Shepherd out there just

recently. I set one line of nets. I wanted to show them the weedy seadragons that are in that area. The single biggest threat to weedy seadragons is loss and degradation of habitat. I swear we've got the largest population in this state there and possibly in Australia.

I wasn't aware of a few things. I pulled eight of them up in my first shot; you will see it come out in their film some time down the track. I let them all go and they swam to the bottom. I found out just recently that they will die. Once they're pulled up off the bottom and they're moved away, because they hang in a particular area, a very small area, they do not survive.

What is even more fragile than the weedy seadragons are the mysids, the fish zooplankton and everything else that is floating around in that environment from the fish species that breed in there. I mentioned to our past director that we need to protect that area. We've got significant weedy seadragons, we have a major population of fairy penguins there, and also we also have the largest King George whiting in the country with genetics distinct to the north-west area that come into that area to drop their eggs.

**Ms FORREST** - In the expansion plan that the Chair mentioned before, it appears there was little consultation around the development of grow and no grow areas. In the salmon industry wanting to expand there are many reasons why they do. One is to meet the increasing need of protein and salmon is a good source of protein - fish is generally, you know that. Do you believe, Craig, that the salmon industry can expand sustainably, and, if so, under what conditions?

Mr GARLAND - I believe there's been a fair focus on windfarm technology. I heard on the grapevine there has been discussions through one of those proposals that there will be cheaper power to get these operations on land. We have to, as a government, encourage that. We have to be the best in the world. They cannot trade as world's best practice under this adaptive management that they've got now.

If you look at the D'Entrecasteaux Channel, that was a recreational fishing area and they're all through there. We didn't fish there, we recognise that. Okehampton Bay is a shark refuge; D'Entrecasteaux is a shark refuge, too. These are all sensitive fish propagation, fish nursery areas.

It has to be done right. It can be done on land. When I've questioned the salmon companies about going on land, they said the power cost is so high. One interesting thing they did state to me was that if we were to go on land, we'd go closer to our market, which is midway between Melbourne and Sydney. Well, there is your commitment to Tasmania and jobs. As soon as it is going to be pushed to be regulated properly, they will bail ship and go over there. We have a perfect opportunity now, with the production of electricity at a cheaper rate, to take in advance of price and get them on land, and that will force the hand of the other two that aren't, and get it done right and get it done properly. We want a sustainable salmon industry, but their sustainability is a direct threat to our sustainability. If you look at the amount of people who are no accessing our wild fisheries - one in five in this state - that is 100 000 people.

Ms FORREST - So you don't think it can be conducted sustainably in open waters?

**Mr GARLAND** - Not with the overstocking and the non-fallowing and going into sensitive fish nursery areas. That is not sustainable.

Mr VALENTINE - In your submission, Craig, you mention in short that essential science is not being conducted, the fishing community is not being included, consulted or listened to.

Regulatory systems are inadequate. Have you any comment on the sorts of things that ought to be in the regulation of this particular industry that you are not seeing at the moment?

Mr GARLAND - I was that desperate; I was in Canberra and I was talking to the Labor Party because they were going to be our new government at the time - as we found out, they didn't end up there. They were looking to introduce a federal authority to oversee this industry because, as I pointed out to them, these waters, these fish, belong to all Australians. No one corporation, one entity, has the right to take away from what belongs to all or has impacts on that.

Here in this state we need to separate our wild fisheries sector from this finfish aquaculture sector because it's in direct conflict and we have nowhere to go. We have no representation, or what little representation we have, has no teeth whatsoever. That is one area I see. You've got me on the spot.

Mr VALENTINE - That's okay. You mention the wild fish sector and that you haven't been consulted. You have made it quite clear through your diagrams here about the overlapping of the different areas and the possible impacts this might be having on the wild fish sector. In the regulatory process, are you suggesting that there needs to be much greater collaboration, or are you saying that the two simply can't exist together?

Mr GARLAND - I can't see the finfish aquaculture industry, on its current trajectory, in our inshore fish nursery areas. I was assured by a former fish farmer that if they had their stocking densities - he highlighted to me he was doing one-tenth of the densities they are now doing. If you fallow and move around, sure, it's quite possible, it can be done. But in that north-west corner, it has to be recognised for what it is. The emerging fisheries coming along here - by the way, King George whiting is the fifth-most targeted fish by recreationals in this state - they're breeding in that area, all the juveniles are certainly all the way up the coast.

Mr VALENTINE - Have King George whiting always been here?

Mr GARLAND - I wrote a submission in 1992 for the new draft management plan and told them about the pattern that was emerging with the King George, the snapper and the kingfish. I suggested then that the only thing that was protecting them now - back in 1992 - was their isolated nature. No-one was targeting them specifically, but there was a pattern emerging. I suggested also that if we manage and protect these fish, we will have a valuable fishery in the future.

We are already there with the whiting. We are hardly pulling any out of the water and it's the fifth-most targeted fish and we have the biggest in the country - twice the size of anywhere else and twice the age - in the north-west tip. When I handed that report to the minister, Mr Rockliff, I thought this was a great news story. I took it to *The Advocate*. I thought this is great - iconic sports fish, highest-value inshore finfish, arguably the finest eating fish and we've got them on our doorstep. Did we see any highlight of that? No, the report was pushed across the table. A few months later, I hear on the news that salmon farms are coming to the north-west. The minister asked me at the time where are they breeding and I pointed out to him that it is directly out where they plan to put the fish farms.

**Mr VALENTINE** - Do you see if it were to be out in deeper water, it might be successful or does that also present a problem?

**Mr GARLAND** - People have this perception because it is in deeper water, it will dissolve and disappear magically and there will not be impacts. Wherever you put them, it impacts on the stocking densities and the amount you want to do will build up and have impacts somewhere.

Tasmania should be a beacon for the rest of the world and we should insist things are done properly here and are done right even if it means a lower profit margin for these corporations. Incidentally, now we have a foreign corporation coming into that waterway that they are advocating giving over to them and locking us out of and possibly affecting our fisheries. The cost and return to us from that is miniscule.

We have to take a bigger view now; unfortunately, I feel for you legislative councillors. Are there any Labor or Liberal people here today? There you go, why would they want to be when they are both complicit in the mess that is this salmon industry. Labor fast-tracked it - Macquarie Harbour is not likely to ever fully recover. I would like to point out we have got a world record they killed that harbour in a world record time of three years. That has not been done anywhere else in the world -

**Ms FORREST** - Can I just ask you: if there were to be a new regulatory framework that could deal with these things, what would it look like in your mind?

Mr GARLAND - Well, we should be at the table. There should be a commercial fishing representative nominated by us, not by a government. We should elect who we have at that table and not just one. The diversity of our fisheries in that area warrants that everybody should have a representative from the cray, abalone and scalefish sector, because each sector has its own peculiarities and each of those persons has a knowledge base.

**Ms FORREST** - How should that approval process be undertaken? Representation is one thing; you have covered that.

Mr GARLAND - It is like everything else - there is no plan. There is no plan set down where the community has sat at the table and had input, whether you are talking windfarms, salmon farms, our forestry. I was talking to an old fellow just recently and he said 'What do you hope to achieve from this salmon farm inquiry?', and our objective is a moratorium until we can gain a better regulated process. The old fellow said to me, 'Bugger me, boy, we should have a moratorium on bloody everything.'.

That is how I feel - our forestry - things are not being done right. It is all proper practices, so we need to sit back have a good look, put on a map what we have got, the significance of all those areas, and then as a community and as a state, go together because this divisionary process. I am 55 years old and I've lived - as would all of you - through it all. We have to show a level of maturity - and hopefully the voters will see past all this bullshit thrown at us and start to elect people who are there for the people, not for the party.

**CHAIR** - We're nearly out of time.

**Mr FINCH** - On the back of Bruce's question, you wouldn't see finfish farming being part of this ecology and the operations here in this area?

Mr GARLAND - It is just too crucial and Victoria's whiting fishery - why has Victoria got involved? When their whiting reaches three years of age, they disappear and go somewhere to

breed. Dr Greg Jenkins has been searching for that breeding stock for 25 years. He came here because he did computer modelling of the currents at the time and it showed a three-month duration in upper surface levels, which showed a strong current from north-west Tasmania reaching Victoria coinciding with that spawning period.

There is one area they have not looked at, and that is off King Island. We have a situation—what we manage here quite possibly has an effect on Victoria. I think their whiting fisheries is worth \$120 million; it is huge and they are all juveniles. They have just started a tracking program where they have put tags into the fish to see where they are going and we need to wait and see if any of those fish turn up here because there is a bit of a dispute about the genetics side of it. We could still possibly have their spawning stock. The other thing is global warming - everyone talks about that; we have seen that happen with a shift of species into our northern waters. We are the first port of call. The snapper, kingfish and the whiting are all here for a reason. They have been pushed out of their normal range and should be afforded some level of protection, and the greatest level of protection we can give them in this area is let things take their own natural course.

**Mr GARLAND** - level of protection we can give them in this area is let things take their own natural course. Let's not put anything in that could be a barrier or a prevention on those species.

I caught a manta ray the other day. If you do not know much about the species, they are a Queensland species. He was about eight and half foot across and I got him at Table Cape. I got him out of my net and away he went.

I have pulled loggerhead turtles there. I caught a Morton Bay bug there one year. We are seeing it firsthand at north-west King Island. There is more to be gained by recognising what we have there than what we can possibly have by putting this in.

One of my associates will point out later that one thing can impact all of us. One of our fisheries can't impact all.

**CHAIR** - That's a good segue because we do need to move on, Craig. I thank you for your time today and for sharing your materials with us and answering the questions. We really appreciate it

Mr GARLAND - Thank you for the opportunity.

## **THE WITNESS WITHDREW**

Mr MATTHEW MORGAN WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

**CHAIR** - Welcome, would you like to make some opening remarks?

Mr MORGAN - I would.

CHAIR - Excellent.

Mr MORGAN - I am a professional southern rock lobster fisherman. I am head of a group called Wild Fishers for Sustainable Finfish Farming. I am also a proud member of the Tasmanian Rock Lobster Fishermen's Association. What most are unaware of is the TRLFA has a formalised resolution that in western Bass Strait from basically Stanley to the top of King Island, all the waters to the west, the hammocks, the channels and everything down through Woolnorth and Smithton - we have a formalised policy to keep it a declared finfish farm-free zone until such time contemporary peer-reviewed science supported by a government warranty can ensure no harm to the area's commercial and recreational fishers can be done.

This was passed with a resounding majority at the TRLFA -107 members, yes, to 54 members, no. In our association, that is nearly unprecedented to get anything carried anywhere near those numbers.

The biggest problem with the proposal to bring the fish out here is, yes, I understand it is a high energy site and fully understand you won't find the detritus under the pen, you won't find it inside the leased boundaries. Reverting back to day one of the hearings where IMAS admitted it is not Dr Who's TARDIS. This stuff does not disappear into the ninth dimension miraculously. Any sediments you put into the water column have to land somewhere. This coincides with what Craig has already told you. That somewhere will be the weedy seabeds that our juvenile fish live upon. There will be the rocky outcrops which are the habitat our fish live within.

Going to Huon's submission the other day identifying biosecurity as a risk, the biggest risk to the biosecurity of all the native fish we have in our area is the salmon industry coming to the north-west coast. Huon explained it quite graphically and brilliantly, I thought. It is no good one lot of people adhering to a certain set of rules which in commercial fisheries are governed by quota per species. We also have seasonal closures. The recreationals are governed by bag limits and seasonal closures.

The thing that can put all this really good management at risk is a company coming out into our waters, putting salmon farms or finfish farms out there. There is no idea where the detritus and nitrogen loadings are going to end up - the science simply is not done yet. Even though my group is called Wild Fishers for Sustainable Salmon and Finfish Farms, at the moment with the amount of science there is, the only commonsense proposal that could be adhered to is that the risk is far too high at the moment to let them come and install this industry in our area. There needs to be a lot more research.

The proposal would be, I think, for 32 pens. I spoke a professor about this recently and he said that is immoral for a start, it is way too much. By the time you install that many pens, if a problem were found to be emerging, it would be too late to fix it. Under the use of both adaptive management and a precautionary approach, instead of starting with 10 000 tonnes or something like that, a more

commonsense approach would be that you allow them to start there with 1000 tonnes, you would do 12, possibly 18, months of monitoring so you can see where the detritus is ending up in all the different weather conditions. If no harm is found to be done, then they can expand. But to let them go in gung-ho at the start as they have done everywhere else and leave a wake of destruction behind them, I think would be absolute madness.

**Ms FORREST** - Following up on those couple of points, I know Petuna has been doing quite a bit of baseline monitoring out there, and I am sure they will talk about it later on. What you have just talked about is a staged introduction. Is that suggesting you think it could be done sustainably in those waters if it were done in such a way?

Mr MORGAN - It is a very difficult question. If I was asked 100 per cent myself, I am only the representative for a lot of other people in the community. I try to be fair in all aspects of the way I approach my life and it's very easy to be labelled the anti-everything brigade and you lose your credibility. I believe everybody has to be given a fair chance. In all fairness, as to where those cages are to be put out there, we had a public meeting a couple of years ago. With the help of some other fishermen, we worked out what we knew about tidal flows and everything else like that. The only place we thought it had a chance of being workable is in the green area from North Point round the Hummocks round the Woolnorth and everything on the sustainable salmon growth map is garbage. It would be too ecologically and environmentally insensitive.

The other thing that wild fishers would be asking for - and the precedent has already been set in the south of the state where Huon towed a cage of fish up into Norfolk Bay because the long-range forecasts stated that when those fish were ready to be harvested - and they had markets ready for those fish - the weather was going to inclement in Storm Bay and they wouldn't have been able to harvest them, so they towed it. That creates a biosecurity risk.

The other thing is that most of the fish in the pens at some stage are being fed with antibiotics. Before they can be marketed, there is a 30-day withholding period. One of the claims Tassal makes is that around their newly installed pens, wild fish congregate a bit, flathead and things like that. This causes a real concern for me, because those wild fish are eating those pellets laden with antibiotics are being taken home to be eaten and they're not having a 30-day withholding period. All of a sudden when somebody gets very ill because they have an allergy to an antibiotic that they should never have come into contact with, it's not going to be the salmon industry that wears the can, it's going to be that there's something wrong with the flathead.

**CHAIR** - Can I just pick up on something there? I think we should ask if you have evidence of that, because it is a claim I think the relevant industry body would dispute. In terms of the salmon being towed to Norfolk Bay in different pens and the claim you make about why that occurred, have you evidence around that?

Mr MORGAN - There were two different stories to that, which was quite amusing. The initial one was that Huon claimed they had diseased fish and they needed to tow them clear of the rest of their fish in a form of quarantine. If you were a land-based farmer who had 100 cows in 1000 that for some reason were diseased and you wanted to take them 20 kilometres down the road because you didn't want to infect the rest of your cattle, under the biosecurity laws you wouldn't be permitted to because it's too high a risk.

When they realised they were getting the end of the hot potato from this particular thing, Huon changed the story - and Huon has been very good at this over the years. When they tell a story that

is unpalatable to the public, they turn around and create a new one. In one particular instance about 18 months ago, in the space of three weeks Peter Bender presented three different scenarios as to why the pens broke in Storm Bay.

Ms FORREST - If I can make a comment about the use of antibiotics in the feed, in the pellets, I've been told by the industry and even one of the feed producers that we've heard from - we haven't heard from all of them - that they do not put antibiotics into the feed. Have you evidence to suggest otherwise?

**Mr MORGAN** - Not that I can prove in hard evidence, only hearsay from staff. I would be very interested to see the physical proof from any salmon farmer who states they are not treating their feed with antibiotics. I would like to have that peer-reviewed by an independent review.

**Ms FORREST** - We asked the industry on the record on oath if they do, so we will be asking that of all the sectors.

**Mr VALENTINE** - In your submission you talk about the charges to the salmon industry basically being way below what they should be.

Mr MORGAN - Absolutely.

**Mr VALENTINE** - Do you have any comment on what sort of a level of levy or charge that should be put in place?

Mr MORGAN - Norway sets a very good example. The salmon industry here would claim that you can't pay Norwegian rates and still make a profit, so how do the Norwegians do it? The Australia Institute did a survey and 1000 of 1 per cent is what is paid to the government in fees by the Tasmanian salmon industry of its gross domestic product. The rock lobster industry, for example, pays 4.5 per cent in levies and fees to the Tasmanian Government and the Tasmanian Abalone Council pays 7.5 per cent.

In comparison they are very small industries, both under \$100 million, but they're contributing far higher. I call it corporate welfare. We as a state are providing corporate welfare to corporations for the benefit of shareholders. I think it's immoral. I'm not against corporations making money but the amount of money they need to make and how they go about it is the public licence. I believe they should be paying more than their fair share. Will Hodgman's legacy to this state is he has left our economy where for every \$100 of revenue the state raises at the moment, they are spending \$108. That will grow to \$110 next year.

We have wasted too many opportunities as a state under the governance that we have had to make our state the glowing light that the world could see as an example of how good economic policy runs. We have wasted those opportunities by granting corporate welfare to many large industries.

**Mr VALENTINE** - In your submission, on the second line it says 'to issue variances to keep the salmon industry compliant'. Can you expand on that?

**Mr MORGAN** - Yes. In the latest legislation for the salmon industry, one of the clauses, and I didn't actually list the clause, but it is in the act and it is easy to give you a quick overview. At the stage where a finfish company feels it is about to slip out of compliance, it must apply to the

regulator and the minister for a variance. It is then the duty of the minister and the regulator to sit down and see if more than one variance needs to be issued to protect the integrity of the lease - not to protect the environment, not to protect the surrounding ecology, but to protect the integrity of the lease.

Mr VALENTINE - Okay, thank you.

**Mr FINCH** - Matthew, is your nose out of joint because of a lack of consultation or a lack of opportunity for you to submit on development of finfish farming?

Mr MORGAN - Not particularly, I don't think, in all honesty. The consultation process is a mechanism used by companies and government. They have already formulated their plans. The consultation process is, to my view - and I am not being particularly aggrieved about it - just ticking off the boxes and once we have ticked off so many boxes, we have had so many public meetings, we have consulted. We get it with government departments in the fisheries all the time. They consult with us. They might consult with us on three occasions and they go and do exactly what they were going to do anyway, but they have consulted with us. We've followed the due and correct process. But I don't have my nose out of joint about it. I understand the process.

**Mr FINCH** - It's the reality of what goes on.

Mr MORGAN - Yes.

**Mr FINCH** - Okay, just another query you might answer for me. I have a bit of trouble following this map that Craig Garland has given us, but I will try to get a better understanding of it. This pen here, I think, is Petuna's proposed lease.

Mr MORGAN - I think it is 1200-odd hectares in size.

**Mr FINCH** - Doesn't the water in Bass Strait travel in that direction, so wouldn't it be that it is on the periphery of the professional fishers here and that the issues you are talking about are going to travel across Bass Strait rather than come back into your area?

Mr MORGAN - Not necessarily.

Mr FINCH - Explain to me, please.

Mr MORGAN - Absolutely. You are talking to the right person - you are gifted!

I have been fishing in that area for in excess of 40-odd years. I have shark-fished through there. One of the important things when you are a shark fisherman is, if you shoot your nets across the tide, they roll up. You usually only do it once or twice before you get skilful. Every time you come a kilometre further to the west - or a nautical mile in proper terms - the angle will slightly change. As you come up towards the Three Hummocks, the angle of the tide suddenly changes.

The other thing to consider is that we get very strong north-easterly winds. Even on your navigational charts that you look at, there is a warning there for navigators in that area that in times of strong north-easterly winds, the western tide, being the ebb tide, will run for two hours longer than is normal and may run in different directions than what is already indicated on the map.

Looking from where Petuna has its pens out, there or seaboard or whatever it may be, you get huge north-easterlies pushing down. You can be talking about out there, at times, 5- or 6-metre swells, quite easily, and sometimes they go for a week or more at a time. The waterflow from the stuff that's not under the pens, it's not inside the lease boundaries and that's all going to come down. I didn't realise this at the part when we said, if they must be coming up here, that's the only part - I didn't think it quite through and I admit that. That will come in and when you get closer to the land, the inshore currents take control of it. This is my major concern: there is still the opportunity that the detritus, the nitrogen loadings and that from these salmon pens are still going to end up in our channel areas. That's why I'm saying, if it is to go ahead, my gut reaction, my absolute wish list, would be that it's insanity and no, but I am fairer than that. It would have to be done on a totally precautionary methodology and absolutely no more than 1000 tonnes to begin with and then work out where we go from then, because then the answers - IMAS admitted one thing along the way as well: with all the precautionary science they may or may not do before they install a pen, it's only giving them a general feel, it's not accurate information. They haven't been doing the periphery things. Once the pens are in place, the water dynamics actually subtly change, and that is the moment that the real research has to start.

**CHAIR** - I am mindful of time, Matthew. I have heard you say you are calling for a moratorium while the science is more robustly done?

## Mr MORGAN - Yes.

**CHAIR** - Are there other elements of the regulatory system and processes around this industry that you would like to highlight for us to be thinking about or inquiring into that you think need consideration?

Mr MORGAN - One hundred per cent, yes. At the moment, the industry is basically self-regulatory. They say they have independent studies being done and everything else like that. Independent in the form of, 'We'll give you a conclusion and you match the science to match it'. I'm a little bit sceptical about that.

Before this inquiry, the EPA had already admitted that they are basically a body without a job because every time they go to do their job, the Government overrides them. What this industry needs as an absolute major number 1 priority - because pens get broken in Storm Bay, the fish escapes in Macquarie Harbour and everything else like that; some of this occurs, even employees of the companies suggest this, when things are a little bit slow and perhaps maintenance is not quite as it should be; I know the salmon companies are going to deny that, but that's a fact of life - is an industry compliance officer who has a working knowledge of the industry and independently goes around - not doing the numpty tour through the factories and hand-selected sites saying, 'Look, how wonderful is this? Aren't we wonderful citizens?' and everything else like that. They need someone who actually knows about the industry - what's going on, that's what the industry needs - someone watching over the industry making sure it is sticking to what it is supposed to be doing. At the moment, they are more often likely to be found out of compliance than in compliance, and there is nothing to stop them doing that.

**Ms FORREST** - With the data collection that is now happening through the data portal - are you aware of that data portal, Matt, or not?

Mr MORGAN - No.

Ms FORREST - It's going to be with IMAS but it's now sitting with DPIPWE and there's reporting going on that's been published, including the monitoring of sites and things like that. If you are not aware, it's a bit hard to ask you a question about it, but I'm just thinking there's more information.

Mr MORGAN - They'd be with IMAS. I can't state it categorically enough, but the kindest word I can say about IMAS is that I'm more than sceptical of most of the research they do. They seem to already have a preconceived conclusion and then they try to match the science to that conclusion until it gets proven that perhaps they didn't do it - which they haven't done in this case with Storm Bay - and said, 'We haven't looked at that, perhaps it's time to look at that now', to see where this all does end up and everything else like that. When you go to any -

**Ms FORREST** - Just on that note, IMAS did present to the committee. It would be worth you reading their evidence on *Hansard* because they are professional people, they are -

**Mr MORGAN** - It's prefaced, Ruth; at the start of any IMAS document, it says these are only the opinions of the scientists. IMAS states that they are only the opinions of the scientists. Every IMAS document I have ever read states that.

As an employer, if IMAS is the employer and the scientists are the employees, if my crewman ties a rope up and he lets it go and we smash into another vessel, it's not my crewman's fault. As the captain of the vessel, the responsibility rests on my shoulders. But with IMAS, you've got this quirky little thing where the employment is stepping aside from the thing. They want you to believe that it's all wonderful research, but they ...

**Mr MORGAN** - employment is stepping aside from the thing. They want you to believe it is all wonderful research but they take no responsibility for its veracity or credibility. Until that preface is deleted from their things, I do not think it can have any credibility.

Ms FORREST - It may be an ownership matter.

**Mr VALENTINE** - You mentioned wild fishers for sustainable finfish farms. You said you had a group. Could you expand slightly on that? How many members?

Mr MORGAN - It has 785 members and most of them are in Tasmania. Even members of the group in the south of the state where the finfish farms, the salmon industry, is very well established. They are not particularly against that. If they can get them to comply with certain noise things and so forth. Your child will be going to school with my child and they become part of the community and everyone knows all that.

The best accolade I have heard is that in the 30 years they have been there, they have probably not done too much harm. That is the most glowing bit of praise I have ever heard about in the industry from someone down there. What everyone from the south of the state, where they have already been installed, who looks at the fine environmental and ecological balances we have on the north-west coast says is that there is no sane or valid reason the finfish industry needs to come to the north-west coast.

In case, as Dr Lisa-Ann Gershwin points out, with the way they clean their nets we do end up with one of these jellyfish explosions that takes everything out of the food chain above, wouldn't it be really handy to have one of the most unique biodiverse areas for fish species in the whole state sanctified and protected?

**CHAIR** - We will wrap it up there. Thank you, Matthew, very much for your time today and for sharing that with us. We appreciate it very much.

Mr MORGAN - Thank you.

THE WITNESS WITHDREW.

# Mr MARK BISHOP WAS CALLED AND WAS EXAMINED.

**CHAIR** - Welcome, would you like to make some opening remarks before we then ask you some questions?

**Mr BISHOP** - Thank you. Along with my younger son, I operate a small-scale fishing business that encompasses all the islands on the map you have seen today. It is our backyard and we know it pretty well.

You are probably also aware Cape Grim on the corner of Tasmania records some of the cleanest air in the world. We also have some of the cleanest water in the ocean in this area. That is why we have such a vibrant wild fishery where not only are the fish there to catch but they also come to these areas to breed. What I wanted to draw your attention to today about that was an IMAS report I have here, done in 2011, which was, until recently, available on their website. It has been taken down now pending copyright assessment.

On the last page, I'll quote you the last sentence -

**Ms FORREST** - What's the title of the paper?

Mr BISHOP - 'Do exotic salmonids feed on native fauna after escaping from aquaculture cages in Tasmania, Australia?' The study was done in Macquarie Harbour. The last sentence says - [TBC]

Nevertheless, biochemical analysis indicates that 2.6 per cent of rainbow trout and 15 per cent of Atlantic salmon have survived on a diet based on native fauna for a long period of time as their tissue has already reflected the biochemical composition of their new food sources.

My concern as a fisherman in this area is that if we have a mass fish escape from a pen failure, salmon go towards shallow water. They are one of the few species that go to the shallows to escape predators. They will invade these tidal waterways and bays that fish use to breed.

When I go out fishing in the very early hours of the morning, the shallows are alive with small, immature native fish. They do have natural predators already. The natural world works at 100 per cent all of the time with whatever is possible. To go and add 10 000 or 20 000 tonnes of salmon into this area, with its associated pollution, gives me great concern. Most of my concern is the escaped fish could have a huge impact on the juvenile fisheries we have in this area.

There is the report.

CHAIR - Would you like to table that?

Ms FORREST - Just on that research, Mark, done on Macquarie Harbour, which we know is a different body of water to the D'Entrecasteaux Channel, to Storm Bay and to this area around the north-west tip. Again, we have to be careful not to apply something from one area to another without any evidence. What do you believe is needed in terms of monitoring and baseline research to direct, if you like, or guide the expansion of the salmon industry if it were to expand into the north-west?

- **Mr BISHOP** I think you would need to do a total study of all this north-west area to work out what the juvenile fish load was to see if it was impacted, because unfortunately juvenile fish grow into big fish we catch and harvest. If we wipe out the juveniles, it is going to have a huge impact.
- **Ms FORREST** I am interested in the monitoring, because Petuna is turning up later, as you know, and I will ask them about the monitoring they are doing.
- Mr BISHOP For a fish farming lease they monitor the water quality of where they want to put their pens. They do not do any wider monitoring of the wild flora and fauna that is in the ocean miles away, but their escaped salmon can get there. It is a bit like having a lease in a highland area of Tasmania with sheep and your sheep get out and wander into the World Heritage Area. Parks and Wildlife would be ringing you up pretty quickly to come and collect them. Escaped salmon in Tasmania are incredibly lax. In other countries in the world there are regulations about attempting to retrieve them.
- **Ms FORREST** Do you think there needs to be a change in the regulations around that, regardless of whether the expansion occurs or not here, because obviously that is an issue?
- **Mr BISHOP** Everywhere. You mentioned that study is in Macquarie Harbour and this area is totally different to Macquarie Harbour. I would argue the potential for salmon to survive in this area is far greater than Macquarie Harbour because of the availability of juvenile fish.
- **CHAIR** Obviously, you have a concern about the prospect of salmon farming being introduced here and not yet having scientific understanding of the potential impact. Have you had an opportunity or can you describe the way you have been involved in the process that has been underway in terms of planning for potential salmon farm expansion in this area?
  - **Mr BISHOP** I received a letter from Petuna Seafoods asking to talk.
  - **CHAIR** At what stage in the process did that happen?
- **Mr BISHOP** That was quite early on; I believe that person does not work for the company anymore. I also attended a briefing at the Stanley Chamber of Commerce where Petuna outlined their plans.
- **CHAIR** Again, was that at a stage where plans had been developed and were being consulted on? What was your understanding of the purpose of that exercise?
  - **Mr BISHOP** That was a community briefing session, I guess.
- **CHAIR** Was it the provision of information, to seek input or both? I am interested to understand the character of interaction?
- **Mr BISHOP** I think it was more a briefing of what they would like to do and obviously they pushed it around that they would be using Stanley as a base and probably building infrastructure there to support the farm.
  - **Mr FINCH** Were you there at that meeting on your own, Mark?

- **Mr BISHOP** No, at the Stanley Chamber of Commerce, no. The Stanley Chamber of Commerce has monthly meetings and guest speakers or various people come along to discuss issues.
  - **Mr FINCH** How long ago was that? When did you have that meeting?
  - Mr BISHOP It would be six or seven months ago, I think.
- **CHAIR** And was that a meeting publicly advertised and available or were people invited to come to that meeting because they had a particular role?
- **Mr BISHOP** No, it was just a standard chamber of commerce meeting members attend. Probably 20 to 30 people were there.
- **Mr GAFFNEY** Diversity of the wildlife and fish life in that area is well known. That area on Craig's map is really special, but further east of Stanley down the coast, is that really special as well? Do you know what I mean?
- Mr BISHOP No. What happens as you travel east, what you've got here on the corner of Tasmania is a confluence of lots of currents, weather systems. It's a rough place and very windy. That is sort of reflected in the diversity and the food available for the fish. I fish from Devonport all the way along the coast catching live wrasse. It is a grazing operation catching the wild fish that reach size. Off Penguin there are some quite good reefs but that's a once a year visit, whereas these island areas are a two or three times a year visit.
- Mr GAFFNEY You alluded to the fact that Petuna or the group might be looking at building infrastructure at Stanley to support whatever they have. Do you think that is one of the main reasons they have chosen this area for their farm, the leases, or could they move them further east without as much impact? Has that not been investigated or do you think it should be?
- Mr BISHOP That's a mystery to me. I've seen the salmon so-called sustainable industry growth plan and it's a mystery to me why they're not further along, for instance, off Ulverstone. Stanley is a point where we get a very strong north-easterly wind that develops regularly in the summer and if it's blowing 20 knots north-easterly in Stanley I can with 90 per cent confidence go to Ulverstone or Devonport and fish for the day and have 5 knots of wind. To my way of thinking it would have less impact on their pens.
- **CHAIR** Just to be clear, you were referring to the sustainable industry growth plan that came out in 2017 that has a map that has grow and no grow zones and potential for further. Slightly to the east of Stanley is where the no grow zone begins and you're not aware of how that was arrived that?
  - Mr BISHOP No.
- **CHAIR** Did the people involved in commercial fishing in the area not have a way of informing this map or was there interaction?
  - Mr BISHOP It is something that I'm not familiar with.

**Mr FINCH** - Is it more likely if these pens are put where it is suggested that pen failure could occur if you make a comparison to Macquarie Harbour, which I would imagine would be a more benign area to have pens? With these north-easterlies you talk about being quite strong, is there more likelihood of pen failure there?

**Mr BISHOP** - I would guess so. Certainly the waters off Stanley are far rougher than Macquarie Harbour.

**Mr FINCH** - What is your understanding of the development of pens?

**Mr BISHOP** - They seem to be getting bigger. I suppose as a fisherman who mucks around in boats, if you get a bigger boat, it can cope with bigger seas. I guess that's why a 168-metre diameter is a very large pen.

**Mr VALENTINE** - I want to clarify a statement that you made earlier, Mark. You were talking about mass fish escapes and how they go to shallow water to escape predators or something like that.

Mr BISHOP - That's correct. That's my understanding.

**Mr VALENTINE** - Do you have any evidence that that happens or is that in the report you handed across?

Mr BISHOP - Years ago I caught escaped salmon down at Cygnet. A friend of mine lived on the foreshore down there and he lived on them for quite a while. There were plenty of them. I was staying with him and he said one day we'll go and put the net out and catch some salmon. He had a little dinghy and a graball and he had the net up on the beach. I started picking it up and he said don't pick that up. I said, 'What do you mean?' and he said, 'You leave it on the shore because the fish swim in the shallows along the shore.'. We rowed the net out at 90 degrees to the channel - there is very little tide down there - and sure enough, in the morning there are six big salmon.

I have been told by people who have fished the Macquarie Harbour, one who was a Parks and Wildlife ranger friend of mine, and it took him a long time to learn how to catch salmon down there because he set his net in the traditional manner of parallel to the shore. He thought the locals were pulling his leg when they said to put the net up on the shore.

Mr VALENTINE - Have you fished commercially in the south of the state?

Mr BISHOP - No.

Mr VALENTINE - I just wanted to clarify whether you had any experience with the communication system around debris but you haven't, so that is okay.

Ms FORREST - Mark, are you familiar with the data portal that has been put in place?

Mr BISHOP - I've heard about it.

Ms FORREST - So you haven't had a chance to have a look. I am interested in your views on what data should be there in terms of ongoing monitoring of current operations rather than the monitoring that was done before expansion.

**Mr BISHOP** - My comment on data that I pointed out earlier is that the salmon farmers collect data to do with their lease areas and I would like to see data collected over a far wider area.

Ms FORREST - So whose responsibility is it collect the data outside the leases?

Mr BISHOP - That would ultimately become a state issue, whether it is DPIPWE or someone else. It is sad that apparently we know more about the surface of the moon than we do our ocean floors. There is a huge lack of knowledge about what goes on under the surface of the water. Fishermen and abalone divers are probably the closest and at the pointiest end of what happens under the water because they regularly see areas over and over again. What information that would be - water temperature, salinity, gauging how much fresh water if it's a drought year or a wet year - there is so much information and so many things we just don't know about.

Ms FORREST - In terms of the regulatory framework around the proposed expansion of new farms or expansion of existing farms, we have had quite a bit of evidence. You have probably heard some of it and read some of it in relation to the process that currently exists under the Marine Farming Planning Act and the review panel. Do you have a comment on that current approach or if you believe a different approach would be better, can you tell us what you think that is?

Mr BISHOP - I'm not sure if it fits under regulatory but my concern is about the actual volumes of salmon in the areas they talk about being buffer zones. Is it a buffer zone for 500 tonnes or 5000 tonnes? For instance, in our area we have a proposal for Petuna whether it is 10 000 or 20 000 tonnes and if for whatever reason that goes ahead and proves to be a wild success, what is to stop Huon Aquaculture and Tassal saying, 'Oh, they're doing well up there, we'd better get up there too and get our 10 or 20 000 tonnes'? The growth seems to be encouraged by the Government and it could be endless. Where is the sustainability in endless growth?

Ms FORREST - What is the process that would give you confidence?

**Mr BISHOP** - In some lease areas we've got a total dissolved nitrogen level that is issued by the EPA. I would like to see a total for all of Tasmania introduced so we have confidence that this industry has a sensible growth target.

**Ms FORREST** - In term of dissolved nitrogen, the salmon or finfish farming industry is not the only industry that contributes to the nitrogen in the ocean.

Mr BISHOP - Exactly right, but a vast majority of it and potentially they will be the biggest.

**Ms FORREST** - Sure, I am not denying that, but do you think it needs a broader approach and is the EPA the body to do that in its current form and, if not, what form does it need to be?

**Mr BISHOP** - As I have discussed in other forums, I think this industry needs an overall watchdog regulator because it is such a broad-based industry that goes through several government departments in different ways. It really needs an overarching authority.

**Ms FORREST** - And the EPA is not that, you don't think?

**Mr BISHOP** - I don't think so. The EPA has a huge brief as well. The EPA covers a massive amount of things from fruit fly invasion. Their brief must be massive; this industry is growing large

enough to warrant its own regulatory authority because a lot of the reporting done is self-reporting as well and we all know that eventually self-reporting comes undone in one way or another. We definitely need an overarching body that does all the checks and balances.

**Ms FORREST** - Separate to the EPA?

**Mr BISHOP** - Yes, and DPIPWE. I did have a list of all of the Commonwealth, state and state regulation the salmon industry has to adhere to; that goes through many government departments, so who is checking off this against that?

Ms FORREST - It is a bit convoluted at the moment, is that what you are saying?

**Mr BISHOP** - Yes. The salmon industry goes from buildings on the shore all the way to ships and boats offshore so we talked about debris and whose responsibility it is. They have tried to take up some issues with that. It has so many tentacles in so many different directions.

Mr FINCH - Mark, is a moratorium part of your thinking?

**Mr BISHOP** - Yes, either a moratorium or a more staged expansion. Definitely, if the baseline science hasn't been completed, pens shouldn't be put in the water until then - isn't that obvious? That is why it's called baseline data. How can you start putting baseline data together when you have fish in the area?

**Mr VALENTINE** - I asked our previous witness, Matthew Morgan, about this. What do you see as a possible model that would be more appropriate in terms of the fees paid by the industry? Do you have any local examples of how it should operate? I know about Norway.

**Mr BISHOP** - My understanding of wild fisheries is between 5 per cent to 7 per cent of the value of the fishery annually is paid in fees of various forms and as a wild fisherman you scratch your head when you see what it costs for an annual finfish lease. I think you need an overarching authority to govern the industry so it has to be user-pays. The salmon industry is expanding at the rate it can because it is incredibly profitable and that, to my way of thinking, is occurring under false economic conditions.

**Mr GAFFNEY** - Mark, one question for my own knowledge base, and I have listened to both Craig and Matthew as well. Is the fishing fraternity in Stanley, in this area, pretty stable? Do you have new people coming in to the industry a lot or is it pretty much a regular group that has been there for ages? You have spoken about 30 or 40 years. What is the movement within the industry?

Mr BISHOP - The commercial fishing industry is pretty stable, the crayfish, abalone and scalefishing that I do, but the real growth has been in the recreational fishery. We live in a low-population area, the north-west, especially the Stanley region, the far north-west, as compared to Hobart, where I've heard stories of 120, 150 boat trailers at the boat ramp. We're pretty spoiled up here and are increasingly getting tourists or visitors to the area, intrastate tourists from Hobart, who are coming up here to catch the fish because of the increase in recreational boats, the size of the boats and what waters they can access. It is a good fishery at the moment.

**Mr GAFFNEY** - So the industry is pretty well balanced at the moment between stock and between fishermen or the fishing groups?

Mr BISHOP - It appears to be.

Mr GAFFNEY - So it is a very well-managed and sustainable product at the moment?

Mr BISHOP - The definition of sustainability is one that I am sure you have discussed and it needs to be defined in some concrete way. My daughter is studying it at university so that is how complex it must be getting. In the last 30 to 40 years things have been relatively stable so it must be relatively sustainable, but the biggest growth I have seen is in recreational fishing.

**CHAIR** - We are out of time. Thank you very much, Mark, for your time with us today. We appreciate you coming and sharing your material and answering our questions with us.

## THE WITNESS WITHDREW.

Mr RUBEN ALVAREZ, CEO, PETUNA AQUACULTURE, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Thank you for coming and giving us some time today. This hearing is protected by parliamentary privilege, so while you are giving evidence it is protected in that way. Once you are outside this room, things you say won't necessarily be protected by that same privilege, so I'm reminding you of that. We're recording the hearing today. The *Hansard* will be available via the committee website when it is being finalised. We won't be broadcasting because we don't have the facilities here. If there are matters you feel need to be heard in camera, you are able to make that request to the committee made and we can consider it at the time, so please raise that if you feel it is necessary. I'm going to ask you to make the statutory declaration as a witness. You can then make some opening remarks to the committee if you wish, and then we will have a series of questions for you.

Would you like to make some opening remarks to begin?

Mr ALVAREZ - I am the CEO of Petuna. This is a company that has been in Tasmania for 70 years already. We feel very proud about what we do. We are fish farmers. We grow Atlantic salmon and trout. We are the smaller player in this industry. We are very committed to quality, which is our main scope. We believe that if we look after our business we can continue growing fish for another 30 years, so we try to do our best. We strongly believe that the bridge between the industry and the community is the science. Science should be able to supply answers for the people. We strongly believe in that. We can say many things as fish farmers, but then science is going to help us improve our procedures.

I strongly believe that aquaculture is going to be the solution to feed the world. Also, I strongly believe that we need to know the numbers of food available in the world in order to understand our local need as well. It would be very selfish if we don't understand global numbers and the need of food in the world. We add just a little portion to the lack of food in the world. It's a great source of protein that we produce and we feel proud to produce it here in Tasmania.

**CHAIR** - Thank you very much. That's a good start. Let's begin. Initially, one of the things we're looking at in this inquiry is things pertaining to the sustainable industry growth plan for the salmon industry, which was produced in 2017 and reviewed in 2018, due to be reviewed again this year. In it, the industry has a growth target of being a \$2 billion industry by 2030. It is something that the Government expressly supports and endorses in the plan. Can you please describe to me how that figure was arrived at by the industry? What informed that growth target and time frame?

**Mr ALVAREZ** - I arrived here just two years ago, so this target was on the table. I can't tell you by experience that -

**CHAIR** - Your organisation perhaps was involved in producing that figure?

**Mr ALVAREZ** - Most probably, yes, it was involved in that.

**CHAIR** - I'm interested to hear more about that because I'm quite interested to hear what informed that specific target for expansion of the industry, because it was proposed by industry, accepted by government and endorsed by government. Are you able to give me that information? Perhaps it's something you need to take on notice and get to us later.

- Mr ALVAREZ Yes, I will take that on notice and come back to you.
- **CHAIR** Okay. I would just like to understand how Petuna as a company was involved in arriving at that and what information, evidence or science informed it.

Mr ALVAREZ - Yes.

- **CHAIR** Thank you. More broadly, what was your company's involvement in the plan itself and coming up with the actions in the plan? Do you know what that involvement looked like?
- **Mr ALVAREZ** Our company planned to expand our operation and we have two projects to do that. One is located in Storm Bay and the other one in the north-west.
- **CHAIR** Did your company have a formal role in the development of this sustainable industry growth plan by the Government?
  - Mr ALVAREZ Yes, there were people involved in that.
  - **CHAIR** Are you able to describe to me what that process was to develop this plan?
  - Mr ALVAREZ I wasn't here but I will take it on notice and I will let you know.
- **Mr FINCH** Ruben, just clarify this for me: you said expansion into Storm Bay and where else?
  - Mr ALVAREZ In the north-west, near Stanley.
- Mr FINCH Thanks very much. I just wanted to clarify that. You talked about science and that has been one of the feature topics in the development of our inquiry. We have heard from IMAS. Could you tell me, from your vast experience and we have spoken with you before and talked about the areas in which you have worked is there a comparison you could make between where we are in Tasmania now, with our bonds and links between the university and our science professionals and the industry, as compared to where you have been in Chile, Scotland and other areas? Could you tell us about where we sit?
- **Mr ALVAREZ** I think the level of science in Tasmania is quite high compared with others. In terms of regulation of the industry, it is a similar level or even higher. Just recently there was published a snapshot of 2018-19 where they compare Tasmania with other countries like Norway and Scotland, and which areas we cover in Tasmania and which areas they cover in another part of the world. It is very clear information here that the standard in Tasmania is as good as others.
- **Mr FINCH** You mentioned that regulation is high as well. How do you feel about the criticism that people might have about the regulatory processes not being as fully developed as they might be and the call for more regulation?
- Mr ALVAREZ I reckon there is just a lack of information, that they need to have a look and read. There is a lot of information available in Tasmania, scientific papers. I reckon not many people are willing to read the scientific papers. It is far easier just to criticise if they are not aligned with our thoughts. In order to understand aquaculture, you need to read a lot and you need to be

close to scientific information. Also, it is unfair when people say the decision that government or industry made 10 years ago wasn't right. For me, it was right, according to the information available 10 years ago. Science is growing every single day. In 20 years time, the level of science and information will be far more than now and most probably we are going to look back and say we didn't make the right decision. We make the decisions based on information available today.

**CHAIR** - On that, given your company's intention to expand into the north-west area, do you have publicly available a scientific case made that underpins and indicates why that is (a) a good idea, and (b) not a bad idea?

Mr ALVAREZ - We have taken information since 2018, so almost two years now. We put data loggers under the water in order to understand what is going on in there in terms of currents and waves. We take ROVs [remotely operated vehicles] in order to see what happens down on the seabed. On top of that, of course, we have contact with the local community to understand which type of activities they develop in the same area. We put map over map - we did that exercise two years ago - and then we select the area where we don't have any conflict, or little conflict, with other interests of the community.

**CHAIR** - Can we talk about each of those elements in a bit more detail then? You mentioned collecting data for the past two years. This sustainable industry growth plan came out in 2017, so the planning and development would have happened prior to that. It indicates this area as a potential area for expansion. Was that done because your company indicated an interest in expanding into this area?

Mr ALVAREZ - Most probably.

**CHAIR** - So you had an intention prior to 2017 when this plan came out to potentially expand into this area. At that time, did you have a scientific basis that said this was an appropriate area for salmon farming? Or a scientific basis that indicated what the impact of salmon farming in that area might be?

Mr ALVAREZ - You need to do the study first.

CHAIR - In 2016, did you have it?

**Mr ALVAREZ** - If the study after two years is telling you we cannot grow fish there, well, we are not going to grow fish there.

First is the intention, based on experience, the area, the current and you can see from the map, from the public information available, then you need to ask our permission to check the area, which we did during the last two years.

**CHAIR** - You expressed the interest into expanding into that area and obviously negotiated that with the Government?

**Mr ALVAREZ** - To study the area first. You need to study the area first and then commit intention to grow fish there.

**CHAIR** - This planning showed that potential area for expansion in the map in the plan. Two years later you began collecting data, in 2018?

Mr ALVAREZ - Yes, more or less.

CHAIR - You have been collecting data for two years?

Mr ALVAREZ - Yes.

**CHAIR** - That then is building a scientific picture as to whether it is indicated it is appropriate.

Mr ALVAREZ - Yes.

**CHAIR** - So, at this time, does your scientific data indicate it is an appropriate area or not? Or are we not quite there yet? Do we not have enough information?

**Mr ALVAREZ** - No, we are not there yet. We plan to put information together probably June-July of this year, with the last data from summertime and then we are going to be in a better position.

If you ask me a first indication, our first indication is telling me, yes, it is possible to grow fish there.

**CHAIR** - In terms of the interactions you had with the community and the interactions with other groups with an interest in that area, you described interacting with them and having overlaying maps to look at different interests: is that document somewhere? Could we see what process was followed?

Mr ALVAREZ - Yes, that map there.

**CHAIR** - That is the result of that interaction?

Mr ALVAREZ - Yes.

**CHAIR** - The process to produce that map included what steps in terms of interacting with the community and other interests?

Mr ALVAREZ - You can see there is the name of the company that catches octopus, shark and others. It was a one-to-one discussion with them in order that they can identify the areas in which they normally do their business.

**CHAIR** - Other than identifying the areas where they work, did you collect other information from them or get their input into the potential impact of salmon farming on their activities and interests?

**Mr ALVAREZ** - That is the reason we met them - in order to understand the concerns they have about our potential business.

**CHAIR** - Right, and is that documented somewhere?

Mr ALVAREZ - Yes.

**CHAIR** - That is publicly available, or could be made available?

Mr ALVAREZ - It is going to be available, of course.

**CHAIR** - When you say that, do you mean in the approval process you will follow when you put in marine farming development plans?

Mr ALVAREZ -Yes.

Mr VALENTINE - Just a corollary in relation to setting up your scientific projects. Did any of that collaboration, any of that consultation with recreational fishers, wild caught fishers, did that inform what you would actually study in your scientific projects? Any of the information you received from them? Did it show you should be doing certain studies in certain areas, or was that just simply in relation to whether you should farm salmon there?

Mr ALVAREZ - I do not understand your question.

**Mr VALENTINE** - I am interested to know, in your feedback from the commercial fishermen, wild caught fishermen and recreational fishers, whether that helped to shape the model you were going to use in terms of what you should measure and where you should measure it in your scientific projects?

Mr ALVAREZ - I can try to find that information regarding any scientific things we need to take into consideration, but if you look into a number of countries, the level of wild fishery to compare with aquaculture, there is no indication aquaculture is going to jeopardise fishery. Every single country, you look at the numbers, and you are not wanting to see any conflict in there. Let us say we have Norway, 1.3 million tonnes of salmon; we produce 65 000 tonnes here in Tasmania - 1.3 million tonnes of fish, they are still catching 2 million tonnes of wild catch for many years. There is no conflict between the fishery industry and aquaculture. You can preview many countries and you are going to see exactly the same pattern.

The fishery is better today when it is overfishing and that is it. This is proved, with many scientific publications about the same.

**Mr VALENTINE** - You may not have been here earlier to hear some of the evidence we have been presented with this morning.

Mr ALVAREZ - Scientific evidence?

Mr VALENTINE - No, in terms of observational evidence from fishermen who are saying the sorts of areas being considered for salmon farming are spawning areas and areas inhabited by juvenile fish. Putting salmon farming there, with the escapees and all the rest of it that might happen, can have a significant effect on the wild caught fishery. That is why I was asking the question in terms of whether you had those conversations and whether that helped to shape the scientific experiments you were undertaking, which you talk about.

Mr ALVAREZ - I understand your point. Again, back to the fact, because feeling and gut feeling is a lot around the world. For that reason, I said we should put the science between so we can understand.

**CHAIR** - We did have a number of scientific reports tabled this morning as part of that evidence so we will be looking at that too. What we heard about was in fact the assertion was science-based, so it is something for us to assess.

Mr FINCH - In respect of you saying scientific data is being collected and explored over the last couple of years, who is doing that for Petuna? Who is overseeing that? Is it IMAS or your own scientists? You might tell something about the qualifications of those people.

**Mr ALVAREZ** - I can recall the information for you. CVS is a consulting company that does this type of work for us. We are a small company so we do not have our own team who can do all this type of studies.

Mr FINCH - So CVS, did you say?

Mr ALVAREZ - Yes.

Mr FINCH - Are they an Australian company?

Mr ALVAREZ - Yes, Launceston.

**Mr FINCH** - Okay. They do this work throughout Tasmania, throughout Australia? I have not heard the name of the company.

Mr ALVAREZ - I can send all the full information for you.

Mr VALENTINE - If you would not mind, please.

Mr ALVAREZ - Yes.

**Ms FORREST** - You started talking about this and were diverted, about the special planning you have done in this area. I am interested in what work has been done. This map indicates the commercial fisheries in the area. Is there other spacial mapping you have done and what monitoring are you doing out there in this region? I want to ask what is happening there before I go to the next question.

**Mr ALVAREZ** - This type of information we have collected from there was millions of data, because the data loader can collect information every second if you want.

**Ms FORREST** - So what is it that you collecting?

**Mr ALVAREZ** - It is oxygen level. It is chlorine levels. It is seawater currents. It is waves. It is chemistry of the water. The same company is going to the seabed in order to understand if we have seagrass there or the type of animals live in there. That area is mainly sand.

**Ms FORREST** - This is the area immediately under your lease?

**Mr ALVAREZ** - Yes - the purple area there.

**Ms FORREST** - So in terms of the currents and the waves and the other monitoring that is going on, is that over a broader area or just within that lease area?

**Mr ALVAREZ** - Just within that area, but of course we are monitoring all the areas as well that we rejected from day one.

Ms FORREST - So you are monitoring here near Robbins Island, for example?

Mr ALVAREZ - Yes. Remember that the whole blue line was the area approved to do our studies, so we identified three or four spots and then the other one was rejected because it was connected with octopus fisheries and shark, so for that reason we moved out from there.

Ms FORREST - Ruben, I know you have told me a lot about this stuff previously but not on the record, so I need you to tell more about what is happening in your monitoring in further, because we heard evidence earlier about the currents and escaped salmon that tend to go to the shallows and the juvenile fish that inhabit this area because there are a lot of nurseries in this area. I am interested in the monitoring, and if you are not doing that, is anyone doing it? Are you monitoring the juvenile fish, the nurseries, the currents in the area to see how things move in this area - I mean the water, mainly.

Mr ALVAREZ - Yes, the sea current is very strong. In that area it is between 1.5 knots and 2.5 knots. You can have some juvenile coming from the local fish but I don't think it is going to be the spot, so we need to check that and I want to ask the consultant if he has any record of this potential population of wild fish fingerlings. If the risk is that the salmon are going to eat the wild fish, this salmon is domesticated so they are more used to pellets rather than catching their own fish. If you go to Rowella, you will see a lot of wild fish inside the pen living together with the salmon, so it's no indication that they are eating the wild fish.

**CHAIR** - Surely they would be mature wild fish.

**Ms FORREST** - Fingerlings of wild fish. Are you able to provide to the committee at a later time some detail about the monitoring you are conducting?

Mr ALVAREZ - Yes.

**Ms FORREST** - And where you are conducting it and any other mapping that you have done in the area? That would be helpful.

Mr ALVAREZ - Yes.

Ms FORREST - Going back to the point about this growth plan, I know it is before your time a bit and you may need to take this on notice, but the blue and green zones are currently under exploration or have potential for further release. Then you go along past Rocky Cape and the red line starts. If Petuna were interested in this space, and that is probably why as you said earlier that this is indicated as blue and green, as far as I am aware there was no exploration happening off the coast of Wynyard or Somerset or Burnie or Penguin or anywhere along there, it was just made red as a no grow zone, or was there some science around that you are aware of?

Mr ALVAREZ - No. I will check and let you know.

Ms FORREST - It just seems odd how that decision was made. In terms of the process for the assessment of a marine farming plan, you have your lease and you said you are soon to have

two years worth of data that has initially indicated that you can farm fish in that area as opposed to wild fish because they are already there. Do you have a view on the current framework under which an approval or otherwise is made to enable you to commence farming within your lease?

Mr ALVAREZ - Well, after two years of study we want to release our full report, which is going to be probably mid or late this year. After that, we need to wait for consultation, so I reckon the timeline is going to be at least another year or two years to finalise the process.

Ms FORREST - The consultation would be with whom once you release your data?

Mr ALVAREZ - I think it's become public and then everybody can ask questions.

**Ms FORREST** - Do you have a targeted consultation process around that?

Mr ALVAREZ - Yes. We started this process as soon as we put the first data logger there and we started to do the consultation with people in the area. We even invited people to have a look at our operation. We don't have anything to hide there. Most of you have been to the farms and the hatchery, the factory, the sea farms. We will see more than 500 people just in our hatchery, including local communities and schools, because we need to communicate what has happened with aquaculture.

**CHAIR** - Have you actually bought any infrastructure or anything in Stanley or in those areas to look at land-based activities?

Mr ALVAREZ - We are looking for possibilities up there. We have two different inputs from the local community. Some of them don't want to see trucks going into little Stanley and prefer we operate by sea, which is something we can do. We can operate from Devonport. The other part of the community are interested to see trucks and people going there because it will improve the economy of the town. At the end of the day we need to make a decision. For me, we can do both.

Ms FORREST - Is that part of your planning process?

Mr ALVAREZ - Yes.

**Ms FORREST** - That will be made clear when you release your report?

**Mr ALVAREZ** - Yes. But then at some point we need to make our decision because it's completely different to buy a well-boat for \$50 million to operate from Devonport to Stanley, or a small well-boat to operate from Stanley to the farm, so it's a completely different approach.

**Mr VALENTINE** - Just to get some further clarity around your statements - in your submission under 'Looking ahead', you talk about the companies being granted an environmental monitoring permit to explore the potential for future salmon farming in Bass Strait east of Three Hummock Island but with minimal impact on accepted professional and recreational fishing areas. Is that something you have imposed on yourself in terms of minimal impact?

Mr ALVAREZ - Yes.

Mr VALENTINE - Or is that something that the Government has actually requested you to do?

Mr ALVAREZ - No, we imposed it ourselves.

Mr VALENTINE - You've talked about the research studies. Have you had much representation coming back from the commercial fishing folk and/or recreational folk approaching the company to talk about what you're wanting to do up there?

Mr ALVAREZ - I have personally been there two or three times already, once in a large meeting with the chamber of commerce to explain to them what we planned to do. We probably reduced some of their stress because most of the people strongly believe that we are going to fill up all the area with pens or we are going to be very close to shore, which is not correct. We cannot grow fish in 2-metre water depth. As soon as we start to explain that we are going to be far away, 20 kilometres offshore and that is going to be between 30 metres to 45 metres deep, they are not going to see us. You cannot see 20 kilometres offshore. That relaxes the discussion a little bit.

Of course, in this type of process you cannot pretend that everybody's going to be happy. Our target was to try to reduce the unhappy people. We understand that some of them are going to be always unhappy and we are going to do our best in order to run our business.

Mr VALENTINE - Thanks for that.

**CHAIR** - I want to ask some questions around the expansion to Storm Bay as another area you are expanding into and the investigations perhaps undertaken ahead of that expansion into Storm Bay. Could you describe this for us to some extent?

**Mr ALVAREZ** - It was a project which started for the company, I think, in 2015. It took a few years to take all the information and data and then we get a piece of water where we can grow 6 000 fish in the first instance.

**CHAIR** - Were there scientific investigations done there prior to you beginning on the impact up into the Derwent Estuary, because we've heard evidence around the fact there is concern about the impact from the expansion, not just from your company but from the others as well, about the lack of understanding that can be demonstrated scientifically about the impact up into the Derwent Estuary from that expansion?

Mr ALVAREZ - I can get that information and try to provide it to you.

**CHAIR** - If you have something along those lines, we would be interested to see it because we have heard about the concerns from scientists who have been involved on this for a long time with the Derwent Estuary.

**Mr FINCH** - I am trying, Ruben, to track down the scientific company you say are putting the data together for you over the last couple of years. You mentioned the name CVS. What is the acronym for? What's the full name of the company?

Mr ALVAREZ - [Inaudible]

Mr FINCH - Thanks very much. I just want to check credentials and what they deal in.

Mr ALVAREZ - Yes, absolutely.

**CHAIR** - Can we talk a little bit now about data? There is a real interest around what data is shared or not shared by the industry. Could you talk a little bit about what your company's approach is to sharing information about the monitoring you do, the parameters of your operations and the things people are typically concerned about? Do you have a planned and structured way you share that information publicly to try to alleviate people's concerns through sharing information?

Mr ALVAREZ - Yes, I think we are very open with our information. For that reason, we opened the door to visit our work farm which is even better. We never restrict any type of visitor.

**CHAIR** - In some structured way you share real-time data and relevant operational data in a public domain so people in the community who wish to do so or people who are involved in scientific groups or whatever it might be could access that data readily, say, online?

**Mr ALVAREZ** - Yes. We have our webpage. We report everything to the government. If you have an escape of fish, you need to report it and we do that. Petuna always do these types of things.

Now on our webpage we are going to include that information. Information is available. Some people do not want to see the information or they do not trust the information available. Most of the information is always there.

**CHAIR** - It's interesting because we hear from people about difficulty in accessing information or information being available in a whole range of different places and not consistently presented. One of the ways to address that seems to have come through the sustainable growth plan is a data portal. The first intention was to have it with IMAS but the way it has worked out, it is being hosted on the DPIPWE site and presents a certain amount of data.

Was your company involved in the development of that portal and informing what data would be presented on the portal?

Mr ALVAREZ - Yes. We do not have any issue with this. I think the main concern of people is about chemicals or antibiotics, all these types of things. We do not have any problem with that because we do not use any chemical in our fish. We have not used antibiotics since 2014. I think that was the last treatment.

Ms FORREST - At all, including in food?

Mr ALVAREZ - The antibiotic you include in the food.

**Ms FORREST** - You have not used any antibiotics at all since 2014?

Mr ALVAREZ - No, 2014 was the last time.

Ms FORREST - At all?

Mr ALVAREZ - At all. In fresh water and sea water - both.

That information should be very clear because in Australia you cannot go to the shop on the corner and buy the antibiotics. You need to have a prescription for a veterinarian and then this information should be available.

Ms FORREST - If I might just ask questions about our biosecurity. We know our government had evidence from the EPA as well about the importance of biosecurity. Last year the parliament passed a biosecurity act. The snapshot you talked about really flowed through a review done by the EPA into the international regulatory requirements. One of the key issues in the growth strategy and part of the biosecurity issues been identified through that is the need to set biosecurity standards, so the EPA is working on that.

Can you talk about this issue of biosecurity from Petuna's point of view? I know it has been an issue in Macquarie Harbour and other areas also. Can you talk about how you manage it, but also the importance of the biosecurity plan? I will come back with another question about how you think that should be framed. Can you talk about how biosecurity is managed and what some of the challenges are?

Mr ALVAREZ - One of the positive things about the Tasmanian salmon industry is the country closed the borders for importation of live eggs, salmon eggs. Doing that, you close the border also for diseases which come with the eggs, which is the history of Scotland, Ireland and Chile. They import eggs, but also all the diseases coming from them. That is not the case of Tasmania. Tasmania is quite safe in that particular topic.

There are a few areas where we started to work, mainly in Strahan due to some of the health issues we faced a couple of years ago, in particular with the POMV outbreak we had over there. As you are aware, we signed off a joint venture agreement with Tassal in order we can manage our lease in a different way.

We are doing very simple things that improve the biosecurity of the area. Basically, we receive all the smolt in one lease. We do the grow-out in another completely different lease and also, we have a fallowing period, which is to keep one farm completely empty without any fish for more than a year. That is probably the first time we do that in Tasmania and probably you not hear any bad news from Macquarie Harbour in terms of mortalities and stuff like that.

We are improving biosecurity. These concepts are considered in the biosecurity plan of the industry, were considered in the separation of year classes included there, which are good farming practices.

**Ms FORREST** - In your view will that be part of the biosecurity plan?

**Mr ALVAREZ** - Yes, it is right in there.

**CHAIR** - Let us just clarify - you are already engaged in those adjustments to the way you do things anyway?

Mr ALVAREZ - Yes, I have been involved in the discussion of this biosecurity plan.

**CHAIR** - In terms of separating year classes, fallowing periods and those elements you just mentioned agreed to be good biosecurity practice, are you already implementing those within your own areas already?

Mr ALVAREZ - Yes.

Ms FORREST - In Macquarie Harbour?

Mr ALVAREZ - In Macquarie Harbour.

**Ms FORREST** - Ruben, just going back to that the EPA director was talking about the environmental standards to be imposed on the industry. He is still waiting on the Government to decide what form that will be, whether it be by regulation or whether it be some other framework. I assume you know what regulation is as opposed to perhaps a code of practice. Do you have a view about how that should be achieved? Should we see regulatory change in this to create that environment standard?

**Mr ALVAREZ** - Interesting question. I think it should be regulatory.

Ms FORREST - The Government has not made a decision yet according to the director.

**Mr VALENTINE** - Just to round off the previous question and to go to another one, is it fair to say you don't have a licence at this time to farm along the north-west coast? You are doing studies with a view to applying for a licence. Is that correct?

Mr ALVAREZ - The only permit we have is to do the scientific research. That is the only thing we have.

Mr VALENTINE - Is that the same with Storm Bay?

Mr ALVAREZ - No, in Storm Bay we had our lease granted.

**Mr VALENTINE** - A number of the submissions we have received have concerns about antibiotics in feed. Do you have any comments on whether you use them?

Ms FORREST - I did just ask that.

Mr VALENTINE - Sorry, okay.

Mr ALVAREZ - Just to clarify a couple of things. We are not using antibiotics at the moment. That doesn't mean that we are not going to use them in the future. I don't know. For me, it is an animal welfare thing as well. If your animals are sick, you need to try to give them something in order to recover. You cannot leave them just dying. But then, you need to have a veterinarian prescription. It's a record of the antibiotic you use, the amount of antibiotic, and then after you treat your animals, as every single farm in the world does, you need to check the depletion curve, which is the amount of antibiotic in the flesh of the animal. You can slaughter your animals and sell into the market when the level of antibiotic is zero.

**Mr VALENTINE** - There was concern expressed earlier that it's possible it could get into the wild caught fishery, that if they are eating the pellets it might transfer across, in terms of antibiotic resistance and things like that and people who might have an issue with antibiotics. If it has been covered, I do apologise. I was concentrating on trying to find some information.

The issue of canola oil has also been raised. Obviously, being a genetically modified product, possibly from locations other than Tasmania, do you use that canola oil in your feed and have you looked at the GM implications of that, whether there is a concern or otherwise?

**Mr ALVAREZ** - Yes, we have a proper certificate from our feed supplier that they are GMO free.

Mr VALENTINE - They are GMO free?

Mr ALVAREZ - Yes.

Ms FORREST - Where do you get your feed from?

Mr ALVAREZ - From Ridley, which is a local company.

Ms FORREST - Who are they?

Mr ALVAREZ - They are in Westbury, and Skretting, which is in Hobart.

**CHAIR** - I want to ask a few questions about marine debris because it's an issue many submissions raised concerns about. Obviously it is an issue not just related to your company, it relates to other companies in the industry as well. It would be good to hear from you. The Government has what it is describing as a zero-tolerance approach and has apparently put some requirements on the industry to better track equipment and identify equipment that may end up as debris. Can you talk a bit about how your company has tackled that?

Mr ALVAREZ - The first one is about educating our people. To me, the main problem is just ourselves in the way that we behave in the farm. We did a clean-up in the Strahan area on the beaches there and 70 per cent of the things that we collected were domestic things. Only 30 per cent was connected with the salmon farm. Our people live in Strahan, so that is telling you that we need to educate our people better. For me, that is the number one priority.

The second one is about replacing all the old things we have in order that they are not going to collapse in the first storm.

I think we have these two priorities in the company, but number one by far is to educate our people.

**CHAIR** - So that the way they go about their work doesn't create debris that leaves your facilities - is that what you mean?

Mr ALVAREZ - Yes, it means that if you are going to cut a piece of rope, you need to put that piece of rope in a proper trash bin.

**CHAIR** - I know that you do the shoreline clean-ups and that is something that you measure and put a figure to, but is there some way you are able to measure and therefore demonstrate to an external person that you generate less debris, given the measures that you are implementing to try to reduce it? Can you point to some way that you measure that so you can say you are producing less debris this year than you were three years ago, or something like that?

- **Mr ALVAREZ** Yes, for that reason we classify the things we collect on the beaches. For that reason, I can give you those numbers 30 and 70 per cent.
- CHAIR That doesn't tell me how you are performing against your own performance previously.
- Mr ALVAREZ I think we have a record of our previous years. I can try to put that together for you.
- **CHAIR** Other than your shoreline clean-ups, is there any other way you measure how much marine debris you generate? Do you collect figures about 'we know we lost this piece of pipe off the site' or 'we know that this bit became dislodged and floated away'? Do you measure in some way the totality or the likely quantum of debris that you create?
- **Mr ALVAREZ** Yes, we keep a record of the things that we lose, let's say in a storm, because then we need to find it and collect it. We keep a record of that.
  - **CHAIR** That would be large items?
  - Mr ALVAREZ Mainly a large item, like a float or a piece of pipe.
- **CHAIR** So you have identification trackers on them of some sort? Is that how you go about retrieving them?
  - Mr ALVAREZ Not for every single equipment that we have.
- **CHAIR** Other than your shoreline clean-up and the data you collect around that, which is fairly subjective in a way because it's going to be indicative of some of the debris that you generate, not necessarily all of it or not necessarily accurately reflective of all of it, is there some way you measure how much debris you have generated so that you can know whether you are improving or not, know how you are tracking? If the Government has a zero-tolerance policy, they want you to create none, or be able to say you created a certain amount and you collected it, can you say how much you collect? Can you reflect how it compares to previously or will compare to the future?
- Mr ALVAREZ We keep a record of the things we collect. We have a different colour for the three companies so we use different colours for ropes, for instance. I can identify Petuna, Tassal or Huon. We keep a record of that.
- **CHAIR** You keep a collection of what you collect but not what you lose that is the point I am making. That's okay. I think your answer to my question is no. You have the information about what you collect, but you don't have accurate information about what you generate in terms of debris.
  - Mr ALVAREZ If we lose something and we find it, we keep a record of that as well.
  - Ms FORREST If you lose something and you don't find it, is there a record of that?
  - Mr ALVAREZ Yes. We keep a record of that.
  - **CHAIR** That would be large items? What is the size it would go down to?

Mr ALVAREZ - Normally larger items are easy to find. The small items are far more complicated.

**CHAIR** - I am interested to know: do you keep information about the small items you lose, not necessarily whether you collect it? Do you have an understanding of how much marine debris you are generating?

Mr ALVAREZ - Yes.

**CHAIR** - How do you have that understanding?

Mr ALVAREZ - Because we keep a record of every single thing we lose. We keep a record of the things that we collect and that is the best that we can do. If we can't put a GPS in every single equipment that we have, it is impossible.

**CHAIR** - I'm not asking about that. So you keep a record of everything you lose, down to small items? What would be reasonable to expect? A piece of rope, a piece of pipe, something of a particular size?

Mr ALVAREZ - Pipes, buoys.

Ms FORREST - Ropes?

Mr ALVAREZ - Ropes, yes.

**CHAIR** - You keep a record of when you lose rope?

Mr ALVAREZ - Yes.

**CHAIR** - That's the information I was after with my earlier questions.

Mr ALVAREZ - Say, if I lose a little piece of rope because something cut the rope and just throw it into the water, we don't have a record of that. For that reason I said that the main thing is education of our people.

CHAIR - Okay, that's fine, we can move on from that. I think that's as far as I'm going to get.

Mr FINCH - Ruben, talking about your experience and the different countries you have worked in, you mentioned that people generally don't read the science or take the trouble to investigate and carry out research, and that is generally where criticism might come to the salmon industry because people are not taking the trouble to do that research and putting time into that, if I'm quoting you correctly.

Mr ALVAREZ - Yes.

**Mr FINCH** - Or paraphrasing you. In the other areas in which you have worked, is that similar? Do you have criticism of salmon farming in Chile and Scotland and different areas for the same reason, that people are not as well read as the industry would hope they are?

Mr ALVAREZ - For sure not in Norway. Of course you find some people against salmon farming in Norway, but the large amount of people are positive about the industry. Probably in the 1980s and 1990s the Scottish industry was criticised, mainly for the use of different types of chemicals and antibiotics to deal with diseases, but as soon as they started to develop vaccines in order to prevent these types of diseases, I think the criticism stopped. They produce around 200 000 tonnes of salmon and it became as important as whisky in Scotland, so it's as popular as that and has a very good name. In Chile we have some issues with native people, most probably because the government didn't take into consideration their opinion about the salmon industry, which is fair.

## Mr FINCH - And that criticism continues today?

Mr ALVAREZ - Yes. Probably it's a lack of scientific research. For me, you need to have three important pillars to grow aquaculture. The first is to have enough water, which there is plenty of in Tasmania; second, you have clear rules, clear law and regulations in order for us to protect ourselves in the future. For every single project that Petuna at least is going to run in the future we're talking about \$100 million-plus, so we need to have clear rules in order to understand if it's okay to invest that amount of money in the future. The third pillar is the science behind it. As far as I know, in Tasmania you have strong scientific people who can support the industry. In some countries you don't have the three, you have one or two, so it's very hard to protect a company in the future.

In other countries, such as small areas like the Faroe Islands with a similar size to Tasmania, you have 65 000 tonnes of salmon and only 50 000 people and they're extremely proud about the industry. You see salmon in every single restaurant. They feel very proud about what they're doing.

Countries like the United States have been against the salmon industry for many years, but they buy a lot of fish from overseas. They don't want to do aquaculture in their own country but they buy fish from every single corner of the world.

**Mr FINCH** - Ruben, tell me about algal blooms. Is it front of mind for Petuna as you look to expansion and development that the algal blooms - we've had evidence about them - and climate change and the warming of the waters would not see compatibility in that area?

Mr ALVAREZ - Yes. It is always a risk, algal bloom. For that reason, doing our scientific study in the north-west and Storm Bay we quantify the level of chlorophyll in the water in order to understand the potential algal bloom they can generate. We also look into the history of Tasmania in terms of algal bloom or other types of organism that can harm our fish. We normally check every single day and take a sample of water in order to identify the algae that have been present there. So far in the two areas that we farm fish we have never had any type of algal bloom.

In Tasmania you have a cocktail of microalgae which is very good because you have many but none of them in high concentration because they compete for the nutrients of the water, so they keep in balance, which is very good. In the north-west we quantify this and I am going to know just by experience with the amount of current that we have over there that if we have any algal bloom, it's not going to last for many days, if we have one at all.

Ms FORREST - I was going to ask about on-land hatcheries and farms where we grow them out. I know there has been a fair bit of conversation about this and a suggestion that if you are going to grow them out, you do it close to the market because energy is one of the major input costs. If Tasmania could offer lower energy prices and availability of oxygen and fresh water, which we

do have quite a bit of - more than some parts of the mainland - is that something that wouldn't be considered by Petuna in the future?

Mr ALVAREZ - My opinion about the RAS system, which is a kind of hatchery, is that we have 70 per cent sea and just 30 per cent land, so we should try to do more in the sea rather than try to move everything into land because at some point you are going to compete with schools, with hospitals, with hotels and housing. Remember we use the volume in the sea. One of our pens is 20 000 cubic metres, so that means a tank of at least 12 metres deep, so how are you going to do that?

That is one of the problems when people think to move everything to land. The other is the energy cost that you mentioned. The other one is about the saltwater RAS system. I have been around the world having a look into this new technology. New technology for me is no more than 10 years old, so it's still new. I don't know any company and if you have information about a successful company with saltwater RAS, it would be good to have.

Recently I visited Denmark. They started the RAS system around the world. They are selling all their technology around the world and they are still in trouble. They don't earn any money and the quality of the fish is terrible. I will criticise their animal welfare because in order to be cost-effective, you need to grow the fish at very high density. I don't think it's a solution today. Perhaps in 30 years time when the technology is there and more mature, it could be a possibility. But then, as you mentioned, Ruth, instead of having a RAS system in Tasmania, we put it in Sydney or in Melbourne instead, close to the market.

Ms FORREST - In spite of the energy costs on the mainland?

Mr ALVAREZ - The freight costs are quite high to move our fish from here to there, so it probably compensates that.

**Ms FORREST** - Off the north-west tip of Tasmania, there's saltwater, but Macquarie Harbour has fresh water so you don't need to bathe the fish.

Mr ALVAREZ - Yes.

**Ms FORREST** - On the north-west, where would you get your fresh water?

**Mr ALVAREZ** - We have two or three possibilities we are exploring at the moment. I will let you know when we have finished with this because we don't want to create a lot of expectation as well.

Mr VALENTINE - We have had some submissions suggesting that now that deeper water is being considered for farming, but as companies move out to those deeper waters inshore farming ought to cease. One was suggesting within 10 years. Do you have any comment to make on that notion?

Mr ALVAREZ - I mean move from -

Mr VALENTINE - Move out to deeper water and farm out in deeper water, the farm inshore licences should cease to exist.

- Mr ALVAREZ I support this type of concept when you cannot grow fish properly in that particular area, but if you are growing fish in a good way, I do not see any reason we should move out.
- **Mr VALENTINE** I think they are suggesting because of the impact it has and the alienation of coastal space is the inference applied in those submissions; you have made your comment.
- **CHAIR** Perhaps it is in relation to your comparison you made earlier around 70 per cent water/30 per cent land for the earth. The amount of the areas being farmed at the moment is very close into shore, so we are not using most of the 70 per cent of water. There are competing uses for ones quite close inshore, so the opportunity to move out of area that might be more competitive and used by other contested areas; I think that was the point.
- **Mr ALVAREZ** I think in the future it is going to be in that direction, but again we need to double up technology to go offshore because it is not easy.
- **Mr GAFFNEY** One of the things we were interested in when we visited your facility was the groundbreaking work you are doing growing fish adapting to climate change. Could you fill us in on how this is working or how that study is going? We have heard climate change mentioned quite a bit with warmer water, so what are you doing as you described to us 18 months ago?
- Mr ALVAREZ Thank you for that because one of the submissions, I think it was number 18 came from a couple of doctors and their concern was that our genetic program is going to become a fish genetic modified. I want to be very clear with that. Our genetic program is a breeding program as cows and sheep and all that type of animal. We are not even thinking [inaudible] more salmon. The only thing we are doing is because this Atlantic salmon and ocean trout at Petuna have been isolated for so many years without any interaction of new blood into our strength.

We start to identify genes of our fish, so now with the information we have, we know our fish are completely different to the European and Canadian strains. For all these years our fish have been adapting to warmer conditions to compared to the European salmon. That is a very good thing and we should take advantage of that in Tasmania.

In Tasmania we have seawater temperature that normally achieves 16 or 17 degrees in summer time. If in Norway, they have the same temperature, they probably have high mortality in the fish but our fish don't die. The only thing we are doing is identifying individuals and families that can tolerate high temperatures in order to breed from them. If we can get another one or two degrees extra, we will be safe for the next few years. We are breeding from the type of family that is showing more tolerance to high temperatures. They can grow well, can achieve good size and those are the families we are using for our breeding program.

- Mr GAFFNEY You mentioned earlier that we do not import any eggs and so on because of the success of the fish we have here. Are you able to export or are you not at the stage yet where you can send Tasmanian stock to other places where they may accept this? Where is that at?
- **Mr ALVAREZ** Potentially, yes, we can do that. Actually there are a few companies very interested to get our genetics. At the moment it is not our core business. I do not think we are going to go in that direction, at least in the next two or three years. There is a lot of interest, mainly from Canada and Norway.

**Mr GAFFNEY** - The last question is about the Blue Economy for which, as Tassal wrote, \$70 million is coming in. That is federal funding of \$7 million a year for the next 10 years to CRC, Launceston-based and it is called the Blue Economy and part of that is to look at driving research innovation in the areas of offshore high-energy salmon farming through facility and research partnerships over the next 10 years. Is Petuna part of that?

Mr ALVAREZ - Yes.

Mr GAFFNEY - Can you explain for us what role you see or Petuna is playing in that venture?

Mr ALVAREZ - Yes, we need to look into offshore type of farm. We need to understand a little bit more about which type of structure we can put over there. Particularly in Tasmania you have good engineers, actually the expansion of Rowella - one of our farms - which cost us \$6 million last year, 100 per cent of the equipment is local from Launceston and Hobart and other parts. The quality of the pens we use in the weather are high class. You should be proud of that. I reckon in the future we should continue doing the same. Of course, offshore types of pen and feed barges are the next level. For that reason, we need to understand and to invest in study to know which type of material we need to build our pens and feed barges. Then we take that information into the local supply.

**Mr GAFFNEY** - Frances Bender last week mentioned a figure of 750 employees with their company. What number of people work for Petuna?

Mr ALVAREZ - I think 320 is in the submission here.

**Mr GAFFNEY** - If there is growth in the north-west area, what do you envisage that would mean for your company as in more fish growth area?

**Mr ALVAREZ** - Direct jobs in Stanley itself, I reckon is going to be 50 people. Everything is going to depend on whether we are going to operate by sea or by trucks.

Mr VALENTINE - With respect to levies and licence fees, there has been comment Tasmania does not really charge anywhere near enough because other locations charge a lot more. They cite Norway. Do you have any comment on that and whether the level of licence fees we charge here is sustained? No-one wants to pay more, but you might have a comment on whether there is room for adjustment.

Mr ALVAREZ - Norway charges far more, but also people paid 60 per cent in taxes when I used to work there. It is a completely different world. You pay more taxes as a person and the company also pays more taxes. Also you have far more benefits. The comparison is a little but unfair because for me the fees and levies are connected with the reality of the country. In Chile we pay far less taxes. We should pay more. I can say that because I from that country we should pay far more in the salmon industry there. Then taxes for persons are 35 per cent, similar to here.

**CHAIR** - To bring the comparison back locally, the other assertion would be compared to commercial fishery or wild caught fishery and levies and fees amount to a smaller percentage of a tax take from the farming compared to commercial or wild caught. Can you comment on whether that is a fair comparison to make?

Mr ALVAREZ - I need to have more information about that.

**CHAIR** - Again, I can't be 100 per cent certain on the accuracy of this, but in terms of a comparative figure, it appeared that, say, for a commercial fishery that it might be 4 to 6 per cent of their income going into fees or levies, what it would amount to in taxes, compared to a much smaller proportion from a salmon farming company.

Mr ALVAREZ - Okay.

**CHAIR** - Perhaps without accurate figures for me to present to you, it might be difficult for you to comment on it, but that would be a better comparison, wouldn't it, than comparing internationally, comparing locally across industries to see who's -

Mr ALVAREZ - They are completely in the industry because in fishery you're catching wild fish from nature. We don't catch any fish. We produce our own fish all the time. It's a completely different business.

**CHAIR** - It's a difficult comparison to make.

Mr ALVAREZ - Yes. We work in the same area.

**CHAIR** - I'm mindful we've taken extra time. The very final question is: what third-party certification system do you use for Petuna?

Mr ALVAREZ - BAP [Best Aquaculture Practices].

**CHAIR** - Why is that chosen by your company over, say, the ASC [Aquaculture Stewardship Council]?

**Mr ALVAREZ** - Because it covers more areas of our business. ASC doesn't certify the factory. This caught my attention because if we process 100 per cent of our fish, they need to be in a clean area and so on. BAP covers our factory, the feed plant, and we show them where the fishmeal is coming from.

Last year Petuna got four stars, so that means we certify our hatchery, sea farms, the factory and feed plant. We are the only one in Tasmania.

**CHAIR** - Thank you, and thank you for the extra time you've given us today. We appreciate it very much.

### THE WITNESS WITHDREW.

Ms JEN FRY, TASMANIAN SALMONID GROWERS ASSOCIATION, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Welcome. Thank you for your time, we appreciate you coming in to give evidence. The hearing today and the evidence you provide is covered by parliamentary privilege while you are here. Once you are outside this room and context, that won't necessarily apply to comments you might make, so be mindful of that. We are recording today and *Hansard* will be available via the committee website of the hearing. We are not broadcasting today because we don't have the facilities here. If there is evidence that you feel needs to be heard in camera, you can make that request of the committee and we will consider the request at the time.

I will ask you to make a statutory declaration, after which you can make some opening comments or remarks if you would like to, and then we can have a series of questions for you. Thank you. Would you like to make some opening comments?

**Ms FRY** - Madam Chair and members of the subcommittee, the Tasmanian Salmonid Growers Association would like to thank you for the invitation to the TSGA to be a witness at these hearings. First, I acknowledge the traditional owners of the land we meet on today and honour the Elders, past, present and emerging, of the Aboriginal people of Tasmania.

Our industry does not shy away from scrutiny. Our submission, site visits and today's hearings will demonstrate that this industry will go above and beyond for its commitment to sustainable farming in Tasmania. The TSGA is charged by its members to support sustainable growth of salmonid fish in Tasmania through best-practice policy, independent research to inform innovation and through outreach or advocacy. There are three active financial members. Ours is a small industry with a big responsibility.

The salmon industry in Tasmania has provided information for a number of inquiries at parliamentary hearings, meetings, papers, submissions, site tours and fact-finding missions. Our submission details the industry's investment in regional and rural communities; the investment and commitment to research and monitoring programs to inform the industry's ethos of continuous improvement; and the care for the welfare of the fish being farmed, the environment the industry operates in, other wild fish stocks and interactions with wildlife.

The TSGA will be happy to answer the subcommittee's questions; however, I am mindful that in some instances some questions will need to be taken on notice and I can provide further written reports to the subcommittee to answer any of those questions if required. I am ready to begin if you are.

**CHAIR** - Thank you very much for that. I noticed that you acknowledged the Tasmanian Aboriginal community at the beginning. Is there a particular way that this industry, or your organisation as peak body of the industry, interacts with the Tasmanian Aboriginal community, consults or gets their input on matters relating to the industry?

**Ms FRY** - That is something probably that each individual company would be better placed to answer. I am relatively new to this position and it is something that I do care about and will be doing.

- **CHAIR** In relation to the sustainable industry growth plan that came out from the Tasmanian Government in 2017 and was reviewed in 2018, due for review again this year, the plan sets out an industry-proposed target to grow to become a \$2 billion a year industry by 2030. Can you tell me how that figure was arrived at by industry and what evidence or scientific assessments informed the figure?
  - Ms FRY I don't know if the industry itself was involved in informing that figure.
- **CHAIR** It is an industry-proposed figure in the growth plan. The Government endorses it and says they support it, but it's proposed by industry.
- **Ms FRY** The TSGA definitely supports that plan. We're happy it will be reviewed and adjusted as necessary, as all good planning strategies should be. It is a living document. We believe there is considerable scope for the industry, but I am not certain how the industry or the TSGA had input into that figure. I would have to take that on notice and look back.
- **CHAIR** I would like you to take that on notice, because it is an industry proposal. We've already heard from Huon that they weren't involved in putting that figure together; Petuna hasn't been able to provide us with information about how they were involved. We will certainly be asking the other company, but you are the peak body. Presumably, your group was involved in putting that figure together. The committee would like to know and understand where that figure came from and what informed it.
- Ms FORREST Can I just follow up on that, Chair? What I would like to see as a member of the committee is correspondence between your organisation and the Government in the development of this sustainable industry plan, because it's really unclear how this plan was developed and how the map was generated that had the grow and no grow zones. I appreciate you have only been there at best for five minutes, but this is the difficulty we're having in that there seems to be no-one who can tell us historically.
- **CHAIR** Knowing that you were coming today, though, and we have a submission from your organisation, you would have access to the information behind that submission, even if you didn't make it yourself. What is your understanding of the TSGA's role in developing a sustainable industry growth plan?
  - Ms FRY I will have to look back and provide that in a written statement for you.
  - **CHAIR** Unfortunately, we don't get to fairly interact with you with questions around it.
- **Ms FRY** I understand you are having hearings in April so perhaps that is something we could look at.
  - **CHAIR** Perhaps it is. So you can't talk to us about the grow and no grow zones on the map?
  - Ms FRY I would need to refer back to history.
- **CHAIR** You can't discuss with us why the plan doesn't include freshwater facilities well-boats and downstream processing? No? Okay.

In terms of the review due for the plan this year, what do you anticipate will be the TSGA's role in that review process?

- Ms FRY I hope the Government will come to us for many opportunities for reviewing the document.
  - CHAIR Do you have a formal understanding of what that will look like?

Ms FRY - No, I don't.

**CHAIR** - It is interesting because action 17 in the plan says that initially the Government had an intention to facilitate the establishment of a new broad-based reference group as an early priority in the plan to support developing milestones and track progress. However, the review one year later says - and this is a quote I am interested for you to help decode for us - that in relation to that initial intention for a broad-based reference group and the milestones -

There have been some significant changes within the industry that have caused the Government to reassess this deliverable. Industry has come together to resolve differences and there is positive momentum to be built upon. TSGA board membership has changed and new members now represent industry. This enables the development of collaborative solutions to industry-wide challenges and provides for a more effective relationship with government.

In terms of removing the need for a broad-based reference group and milestones to track progress, can you decode that statement in terms of how that then informs the Government's milestones and progress measurement for the plan?

- **Ms FRY** I will just repeat that back so that I make sure I understand your question. Are you asking me to decipher what the review meant with the statement that there have been changes within the TSGA?
- **CHAIR** That would be a good start, and therefore why there might not be a need for a broad-based reference group.
- **Ms FRY** I believe that in the past the TSGA board was perhaps not as communicative with each other but as time has gone on over the last little bit there has been a lot more communication with the board members. It is a very cohesive board that I now report to that works together on a number of issues. As a result, there would be a very good opportunity for the Government to be able to consult with industry through the TSGA.
- **Ms FORREST** Can you tell us who is actually on the board at the moment, who the chair and members are?
- **Ms FRY** Yes, we have a member from Petuna, Ruben, who was here earlier; we have a member from Tassal, Mark Asman; and we also have a member from Huon, Phil Wiese.

**Ms FORREST** - Is that the entire board?

Ms FRY - It is at the moment. We have an independent chair whose name is Chris Dockray.

**Ms FORREST** - You said there have been changes to the board. Who was on the board before that?

**Ms FRY** - That was before my time. I understand that Mark Ryan was a member of the board and maybe Peter or Frances Bender.

**CHAIR** - So the board was still made up of people from each of the three main companies?

Ms FRY - Correct.

Ms FORREST - Was there an independent chair previously?

Ms FRY - Yes.

Ms FORREST - Who was that?

Ms FRY - It has been Chris for a number of years.

**Ms FORREST** - The chair hasn't changed?

Ms FRY - Correct.

Mr FINCH - Jen, how long have you been with the Salmonoid Growers Association?

Ms FRY - Since 9 January.

Mr FINCH - So not long?

Ms FRY - No.

**Mr FINCH** - I am just curious that you have been asked to come and appear here with scant knowledge of the history of the way things are developing while Chris Dockray, who developed the report, has not made an appearance if he has been the ongoing chairman.

Ms FRY - Chris wasn't available.

**Mr FINCH** - Thanks. It may be, Chair, that if we want to pursue this line of questioning, we might need to talk to Chris.

**CHAIR** - Yes, my questions are going to be difficult for you to answer on the same basis that you have already been unable to answer the earlier ones. Shall we press on with some you think might be worthwhile?

**Mr VALENTINE** - I was going to ask a question with regard to the proposed Tasmanian salmon industry scorecard. Have you any comment on how much input you may have had as a group to that particular scorecard?

**Ms FRY** - I understand that the TSGA members were consulted, but I think that question is probably better directed to the individual companies because at the time that was happening there were some changes going on within the TSGA.

Mr VALENTINE - Okay.

**CHAIR -** In relation to the development of an industry scorecard, that implies an industry-wide cooperative arrangement that presumably the TSGA would be best placed to be informed of and developing.

Mr VALENTINE - Across the board, one would think.

**Ms FRY -** I would need to look back and make sure what was or was not consulted upon with the TSGA, but I do know that the Government has been in touch recently around various things they are doing with the TSGA. Whether it was the release of the data portal, they have definitely been in touch so I do know they are consulting us.

Ms FORREST - A couple of questions that hopefully you will be able to assist with is looking to the future. The Biosecurity Act - a new act - was passed last year, and part of the growth plan is to develop a biosecurity plan. What role will TSGA have in that?

Ms FRY - The TSGA believes that a strong biosecurity regime is fundamental to both the existence and continued growth of our industry. We strongly supported the introduction of the Biosecurity Act and have worked to develop a collaborative industry and government biosecurity plan. It is critical that we learn from past mistakes and we want to make sure we can continue to supply a sustainable protein for Tasmania and the mainland, for Australia and the world for the future.

Ms FORREST - What role will the TSGA play in the development of the biosecurity plan?

**CHAIR** - Or has played?

Ms FORREST - Yes, has played or will play, because it's a work in progress at the moment?

**Ms FRY** - That's right. We have been having meetings with the Government since I started to help with the biosecurity plan.

Ms FORREST - What areas are you specifically focussing on from the TSGA's perspective here, because there are a number of stakeholders here and TSGA is one of them, so what role are you playing in that?

Ms FRY - At the moment the three major companies are working together with the TSGA to help inform the biosecurity plan from an operational point of view. For example, if the plan has in it that we need to do this, this is how the industry will undertake that.

Ms FORREST - Lloyd Klumpp, our fellow in charge of Biosecurity, lived and breathed that act. He didn't sleep for weeks, I think. More power to him for putting in the effort. It's not just about the salmon industry. If he were to come to a meeting with you and propose an aspect of the plan that may make it more difficult for your members to implement, do you then go to them and say, 'This is what Mr Klumpp has been looking at. What do you think about that?' I am just interested in how it works. How does that interaction occur?

**Ms FRY** - We sit down together at the moment, because I am too new.

# Ms FORREST - We being who?

- **Ms FRY** Myself, the Government, Lloyd, the chief vet and the companies' chief veterinarians and technical officers and operational officers. We sit down together to talk things like that through, as I am too new.
- **CHAIR** You mentioned in answering Ruth's question learning from past mistakes in the context of the biosecurity plan. Can you speak about that in more detail, please?
- **Ms FRY** I'm assuming that when we talk about past mistakes, we are talking about other jurisdictions. Is that what you are asking me about?
- **CHAIR** I am wondering. You have used the phrase in this context. I am interested for you to provide more detail around what you mean by that and what that actually looks like in the sense of your involvement in developing a biosecurity plan.
- **Ms FRY** In that statement I was referring to other jurisdictions and other industries that have had incursions and when that happens what are the things we can learn from? It might be from fruit fly that has come into Tasmania. How did that occur? Was that through quarantine? Through importation? That is what I am referring to.
  - Ms FORREST We are not talking about the Macquarie Harbour disaster?
  - Ms FRY No, I was not talking about that.
- **Ms FORREST** Wouldn't we want to look at that? We are talking about the salmon industry here and we know the management of Macquarie Harbour created all sorts of harm. Shouldn't we be looking at that?
- **Ms FRY** I did not say that it wasn't. I just said what I was referring to in answer to the Chair's question.
- **Ms FORREST** Are you saying then that the TSGA is not considering the past mistakes of Macquarie Harbour and advising the government on the biosecurity plan?
  - Ms FRY No, I am not saying that at all. I was simply talking to the Chair's question.
  - **Ms FORREST** But you said you were only looking at other jurisdictions and other industries.
- **Ms FRY** That is what I meant when she asked me about what I meant by those other jurisdictions. That is what I meant by those other jurisdictions when I gave that statement.
- **CHAIR** I asked you what you meant by learning from past mistakes and you indicated you meant other jurisdictions. I think, Ruth, you were just trying to clarify would there also be in addition to that, which is what you meant when you first said it. Would you also be considering lessons from experiences here in this jurisdiction?
  - Ms FRY You would expect that to happen, of course.

**Ms FORREST** - That is why I asked the question. Particularly, it is one of the key challenges for Macquarie Harbour was the overstocking there and that happened as a result of your members' actions in the harbour. I am interested in the engagement around that in terms of biosecurity?

Ms FRY - I do have some notes on Macquarie Harbour.

Macquarie Harbour is, and will continue to be an excellent location for the farming of salmon and trout. The environmental issues in the past were a result of multiple factors including, but certainly not limited to, the biomass in the harbour at that time.

We do support a biomass cap that applies to the harbour and we are very pleased to see that the environmental monitoring shows the health of the area continuing to improve.

**Ms FORREST** - What is the plan? I know Huon's still got some trout in there, have they? Have they still got some trout in Macquarie Harbour?

Ms FRY - You would need to refer that question to Huon.

**Ms FORREST** - Okay. We know that Tassal and Petuna have salmon in the harbour. What is the plan? I would imagine the TSGA was involved in the mass mortality in the harbour?

Ms FRY - Yes, but that was well and truly before my time, so I would need to look back -

**Ms FORREST** - No. I am talking about what the plan is for a mass mortality should a mass mortality occur in the Harbour. What is the plan?

**CHAIR** - Is there currently a plan in place to deal with should it happen today?

Ms FORREST - Or tomorrow?

Ms FRY - I would need to take that on notice, but I assume that each company would have their own plans in place for that, and I think you are probably best to direct that question to the individual companies and quite possibly to DPIPWE and the EPA.

**CHAIR** - There is now a Macquarie Harbour management plan in place that is a collaborative plan. Is that correct?

Ms FRY - I believe that is in place now, yes.

**CHAIR** - Is the TSGA a party to that Macquarie Harbour collaborative management plan?

Ms FRY - Through our members.

**CHAIR** - But not as a party? Individually, like separately to your individual members?

Ms FRY - I would need to look that up and get back to you.

**CHAIR** - Right. Because I would have thought if rather than just company by company, given there is, I believe, a now collaborative management plan in place, there would be actually an agreed industry-wide biosecurity plan in place for events such as mass mortalities.

Can I move on to something else, or are you still going?

**Ms FORREST** - We have had some evidence from the EPA director last week talking about the development of environmental standards which flowed out of his review of international standards, and there is still some work to be done, and for the Government to determine whether it is to be by regulation or by some sort of industry code.

Can you talk about what TSGA's view is on the most appropriate framework for that?

**Ms FRY** - We will work with the Government. I believe that is a decision for the EPA to make and we will work with the Government.

Ms FORREST - The EPA won't make it. The EPA is waiting for instructions from the Government.

Ms FRY - All right. Well then, it is a decision for the Government to make.

**Ms FORREST** - Your members do not have a view about whether it should be by regulation or by industry code?

Ms FRY - I would need to take that on notice.

Mr VALENTINE - In relation to the review of the sustainable industry growth plan, under point 12, talks about encouraging relevant research and development and the subsequent adoption of new technologies that reduce environmental impacts. Do you as an association, talk about the sorts of scientific studies that should be taking place and agree that certain areas should be studied or is that only something that individual companies do with the Government?

**Ms FRY** - No, the TSGA does have a partnership with the FRDC.

Mr VALENTINE - With who?

Ms FRY - The FRDC, which is the Fisheries Research and -

Mr VALENTINE - Fisheries Research and Development Corporation?

**Ms FRY** - That is correct. We have a chance to provide comment on lots of different types of research that needs to be done in lots of different types of areas.

**Mr VALENTINE** - Is it always agreed these areas should be studied or is it something individual companies can express their opinion to the FRDC on?

Ms FRY - Sometimes, it is an industry where we will be working individually with the company with their own research and sometimes it is within the TSGA remit.

**Mr VALENTINE** - Do they share their research between the companies?

Ms FRY - In some instances, absolutely.

Mr VALENTINE - In some instances?

Ms FRY - That is right. In some instances, they may not from a commercial-in-confidence point of view.

Mr VALENTINE - Okay, thank you.

**CHAIR** - The TSGA submission states it is a highly regulated industry. It describes the list of legislation regulations and licence conditions. It mentions company policies and practices and third party accreditation as the mix of things that lead it to be labelled 'highly regulated'. It talks about the need for regulation to be reasonable and appropriate. Can you talk about the context which currently exists and whether the TSGA regards it reasonable and appropriate or if you can identify ways you believe it might be improve or tweaked or made more effective?

**Ms FRY** - I will make sure I am getting the nuance of the question. You are interested to know if there are other regulations that were legislative or other things could be done that would make things more effective, and when you say 'effective', do you mean about farm and environment?

**CHAIR** - I am meaning it from your perspective. You described it as a highly regulated environment or industry and we have listed a whole range of things that relate to that and you used terminology around reasonable and appropriate. I am interested to hear from you whether that is what we have and, if not, what you see as leading us towards that.

Ms FRY - I think there is a need in some cases for the regulations for the industry to cover on all three levels of government. There is local council, there is state and also federal. All those things work together to create the highly regulated industry we are. If new regulations are introduced, it makes sense for those regulations to be in line with or to complement other types of legislation or regulation from other bodies or other tiers of government. Also, there are a number of conditions associated with leases and licences and, again, if those were married to regulation, it makes sense from a bureaucratic point of view.

**CHAIR** - So, to bring say conditions, leases and licences into a more consistent approach across the industry?

Ms FRY - Yes.

**CHAIR** - Linked through to something tangibly in legislation and regulation?

**Ms FRY** - If that is what is required, absolutely.

**CHAIR** - Does the industry and TSGA as the peak, have other elements relating to the regulatory system you advocate for in terms of changes or improvements or tweaks?

**Ms FRY** - One of the things I think is going to happen or is happening now - again I am new and so I am not 100 per cent certain - however, I believe having officers who are highly trained and skilled in looking at those regulations from all those teams and how those things interrelate. It would be very good to have those officers who are well-versed in all of those areas.

**CHAIR** - Where would they sit in the system?

- **Ms FRY** Yes, that is a good question. I'm not certain how that might work and that I guess is a matter for the Government, EPA or DPIPWE.
- **CHAIR** It's not dissimilar to some of the suggestions we have heard from other groups around quite a distinct entity that would act as the overarching regulator or central some people would describe it as watchdog. It doesn't necessarily have to have that terminology or that connotation, but a more distinctly independent, overarching body that could do that drawing in of all the different levels of regulation but all done from one central entity. Is that the sort of thing you are talking about too, to give consistency and cohesion to the complexity of the environment?
- Ms FRY Yes, I am talking to consistency and cohesion at the moment as opposed to how that would be carried out from a government's point of view. I have heard other people suggest that. From my personal point of view, having something centralised would, of course, be easier, especially if it were looking at all those different tiers of regulations, conditions there can be hundreds of conditions on a single licence to have something that is more cohesive; that does make sense.
- **CHAIR** Do you think the industry and the companies within the industry would find that a helpful and easier way to interact with that complexity of regulation?
- **Ms FRY** Possibly, but I would have to go back to them. I'm happy to take that on notice. I think that's a good question for me to go back to the industry members on.
- Mr VALENTINE In your submission you talk about 'our continuous commitment and efforts to engage with our communities to resolve matters around our operations'. We have had over 220 submissions and a lot of them are talking about noise complaints and general impacts in their coastal areas.

Do you discuss as a group how you might better consult and improve the consultation process? Some of the concerns have been the fact that it's really about information dissemination rather than being there to answer queries and questions. Do you look at that side of things and how best to improve your interaction and communication with the community?

- **Ms FRY** The TSGA is also responsible for advocacy associated with the salmon industry. It is certainly something that the TSGA is going to be working towards and I would need to look back as to what has happened in the past.
  - Mr VALENTINE Do you have any plans for public consultation that you can tell us about?
- **Ms FRY** No I don't have any plans. I do know that a lot of those sorts of questions the member companies themselves are definitely taking on board and as a result you are probably best to direct those specific types of questions about what they are doing in community engagement to address concerns to each individual company.
- **Mr VALENTINE** I'm interested to know whether you are looking at a code of practice or some way of improving. Has there been any discussion about having such a thing as a code of practice when it comes to community consultation so that you get it right, rather than having to wear the brunt of community angst because you didn't get it right?

Ms FRY - I think your question is: do we have any code of practice on community engagement or plans to develop one? We do have codes of practice currently in development. To start with, we have taken on the things that we are hearing the most about from the public. The first one is marine debris, and the second one will be on wildlife interactions. Once we have done those, what we must do is talk to the community on what it is that they would like to see in terms of a code of practice.

It might be noise; it might be on just the way that we are engaging with communities. There have been a number of sentiment surveys in the past on how people are feeling about the industry and the things they feel need to be addressed. There has also been a survey that is helping us look at some of the things that we need to talk around the way we use the language. Often when we talk to communities we might use scientific-based or company-based language, and we need to actually speak to communities in a language that they are comfortable with, so we have done a bit of research around that as well.

- **Mr VALENTINE** Some of the observations made are that they have felt like and I'll paraphrase it they are being talked at rather than with, if I can put it on those terms.
- **CHAIR** Can I ask you about the sentiments you have just mentioned? Could you talk in details just to give us an example of one that was undertaken, its purpose and then what was done in response?
  - Ms FRY I would have to take that question on notice.
- **CHAIR** So you are aware of them. You believe they were valuable to do, but you are not able to talk about in detail about an example today?
  - Ms FRY Correct.
- **CHAIR** In your submission on page 6, you talk about 'future planning of Tasmania's salmonid industry is predicated on an ongoing precautionary approach'. I would like you to talk about what the TSGA means when it talks about a precautionary approach.
- Ms FRY Tasmanian waters have been and continue to be extensively researched and monitored by trusted and independent scientific organisations. Every year the TSGA, through our member companies, invests in the expertise of local scientists with IMAS and with CSIRO. The aquaculture industry has a culture of continuous improvement in all aspects of its operations. For example, around \$500 million has been spent by the industry on pens which minimise risk to wildlife as well as stock and workers. Innovative net-cleaning techniques reduce environmental impacts, for instance, of net maintenance and reduce the risk to our fish.

From the very first years of the industry's conception, IMAS scientists have been involved in monitoring the salmon industry in Tasmania. This science has allowed the industry to address its challenges through adapting.

**CHAIR** - None of that actually speaks to a precautionary approach. What you have described is 'We do some science, we have continuous improvement and we like to have good technology', and you talked about adaptive management. When you talk about the salmonid industry being predicated on an ongoing precautionary approach, what does TSGA mean by that?

- Ms FRY Adaptive management, when spoken about in terms of a scientific basis you cannot have that without a precautionary approach. A precautionary approach says we are not going to not act on the basis of not having the science that we know. We need to have the thing occurring in order for us to apply the precautionary approach and then have adaptive management in order to make sure we are doing the right thing.
- CHAIR Another way of looking at a precautionary approach that I think would be put is not that we don't have the science so we won't do it; it's, 'Do we have enough science to begin doing it or do we need more science before we can then comfortably begin doing it, knowing we are not going to present a great risk and then bring in the adaptive management approach once we are doing it?' Does your precautionary approach align with that questioning of whether we have enough science?
- Ms FRY I believe that question is probably better directed at DPIPWE, EPA, IMAS and CSIRO.
- **CHAIR** Yes, except that you claim that your industry has a precautionary approach that it's applying. I would like to understand your industry's understanding and use of that word. The way you described it, you could start with almost no science and then learn more as you go. A precautionary approach is about how do we know we've got enough science to safely begin -
  - **Ms FORREST** And be able to measure the impact once you do begin.
- **CHAIR** and then be able to do it in an adaptive way once you are beginning. What is your organisation's understanding of that precautionary approach?
- **Ms FRY** Perhaps you would like to hear more about the environmental monitoring that is done by the industry and the member companies? Would that be of assistance?
- **CHAIR** No, I am trying to understand your organisation's use of the words 'precautionary approach' and what you mean by it. So far you haven't described something that is precautionary; you have described adaptive management. You have described continuous improvement and other concepts, which are all valuable concepts in their own ways, but this is a term you have used and I don't hear your organisation's actual understanding of that terminology.

Ms FORREST - Can I reframe the question slightly?

CHAIR - Yes, please.

**Ms FORREST** - How does your industry believe that you can effectively monitor the impact of an expansion, whether it be to a new area like the north-west of Tasmania or another operation in Storm Bay, say, or the Huon River or anywhere where there are already existing farms, even Macquarie Harbour for that matter? How can you monitor the impact of an expansion or a new farm without all the science that would fulfil a precautionary approach?

CHAIR - An adequate baseline.

**Ms FORREST** - Yes. You said this is a precautionary approach, but what you talked about was putting something in the water and then seeing how it affects things and then adapting - 'If it harms the environment more, we'll cut back a bit'. That's adaptive, not precautionary.

- **Ms FRY** I think the Chair may have answered it in order to make sure adaptive management is working against a precautionary approach, you would have good baseline.
- Ms FORREST Let's go back to the Chair's question, then. You say the industry is predicated on an ongoing precautionary approach underpinned by science by independent experts. Let's use the north-west here. There is no farm out there. What do you believe is needed before a farm can go there to adequately ensure that you can assess the impact once a farm does go in there?
- **Ms FRY** The appropriate baseline monitoring that needs to be undertaken is something I believe that Petuna was talking to earlier today.
- **Ms FORREST** Yes, but I'm asking you about what your industry believes is necessary to ensure a precautionary approach.
- Ms FRY You need to find out what is there and how the systems are interacting with one another. Once you have your baseline, you can't measure how something is going to respond until you do a little bit of background.
- Ms FORREST That's right. In the case where there's no fish farm activity, what sort of time do you think this monitoring needs to occur over and what level of monitoring needs to occur? Is it just around the lease? In this example, on the map we have Petuna's lease, which is out from Stanley, out from Three Hammock, well off Robbins Island that's the area we're talking about. What I heard Ruben talk about, and I've spoken to him before, is that they're monitoring predominantly around their lease. Some areas they looked at were ruled out for a variety of reasons. In order to have a precautionary approach, what needs to happen to assess potential impacts on the shark nurseries, the octopus fishery, the calamari fishery and the King George whiting, for example. You probably weren't here when you heard some of them. There is rock lobster as well.

I just don't think we're getting an answer from you about how you see the precautionary approach being taken here in light of an expansion.

- Ms FRY The precautionary approach needs to have that baseline monitoring -
- **Ms FORREST** How long does it take to do that?
- **Ms FRY** That's a question for the scientists; it's a question for the local area. How long is a piece of string? One area might require -
- **CHAIR** Maybe one way to come at it is who decides that we have enough baseline monitoring and we have that base we need to then utilise for reference once we have an adaptive management situation at play? Does your organisation, as the peak, have a view as to who decides that there's adequate baseline monitoring or what parameters of that monitoring would be?
- **Ms FRY** I believe the Government, as in the departments, decide that based on their scientists and also expert advice from IMAS and CSIRO -
- **CHAIR** Do you believe that in the recent instances of expansion into new areas, say, for example, Storm Bay, there was an adequate baseline dataset available to underpin that expansion that would then be adaptively managed?

- **Ms FRY** My research tells me that there have been baseline studies done in Storm Bay since the 1980s.
  - **CHAIR** There has been some data collection happening since that time of some things.
- Ms FRY Correct, yes. On the basis of that modelling and consultations, government departments have had an administrative cap placed on that area on the basis of making sure that we have the right amount of science. How long that needs to go for is up to them and the independent scientists.
- **CHAIR** There are different views on whether there was a full suite of baseline data available prior to that expansion. Is it your industry's view that there was a full suite of baseline data available prior to that expansion?
- Ms FRY There certainly was good research done in that area. If the departments, in their wisdom, said that they needed more time and more data, that is something the industry is compliant with.
- **CHAIR** So the industry was comfortable to go ahead with the data suite that was there, even if there were questions in place around the completeness of that dataset as a baseline?
- Ms FRY The initial leases have been granted, but final licences and environmental permits must still be obtained for a number of those leases. Each of those will involve further scrutiny and insight before they are granted.
- **CHAIR** There has actually been no opportunity for members of the public, or other parties affected to have any input into those if they are granted within a two-year period of the marine farm development plan being granted, so there is nobody but government and industry that can have a say in the granting of those licences once the plan is in place if it happens within two years.
- **Ms FRY** I believe you are talking about the marine farm planning process and I believe that is a question for the department to answer.
- **Ms FORREST** Can I get back to the board for a moment? Can you tell me how the board operates in that you've got the three industry representatives and an independent chair? How are decisions made by the board?
- **Ms FRY** Through consensus. We have board meetings. They are informed by research, by board papers, and spoken about at the -
  - Ms FORREST Do you prepare the board papers for that meeting?

Ms FRY - Yes.

Ms FORREST - So if the three industry players all agreed on something that the independent chair didn't, does that prevail? If you went to a vote, what's the process around the governance structure of the board?

Ms FRY - I have only been at one meeting. There are provisions for that to occur. However, in my history, and I've looked at past board papers, instead further information is requested and consensus, rather than going to a vote.

**Ms FORREST** - Are you able to provide the Government's documents to the board?

Ms FRY - I need to take that on notice because I'm not certain if I can, but I will do so if I can.

Ms FORREST - I'm not asking for board minutes, I'm asking for the governance structures.

Ms FRY - No, you are asking for the constitution.

Ms FORREST - Yes.

Ms FRY - If I can take it on notice, I will come back to you if I can.

**CHAIR** - In the TSGA submission you say that under licence conditions, the industry reports regularly and you do not shy away from scrutiny and go above and beyond as an industry. There is a strong appetite, from the submissions we have seen, for better communication and data-sharing with the industry. Given your statement about not shying away from scrutiny and going above and beyond, would you be interested to explore ideas about how to more effectively communicate and share data?

Ms FRY - Absolutely.

- **CHAIR** Okay. Other than the compliance reporting you do and reporting against licence conditions, how does the peak body of the industry test the success of the information, communication and data-sharing that's done with community stakeholders?
- **Ms FRY** In the past that's what the sentiment surveys were often about, and how best to inform, not necessarily what data is available on the portal or what data is available on each of the companies, but it does help the TSGA to inform what we might be able to provide them on our own individual websites or through our social media.
- **CHAIR** That might be an example that you could provide to my earlier question. You did sentiment surveys about communication and data-sharing on your website, did you then implement the results or be informed by the results to change or direct things you put on your website and how you present information?
  - Ms FRY My research shows me that did occur at that time, yes.

**Mr VALENTINE** - If I can ask a question in regard to the wild fishery: do you, as an association, engage particularly with wild caught fishers to understand the problems and issues they have broadly as an industry? I appreciate there might be members who do engage, but do you, as an association, undertake that engagement?

Ms FRY - Yes.

- Mr VALENTINE What has the feedback been in terms of the expansion being considered at the moment? Do you have any comment on that, or are you going to tell me that being there only since January, it is not something you have done?
- Ms FRY I have actually attended a Tasmanian Seafood Industry Council meeting since I started.

Mr VALENTINE - Sorry, Tasmanian?

- **Ms FRY** Seafood Industry Council, the TSIC, they, too, provided a submission. I have attended a meeting in order to let them know who I am. I know the TSGA is working across the industry to address challenges that we have together. Absolutely it is something we do and has been done in the past.
- Mr VALENTINE Obviously, today you would have heard it there is significant concern from the wild caught fishery sector about the level of impact expansion into various areas in the state can have on the wild caught fishery. That is why I ask the question. Sorry, I was not being sarcastic before with 'and you're going to tell me you've only been there since January,' but it is a fact and obviously you may not have had the opportunity. I appreciate that.
  - Ms FRY I have met with them and it is in the spirit of collaboration.
- **CHAIR** We will try a few questions and we will see if it is something you are able to comment on. Your submission talks about -

**TBC** 

... Tasmanian salmonid industry continues to work to reduce the amount of marine debris that enters the environment in which we operate.

In terms of being an industry peak body that works across all companies, or with all of the companies, do you have a way you are working on as an industry to be able to demonstrate you are actually reducing the amount of marine debris entering the environment?

Ms FRY - The TSGA is in the throes of developing a code of practice with industry members on marine debris. We, ourselves, have a target of zero debris and the idea is to stop the debris at its source. We do that at the moment through the code of practice, although it is yet to be ratified, and the operational practices the member companies are now undertaking, for instance, making sure that debris is a part of every daily operational meeting so that it becomes part of the culture we are aiming towards that zero degree.

How we are actually going to measure is part of that code of practice. Because it has not been ratified yet, I am not really in a position to give you details, but I hope to be shortly and would love to provide you with that answer.

**CHAIR** - That is fairly unfortunate thing you cannot actually talk with us about today, how will you measure, how will you know your progress towards the intention of zero tolerance? In fact, the state Government has an intention of zero tolerance, so is something being imposed on you from the outside as well as something the industry is committing to through its voluntary code. At the present time, then, how is it measured?

Ms FRY - At the moment we do have -

- **CHAIR** I do not mean the shore clean-ups.
- Ms FRY the hotline for reporting.
- **CHAIR** Great, can you speak about the hotline and also the app, is that something you will be able to answer questions about?
  - Ms FRY Partially, I hope.
- **CHAIR** Okay, great. Tell me about the hotline how does that function in order to indicate increases, reductions, measurement of debris?
- **Ms FRY** -We have a third party, a contractor, who undertakes the receiving of the phone calls. It is open 24/7. They also have a radio room, which immediately alerts the community to debris, especially if it is large debris.
  - **CHAIR** How is that done?
- **Ms FRY** Through the call radio, I think it is channel 16. All calls are recorded and those are used as reports for us to get a handle on what sort of debris, where it is, if there are any identifying marks. We also have the app.
- **CHAIR** Before we move on to the app, can we stick with the hotline at the moment? If I ring the hotline to say I am walking on the foreshore and there is debris and I am going to report the debris, how then do I know what has happened as a result of my call?
- Ms FRY You can leave your details and we can get back to you or the member companies can get back to you if it is identifiable.
- **CHAIR** Then how is the totality of data collected through that hotline in terms of what was reported, where it was reported and all that made publicly available?
- **Ms FRY** I am not certain of the answer to that question. I know DPIPWE has the portal. I know the companies have their own portals.
- **CHAIR** It appears the only things they report on are the shore clean-ups. I am interested, given that the hotline belongs to TSGA: how do you report on the data that comes through the hotline?
  - Ms FRY I do not believe we are currently reporting on that at the moment.
  - **CHAIR** Then the app?
- **Ms FRY** It is set for the member companies so they know where their debris is or isn't coming from.
- **CHAIR** Do you give them, say, an annual report in terms of what has come through the hotline relating to their company?

- Ms FRY The third party we contract does that.
- Ms FORREST How long has it been in place?
- Ms FRY I am not certain. I will have to get back to you on that question, I am sorry.
- **CHAIR** If you report to each company, would you be able to make a collective report available in some way that indicates the collection of data from the hotline over an annual period?
- **Ms FRY** I hope so but I will have to investigate a little. I am not as familiar as I could be with exactly how the reporting happens.
- **CHAIR** I would like to know what reporting happens and what reporting is possible on the data you collect, both in a cumulative total way and in a location by location way, or region by region and also company by company, and if it is something you put in the public domain anywhere and, if not, why not?
  - Ms FRY That is down in *Hansard* now, so I will be able to get that.
- **CHAIR** So back to the app, what process informed the development of the app? Did you interact with community stakeholders or industry stakeholders?
  - Ms FRY I would have to look back at that and take the question on notice.
- **CHAIR** In terms of the app, where do you report based on the information collected through the app?
  - **Ms FRY** I believe, but I would need to check this.
  - **CHAIR** The same question then around the hotline would apply around the app.
  - Ms FRY Correct.
- **CHAIR** For both of them, how do you engage in public education about their existence and promote their use? What does that look like?
- Ms FRY At the moment the website and the social media, whilst we have been going through a period of transition, does not have as much information as they will in the future, but it will have that information in the future.
- **CHAIR** Is it something you will work with government on in terms of public education around the hotline and the app? What do you see as government's role?
- **Ms FRY** If government approached me or vice versa, I do not see a reason we would not work with them. They may have their own telephone number when it comes to the general rubbish as opposed to marine debris. It is something I would like to be able to access to find out information from what they are getting also. If they were willing to collaborate, I would be as well.
- **CHAIR** Does TSGA have a view on whether it is more appropriately an industry role to operate those reporting mechanisms compared to, say, an independent role or a government role to

operate those mechanisms? Given the sensitivity of the public using, for example, the app, you have to give contact details to sign in and log in, which could be a barrier to people using that if it is operated by industry because you are giving your details to industry. Does your organisation have a view on who best should operate those mechanisms?

- Ms FRY Well, we are operating those mechanisms.
- **CHAIR** Sure, but do you think that's the most appropriate spot for operating those mechanisms, compared to, say, government or independent?
  - Ms FRY Government has its own processes and I think the two should work together.
- **CHAIR** I'm asking you where you believe it best fits. I think it is potentially laudable that the industry has created those things in the absence of effective ones elsewhere, so I'm not putting this to you to say it's wrong; I'm just saying, in terms of where it might best be operated, does the industry have a view of where it might most appropriately be operated?
- Ms FRY I would have to check with my industry members on that; I have not raised that question with them.
- **Mr VALENTINE** As a question further along that line, do you as an association have any interaction with MAST, the government organisation that deals with these sorts of things in terms of alerting fishermen and recreational users to rubbish and debris?
  - Ms FRY Our third party, our contracting service, does that.
  - Mr VALENTINE Contracting service?
  - Ms FRY The people who are actually staffing the 1300 DEBRIS number.
- **CHAIR** In your submission in terms of the marine debris areas, you talked about being bound by legal obligations and having an industry code of practice as you work towards zero instances of marine debris originating from any fish farming operations. It implies that your industry code of practice is already there, but we've established today that it's not yet there; is that right?
  - Ms FRY Correct. It has not been formally ratified by the companies yet.
- **CHAIR** In terms of when it is, how will you manage compliance, monitor or report on compliance with that industry code?
  - **Ms FRY** That is something we're working on.
- **CHAIR** Once you implement that code, will it be something that an external party can go and see what the code is, how it is applied, how it is monitored and how it is enforced?
- **Ms FRY** That would be my intention, but all those things you're asking about are yet to be ratified.
- **CHAIR** Thank you for your time. I know it's been somewhat awkward with things that you're able to comment on more fully than others. We will be following up both with the things you've

taken on notice and then potentially with a further discussion with a representation that can answer our questions more fully perhaps included in that as well.

Ms FRY - Thank you.

THE WITNESS WITHDREW.