THE GOVERNMENT ADMINISTRATION COMMITTEE A SUBCOMMITTEE INQUIRY INTO FINFISHING FARMING IN TASMANIA MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART ON WEDNESDAY 9 SEPTEMBER 2020.

<u>Dr Patrick Hone</u>, managing director, <u>Mr Peter Horvat</u>, <u>Mr Joshua</u> <u>FIELDING</u> AND <u>Dr HEIDI MUMME</u>, FISHERIES RESEARCH DEVELOPMENT

CORPORATION) WERE CALLED VIA WEBEX AND WERE EXAMINED.

CHAIR (Ms Webb) - I am going to run through a couple of formalities at the beginning to make sure you are aware that this is a public hearing. The evidence taken in this hearing is protected by parliamentary privilege, but you might not be afforded that privilege once outside the hearing.

We will be recording the session today and a *Hansard* version will be available and put on the website once it is ready. We are also broadcasting the hearing today. If, during the hearing, there are matters you feel are you would like to have heard in camera, you can make that request of the committee, and we will consider the request at that time.

The way we would normally proceed is to provide you with an opportunity to introduce yourselves and make an opening statement if you would like to, and then we would proceed with some questions based on your submission and your statement.

Is that clear and does that sound okay from your end?

Dr HONE - Very clear, and thank you very much, Chair.

CHAIR - Would you like to begin with an opening statement, and introduce yourselves for us, thank you.

Dr HONE - My name is Dr Patrick Hone, Managing Director of the Fisheries Research Development Corporation.

Mr HORVAT - My name is Peter Horvat, General Manager of Communications, Marketing and Trade.

Mr FIELDING - I am Josh Fielding, and I am the senior research portfolio manager.

Dr MUMME - I am Heidi Mumme, and I am the project manager for the Storm Bay projects.

Dr HONE - Are you happy with the introductions?

CHAIR - Thank you very much.

Dr HONE - We would like to make an opening statement and we are happy to provide this straight afterwards or afterwards. You will recognise many of these words because they come straight from my submission, so with that I will start.

The Fisheries Research and Development Corporation - FRDC - is a federal government corporation. Our role is to plan and invest in fisheries research and development and extension activities in Australia. We are a statutory corporation within the Australian Government's Agriculture, Water and the Environment portfolio. We are accountable to the Parliament of Australia through the Minister for Agriculture, Water and the Environment, and we are just one of 15 research and development corporations across various primary industries and are specifically established to be independent of government.

We are solely owned by the federal government and therefore accountable to the federal government.

The FRDC's role, as I have mentioned, is to plan research and development. We are a co-funded partnership where the Australian Government contributes funds to the FRDC under an agreed formula that can only be changed by legislation. As a result of that money that comes in, we can get that matched by industry contributions up to a cap. Then we deploy those investments using our board who makes the decisions on where we are going to invest against various research activities in Australia. When we talk about Australia, we obviously have a remit from somewhere in the Indian Ocean to the Pacific Ocean to the Antarctic, to somewhere in the middle of Australia, so it's a very broad remit. Anywhere there is a biological activity in the water, FRDC will be doing research on it.

Importantly, because the predominance of our research is in the natural resource management area, our main beneficiary of our research is the Australians who are, on behalf of our governments, the custodians of the environment that we work in. The Australian Government works to make sure the community is the beneficiary of the types of research we are doing.

As such, our investment in research and development obviously is mainly around that aquatic resource and fisheries management. It really focuses on the most important thing, which is healthy habitats or what is often called sustainability, then looking at the other dimensions around the economics, the productivity and social components.

We work with three main sectors of the industry, as we call it. There is the commercial sector, which includes both the wild catch and aquaculture, and recreational and Indigenous, and we try to ensure we balance the view of everyone in those stakeholder groups when we are looking at our R&D.

I must make a particular mention of the Indigenous stakeholders whom we work with, the first people of Australia. They have a very strong insight into natural resource management, so understanding their needs and understanding their aspirations about how we use aquatic environments have been very critical to us.

What is our role with regard to salmon farming? We have been investing salmon research since the inception of the Fisheries Research and Development Corporation Regulations 1991.

The history of that research stands some 260 research projects. A significant amount money - some \$60 million of funds by us, and a significant quantum of funds by our partners.

We have provided a list in our submissions so you can see it. It is also all available on our website. The research has spanned as we have evolved through time. Numerous types of functional research for the industry and for the industries' regulators and for the community.

That expands things like aquatic [inaudible] health, biosecurity, feed development, vaccine development, management of the environment, management of diseases, capacity building, community work, understanding environmental impacts, and, obviously, research to establish the science to inform monitoring programs.

As we evolve through time, the [inaudible] actual platform was one of granting. We used to be mainly a granting body, where we would just grant money. We now talk very much about being an investor, where we invest for applied outcomes for stakeholders. That is very important to us, because it implies there is an idea about the endpoint of research for all the decision-making.

For example, if they are managing fish stock and they want to know what sort of catch it would be, that is an endpoint, as we know the sorts of research that would inform this.

At the moment, our partnership with the Atlantic salmon industry in Tasmania is through the Tasmanian Salmon Growers Association, and the three companies. We have effectively an MOU with those groups and we call it an industry partnership agreement that sets out the roles and responsibilities between all parties in how we actually undertake to research in atlantic salmon. It clearly identifies the fact as part of that research there are many and numerous stakeholders who are interested in research. We have to have high regard for all of the stakeholders in applying priorities and making sure we are investing in the needs of the people, by looking for science to inform decision-making.

In terms of the funding itself. Obviously, with the salmon industry being such a large industry, and because our [inaudible] formula [inaudible] is based on the gross value of production for a sector, there are significant funds we can obtain from the federal government to support atlantic salmon research. It is quite a large area.

I will make a couple of closing remarks before you ask questions.

First of all, FDRC prides itself very much on being independent of government, independent of industry and independent of all stakeholders, and delivering sites to inform decision-making.

We have no role in the decision-making, and as such, we like to stay impartial to the decision-making. It is very important that our science is fit for purpose, so people can make decisions based on evidence. That's very important to us.

In developing our science, it is very important that we're transparent in all the processes we undertake, to make sure the science we undertake meets the ethics and morality needs of society in terms of good science. We are also very aware that because the science we undertake is something that is looking at a public resource, it needs to be even of a higher level of accountability to the public and to the investors we work with. That is very important to us.

Last, we are very fortunate in Tasmania to work with some fantastic partners. Our science is only as good as the science providers we work with. In Tasmania we are very

fortunate to have the Institute of Marine and Antarctic Studies at the University of Tasmania, and the CSIRO marine labs.

That partnership between IMAS, CSIRO and the FRDC has been an enduring one. For more than 25 years, I think we've been incredibly fortunate with the quality of science, and the integrity with which those scientists undertake their work.

These have been my opening remarks. Thank you.

- **CHAIR** Thank you, Patrick, we appreciate that. Did you want to make any particular mention perhaps Heidi of the specific projects in operation in Tasmania at the moment before we delve into questions?
- **Dr HONE** We have a lot of projects in Tasmania, from flathead through to work that we're doing in Macquarie Harbour and Storm Bay. I think we've attached the list.
- **CHAIR** You have. I just wondered whether you wanted to highlight the main salmon-related projects operating in the state? You don't need to I just thought you might like to, before we begin asking questions.
- **Ms FORREST** If you could focus on the salmon as opposed to flathead and other fish species.
- **Dr HONE** I think we would break that into three components. First of all, the research we do around aquatic animal health, biosecurity, prevention and disease management is a highlight particularly the work we're doing with the centre of vaccine development in northern Tasmania. Obviously, disease and biosecurity is really important.

Then there is a body of research that we're doing on Macquarie Harbour, principally with Jeff Ross and the team at IMAS, trying to provide improved information to inform the management of that resource for salmon farming. That's been looking - as you've seen from the submissions from IMAS and CSIRO - at trying to get a better understanding about that unique habitat, and how the EPA and DPIPWE can manage that resource using that improved knowledge around the models and the data we've been collecting there.

The other big piece of work we've been doing for salmon is our Storm Bay work, over nearly a decade. It came through from work we originally did around the Derwent-informed project, looking at the socio-economic and other considerations about the use of the resource in that area, and the work that came out of the Huon Estuary Program.

Storm Bay is now probably our single largest investment in Tasmania in a particular area.

It has three main elements. One is the biogeochemical modelling, which is also underpinned by another bit being done by CSIRO, which is underpinned by another piece of work, which is the decision-tool system that has been developed. Then there is a platform underneath that, which is the Jeff Ross/IMAS project, which is trying to understand the unique biological and chemical characteristics of the water - actually, the baseline data across a very large area.

They would be the main areas: Macquarie and Storm Bay biosecurity.

Ms FORREST - Can I just ask about the Macquarie Harbour research you are doing? When you said you are looking at baseline data, you are talking about the baseline now, because we know the harbour is in a pretty bad way.

To get baseline now, because there are all these other inputs - where the King River comes in from the mine via the Queen, the Hydro operations further up the Gordon - that impact on the harbour. When you are looking at the baseline data in the harbour, what are you actually talking about?

Dr HONE -I am not sure if I use the word baseline; that is incorrect. The research we have been looking at is subsequent to the development of the recent expansion in Macquarie Harbour, and the research was truly trying to understand why they were seeing the degree of impact in that original work that was done, not by the FRDC.

The work we are now doing is looking at trying to understand - as you said, in quite a disturbed environment; it was never a perfect environment to start with - exactly how all the different components of that environment fit together, improving the natural part of the system through the flushing in the whole bay itself, but also respecting the rivers, and the previous history of the sedimentation.

You are quite right, there is no genuine free salmon farming baseline so to speak, but there is the research to try now to understand the impact of salmon farming on Macquarie Harbour.

CHAIR - Just to jump in and clarify, I think you used the term baseline in relation to the Storm Bay project?

Dr HONE - Correct.

Mr VALENTINE - Patrick, could you provide the project numbers for the Tasmanian projects? You do not have to do it right now, but if we could have that list, that would be good.

Dr HONE - They are all in the submission, but I'm more than happy to do that.

Mr VALENTINE - They're not specifically underlined, are they? Quite a number of the projects in the submission are Australia-wide, so I am not sure which ones are specific to Tasmania.

Dr HONE - I will send you specific ones for the Macquarie Harbour and for Storm Bay, and the specific ones for the biosecurity health projects.

Mr VALENTINE - Thank you, I would appreciate that.

Ms FORREST - Is there any work being done in Okehampton Bay, or any other areas where there are marine farming activities?

Mr FIELDING - Yes, that is also contained in that group of work, but it is separate, so we also do projects specific to each company, where either the major beneficiary - we are doing work in Okehampton Bay on the development of a [hydronomic?] [inaudible] model

specifically with Tassal. We also funded some of the preliminary multitrophic aquaculture, the seaweed-based work being done there as well.

Ms FORREST - Are you doing any work up around the north-west tip of Tasmania, where Petuna is looking at potentially putting in a fish farm?

Mr FIELDING - The environmental data collection work is being done by the companies, but we have a project looking at the social elements of development in that area. That project is being funded through our partnership with Petuna and Tassal.

Ms FORREST - Why is Tassal involved?

Mr FIELDING - My understanding is that Tassal showed initial interest in potentially that area as well. If you look through to its investigations in King Island -

Ms FORREST - Yes, Tassal is interested in King Island. As I understood it, Petuna was the only one looking in the north-west tip around Robbins Island.

Mr FIELDING - Yes, [inaudible] the entire north-west region, including King Island.

Ms FORREST - Your social impact assessment includes King Island, as well as north-west Tasmania?

Mr FIELDING - Yes.

Mr VALENTINE - Patrick, do you have anything happening in terms of research going on at West of Wedge?

Dr HONE - That's all included in the Storm Bay program.

Mr VALENTINE - It goes that far?

Dr HONE - Yes.

CHAIR - Can I take you to a broader question. You mentioned in your opening remarks about the community being the beneficiary of your work. In the submission you've made reference to social benefits being key, community is one of the five theme areas that you have for your work, and you talk a lot about stakeholders. Can you talk a little bit about how the community is a stakeholder in the work that's done by the corporation, both in the planning and the assessment of which projects will be done and then in the delivery of the projects?

Dr HONE - That is a really good question. When you work in the natural resource management area, it is very important that you always consider how you are going to engage the community in these projects. We're very fortunate at UTAS to have the Centre for Social Studies that is led -

CHAIR - Could you repeat that because it broke up a little in the transmission?

Dr HONE - We have a group at the University of Tasmania and the IMAS group that run a centre for social studies around the use of natural resource from a social perspective.

Emily Ogier is one of the chief scientists involved in that area and she runs the coordinating Human Dimensions Research Subprogram for us. They give us advice on how we can ensure we are building in community stakeholder views into our science.

When we actually then look at our science, we go out into our various structures to make sure that recreational community groups can put advice into the priority setting process. Then when we actually undertake the research, it is really important to build in appropriate community groups that are relevant to that site. A good example would be the Storm Bay research. We have a steering committee for that. We have the community group for the Derwent Estuary as part of that steering committee.

It is not always possible to get every community group in the steering committees, but where possible, where we can, we do try to make sure they are engaged in the process.

CHAIR - In terms of the community in some sense being able to feed through into the identification of a priority area of research or the selection of a particular piece of research over another, how does that look in your process? Is that possible?

Dr HONE - In Tasmania we have an open call. Anybody can submit an application. It is just an open, competitive call for ideas. Anybody can put a project in. In terms of the process to make sure that those ideas are being assessed, we have the Tasmanian Research Advisory Committee, which has a broad group of stakeholders in it, including government and various industry groups - including the Tasmanian Seafood Industry Council and TARFish - and recreational groups to make sure that there is a broad view of what the priorities are.

It is fair to say that it is a balancing act. You will never, ever get 100 per cent agreement on a project. That is why the FRDC board becomes very important. If we were to just invest in projects where there was 100 per cent consensus, many of the more contentious science that we do would never get funded. It is really important that while we hear the views of everyone, we still have to do the science that is needed to make decision-making happen.

CHAIR - It sounds like you have the involvement of recreational fishers; you mentioned the Derwent Estuary Program, which is a science-based program. Is there other broader community representation on any of those project advisory groups or environmental groups being represented outside of recreational fishers, outside of, say, the Derwent Estuary Program.

Mr FIELDING - I will take that question. We do regularly have steering committees for projects. A number of our salmon projects in Tasmania have steering committees currently. Groups like WWF Australia are represented on those. At times, there are different community groups depending regionally where it is. Different industry groups, as Patrick touched on. We have another project, which is wrapping up, that has the Tasmanian Abalone Council on it as well as rock lobster and other fishers et cetera.

CHAIR - All fishing related. When you send us through a list of the Tasmanian projects, it will be interesting for us to see the steering groups associated with those projects and which stakeholders are directly involved. Is that possible?

Mr FIELDING - Yes, it should be. There is always the opportunity for stakeholders to contact us directly and over the many years they have done that - for example, *Four Corners*

ringing up for information. There has always the public access viewpoint so that people can raise concerns directly with us.

Mr VALENTINE - You were saying that you advertise for interest. How do you that? Is that just through newspapers or is it through social media? Can you give us an understanding about how the greater public is made aware or at least have the opportunity to put forward research projects or how they are made?

Dr HONE - That is a good question, Rob. No, we do not advertise in newspapers but yes, we use a mixture of social media. We obviously have a website of various things. People can register for that to get those calls et cetera. It obviously goes to people who historically have applied for funding for us and it goes to all those people, whether community groups, universities or governments et cetera, so it goes to all of those. Obviously, it does not just go to people in Tasmania. We have, for example, research in Tasmania that is being done by the University of Melbourne, so it goes to a broad group of people around the country.

We get a significant amount of interest in those application calls. It is probably fair to say that the most clicked on things we send out are always the things about funding opportunities. It is obviously what people are looking for.

Mr VALENTINE - I can appreciate that. I am interested in how deeply that message gets out into the general community. Obviously, you can appreciate that down here many people in the community are very well qualified and put their mind to these sorts of things, but they may never see something like that and may never get the opportunity to apply or put forward an idea. That is the reason I asked that question.

Back to something mentioned in your overview: you talked about remaining impartial of the decision-making. Does the board actually select each projects that you then, as the science research professionals, undertake? Is that the way it works? Can you give us that understanding?

Dr HONE - I used independent or impartial in context. One is independent of the decision of the end user of the research, so that is how we do some research, and DPIPWE with the decision-maker, so we are independent of that.

In terms of impartiality to the actual projects, the staff and I are very much part of the assessment of applications. We obviously get advice from stakeholders. We get independent assessments done, which is the peer review process of applications. All that advice feeds up to recommendations through me to the board.

Mr VALENTINE - Thank you for that. What is the membership of the board and how are members chosen under the act? Do you have an understanding of that, just to give us a broad understanding of the organisation?

Ms FORREST - And the skill set.

Mr VALENTINE - And the skill set - whatever is stipulated under the act?

Dr HONE - Our parent legislation is the Primary Industries Research and Development Act 1989, modified in 2013. The ultimate appointment of our board is by the minister. The

minister sets up a presiding member that he or she appoints to then run the process of selection of our board. The selection of our board is independent of us, the organisation. It is done independently.

The preceding member appoints a selection committee from stakeholders and seeks their advice on the independent types of people that might be on that selection committee. When they are looking to appoint the board, the PIRD Act sets out a variety of criteria they are looking for - expertise and natural resource management, research, social, economic, government decision-making, community science, social science. Quite large. We can send you the set of criteria.

The current board is on our website. It is a very broad remit of skill sets. We have a chair is appointed by a minister and not by that selection committee, independent of that process. Our current chair is John Williams, a former member of federal parliament.

The deputy chair is someone you probably know very well, Professor Colin Buxton, a former University of Tasmania scientist. We then have Doctor Kate Brooks, a social scientist from Victoria. Kate is more than just a social scientist - I think that is a bit mean to Kate. Kate has an incredible breadth of work in natural resource management looking at how to manage resources and behaviour and understanding those systems.

We have a farmer from out in the Riverland, Mark King. We have Katy from Western Australia, who is a specialist in communications and systems knowledge; she is a former chair of one of the senior committees over there, and she has a very broad skill set. I could go through all the rest.

CHAIR - That is fine. Patrick, we will get those in writing from your website or from you directly, so we can move on to other questions from your submission, if that is all right.

Dr HONE - Yes.

Mr FIELDING - I will send the annual report, which has biographies of all of them, through to you.

Mr VALENTINE - You mentioned Indigenous stakeholders in your projects. With respect to the Tasmanian projects, do you have any Tasmanian Aboriginal stakeholders who provide input.

Dr HONE - We have the Indigenous Reference Group. It is very difficult to get advisory structures for Indigenous people, because they understand that an individual cannot represent a community. Our Indigenous Reference Group has members from the Indigenous people all around the country.

Mr VALENTINE - Including Tasmania?

Dr HONE - Yes. Bryan Denny is the current member for Tasmania. We send all applications to that group and we encourage everyone to consult with that group about their projects. We have due regard for them in all our work. We do, wherever possible, make sure they are involved in everything. It is interesting that the Indigenous Reference Group and the National Aquaculture Council, the national peak body for aquaculture, recently got together to

talk about how they could build their partnership. There is a strong link between those Indigenous groups and the other groups that work with them.

CHAIR - On page 6 of your submission, under 'Industry Partnership Agreement', you describe that when an industry is of a certain size, it can enter into industry partnership agreements with you, as you have described the Tasmanian salmon industry has. So I can better understand it, can you clarify the following -

Under FRDC legislation there is a requirement to return the money contributed by the sector ... to the sector on a rolling five year average ...

Can you explain what that means? I saw your diagram, which explains that it is a co-funded model from the sector and the Government matches the funding; what is the requirement to return the money contributed by the sector?

Dr HONE - I am looking at page 6 and I cannot see -

CHAIR - It is in the paragraph under the heading, 'Industry Partnership Agreement', about halfway through that paragraph. The sentence begins, 'Under FRDC legislation ...'.

Dr HONE - Our legislation requires we have no levies so it is a voluntary contribution. The contribution has to come to us via the state Government. An industry group will voluntarily provide funds through DPIPWE. It comes to us, and once it comes to us, it goes to the federal department, and that then triggers a matching of that dollar.

The legislation requires that on a five-year average we have to return the dollar, not the matching component, back to the states. That is the only requirement under the act.

CHAIR - In terms of return, what does that mean? Do you actually refund the money or do you have to deliver the value of that contribution back through the research?

Dr HONE - We have to spend that equivalent money in research that benefits that jurisdiction. It does not actually have to be in that jurisdiction, so it could be the research was done it Melbourne, but the benefit, that one-dollar value benefit, comes back to Tasmania.

The most important thing is to actually talk about investment partnerships. Our whole goal is to ensure we are getting the best value and efficiency of our dollar in terms of where we leverage each other. So, obviously every time [inaudible] or other groups, industry itself and we ourselves try to build up. It is not just the legislative requirement to return the dollar, that is a very simple thing - there is no doubt that efficacy returns the dollar - but the most important thing is the leverage for the total pool of investment dollar that then goes back to a jurisdiction. In that regard, we look at the contributions we get in terms of income or cash contributions from our research partners, through CSIRO and the Institute for Marine and Antarctic Studies. We could get additional dollars invested through the state Government - for example, DPIPWE would put some additional dollars if it wants additional research done. Quite a pool of funds is generated by that one dollar.

Mr HORVAT - To highlight, in the annual report we actually document that. In this coming annual report, which has not yet been to the minister and been tabled, later in the year, the contribution from Tasmania was about \$2.4 million; and over that time, over the five years,

we have returned almost \$8.4 million to Tasmania in final benefit - that is, about 2.37 times the jurisdiction's contribution has been returned to the state. That is in the annual report; I can also send you copies of previous annual reports.

Mr VALENTINE - Under 'Industry Partnership Agreement', third dot point down, your submission reads -

Be able to show a balance in the RD&E investment across projects with; industry benefit, public good outcomes, address people development ...

I have no doubt many benefits comie out of this research for industry. I have read through the projects, some of which are very interesting projects; I certainly found that of interest to read.

I am looking at the public good outcomes: How do you determine what the public good is? How do you measure those outcomes? Do you measure those outcomes?

Dr HONE - The balance debate is a really important one. We do not want to invest all our dollars just in research that underpins profit. That could be a good thing, but obviously we have to do research in terms of environmental and social considerations. You mentioned Indigenous considerations. We have a very rigorous debate with all our stakeholders to make sure we have a balanced portfolio.

In terms of the measurement, that is a very interesting question. We do a cost analysis where we use traditional economic considerations of how you work out what the benefit is. It is very difficult to measure the non-financial value of our research, but we work on willingness to pay and trying to understand to what degree you would value maintaining aquatic environments. We build those values into our benefit analysis; again, this is all in our annual report.

We continue to evolve those studies so we get better, but it is probably fair to say many of those components are more around qualitative reflections by stakeholders rather than being able to put a standard dollar against it. You have to use a combination of qualitative valuation and economic considerations when you do that assessment.

Mr VALENTINE - Do you ever undertake public surveys or local public surveys in the vicinity of fish farms? Is that part of the process of working out what the outcomes are, the delivery of outputs and how that they have impacted from the community side?

Dr HONE - We have done social studies but not social studies looking at the quantitative impact of the science. We do surveys of the public on general public views on fishing and aquaculture and [inaudible]. They are not specific to Tasmania. We have done socio-economic surveys related to salmon farming in Tasmania and some of those projects are listed in the list. We have done projects more generic to Tasmania, but we have not done specific post-project surveys of community groups.

Mr HORVAT - It is important to note that of its priorities, priority one of the last R&B plan was that the fishing and aquaculture industry is seen to be sustainable and acknowledged

to do so by the public. As part of your question on surveys, we ran an annualised survey of community perceptions, and over a five-year period the perception of the fishing and aquaculture actually increased 10 per cent.

Interestingly, we also break it down into four subcategories - fishing, aquaculture, recreational and Indigenous. By far the highest rating of sustainability by the community, and this is a stratified sample across all of Australia, aquaculture was deemed to be the most sustainable by order of the magnitude, almost twice as high. When you compare it to other primary production sectors, such as cattle and eggs, for which we ask the same questions, aquaculture still appears to be twice as sustainable as other primary industries.

CHAIR - To clarify, that is not a Tasmania-based survey; this is a national survey you have done on those attitudes?

Mr HORVAT - Yes, we can give you a breakdown by jurisdiction.

CHAIR - It would be very interesting for us to see a breakdown for Tasmania. Can you clarify which five-year period that was done across?

Mr HORVAT - The last five years, but prior to that we had also run other community session surveys dating back to 2002 when the Bureau of Rural Sciences, which is now part of ABARES, undertook some national studies. We could provide you with probably five or six reports and I can pull Tasmania-specific data for that.

Mr VALENTINE - Given you also look at industry benefit, what sort of feedback mechanism do you have in terms of how industry itself has valued a particular project. Does it provide specific feedback - 'You've hit the mark', 'No you haven't', 'This has been an unsuccessful project', or 'It's not significant?'. What sort of mechanisms are in place to make sure industry is getting value for its money?

Dr HONE - That's a very good question. In my opening remarks, I talked about the fact that our money's voluntary. You live and die by whether you're actually delivering value to the Tasmanian Government, the industries in Tasmania, the community. If they don't think your past research is good, you're not going to get your future dollar. The fact that we currently run a matching component, as I said, where we can match up to account, we're currently fully matched in Tasmania by 112 per cent - so they're actually giving us more money than we can actually match in our government formula, and that's all on a voluntary basis.

Our success is that if people want to invest in the next project, if they didn't think the previous research was successful in meeting their needs, they wouldn't invest in the next projects.

Mr HORVAT - In addition to that, we also run stakeholder surveys with industry groups, and stratify that into the big companies as well as grassroots fishers. You can appreciate that not all fishing companies are the same size and scale, so we think it's important to get both the little guys' view and the big guys' view. We run that, stratify it, every 18 months to two years.

I will note, though, having been on some boats, if you're investing in research that the industry doesn't like, they will tell you, and they will tell you very, very squarely what you're

doing is good or bad. They're not shy in coming forward with their views about the value of a piece of research.

Mr VALENTINE - I can appreciate that. I just wondered how collectively research is evaluated as being useful or otherwise. It mightn't be useful for one, but it might be very useful for another.

Ms FORREST - And there could be competing interests.

Mr VALENTINE - Yes, either economically or otherwise.

CHAIR - I'm mindful that we've come to the end of our available time. I have some other questions I could flag with you now, which we could put in writing to get a later response.

On page 5 of your submission you allude to some community discussion in Tasmania around this industry, and talk about the credibility of the research you do, and that you're prepared to defend that in terms of the checks and balances - the governance that's in place around it - that ensures the investment is independent and addresses the priorities of the stakeholders. I know you have alluded to some of those matters around independence already.

Did you want to put some more detail on the record about what checks and balances you have, in a governance sense, to maintain that independence?

Dr HONE - We have our Fishery Science Guidelines, which are on our website, that we're very strong on. We're also an ISO-certified organisation. We're very much like a lot of science organisations that have a strong history of understanding the importance of peer review when assessing what we do.

To us, it's incredibly important that our science has credibility behind a strong science platform, from hypothesis testing through to the methods and assumptions, how it's been reported and analysed, and then the independence of that report's assessment prior to its use by end users.

Much of our research is published in peer reviews, but you'd be aware that a lot of our reports are the so-called 'grey literature', and we're very aware that grey literature also needs a strong science framework to make sure it has the credibility behind it.

That is why, when that research comes to us as a draft report, we put in place a significant structural process to make sure that research gets the appropriate peer review prior to being published.

Mr VALENTINE - Under 'Any other relevant matters' on page 8 of the submission, you say -

The FRDC is working differently on these projects in an effort to communicate results and outputs ...

Then you talk about integrating -

with the work the Tasmanian Government is doing with the Institute for Marine and Antarctic Studies to develop a data portal

Is that data portal going to be publicly accessible once this is all done? Will members of the public be able to access a 'warts and all' data portal?

- Mr FIELDING Yes, the intention is that it will be. We make all our research standards, including the data, publicly available. You can appreciate that at times there may be elements of data collected within projects that are commercial-in-confidence or private. In those instances, that data won't be made available but, yes, the intention is that the data from these projects will be made publicly available. We hope we will be able to integrate with some of the other things that are going on, such as the data portal, so that you are one-stop shop, for want of a better term so there are not little pieces sitting all over the place. Those elements talk to each other.
- **CHAIR** To clarify, the portal referred to in your submission, is that the portal referred to in the Sustainable Industry Growth Plan, which was originally posited as being developed and hosted by IMAS, but which is now being hosted by DPIPWE?
- **Mr FIELDING** Yes, it is that one. That process is all external to the FRDC but yes, in our view, it is another piece of publicly available information and data, and anything we do should, where possible, show relevance and link to those other pieces.
- **CHAIR** Currently, that portal is operating in some fashion, or are you already making contributions to that portal and the data available through it?
- **Mr FIELDING** We haven't at this stage, so those projects are all still active and ongoing. Patrick just spoke about the kind of peer review, the scientific process, we put around them. Until we have gone through those processes, we won't make that data available until it's accurate to the best of our ability.
- **Ms FORREST** We have had a fair bit of discussion around the expansion into Storm Bay; it was mentioned that you are doing some baseline monitoring work there. Can you tell us what the FRDC's involvement is in that baseline monitoring, and any other relevant research being done in Storm Bay at the moment?
- **Dr HONE** When they alluded to Storm Bay, obviously there is a history of other projects. I mentioned the 'informed' project as well, which was looking at inputs into Storm Bay and some of the components of Storm Bay. The main project looking at the ecological processes in Storm Bay at the moment is the one run by IMAS and led by Jeff Ross, which involves a significant amount of sampling across a whole range of habitats within the Storm Bay area.

Joshua, do you want to make any other comments about that?

- **Mr FIELDING** All those projects are building on previous research, and it will all be provided in a list of projects that will be sent through.
- **CHAIR** I will just ask you a little more about that. Some submissions and material presented this committee have raised concerns about the incomplete nature of the scientific data and the baseline information available when decisions were being made about expansion into Storm Bay. It has been asserted that sufficient data and baseline information was not available at that time.

You alluded to the fact that you are building on previous work so there were bits of available information.

Do you have a view as to the completeness of the information that was there at an earlier stage, before FRDC involvement, and whether what you are delivering now will be a comprehensive baseline picture that perhaps was not there at that earlier stage?

Dr HONE - I just need to differentiate Macquarie Harbour from Storm Bay.

CHAIR - Sorry, I am talking about Storm Bay.

Dr HONE - Historically a significant body of research has been done in Storm Bay. However, other platforms also sit around there, such as the Integrated Marine Observing System. A series of oceanographic research has been happening there. For various reasons we have been studying ocean currents in that area for some time - the change in currents because of climate change. There is a significant body of research being done off that eastern coast of Tasmania, of which Storm Bay is one component; it is imbedded in it. Previously we did a lot of work on the models and the size we can break them down to in terms of their dimensions and boundary conditions. A lot work has been done in those areas.

Is the science complete? Is there a complete picture? Of course, the answer is no. We will always work with incomplete information. Our job is to try to provide the most important pieces of science that can inform decision-making, but everyone will be aware that the precautionary principle will get a [inaudible] in the decision-making. We try to focus on the most important parts of that science and making sure it as complete as possible but the [inaudible] of marine systems means that what we study today will not be the same system we study in 10 years time.

Mr VALENTINE - With regard to the study going on with Storm Bay, are you looking only at marine-based research or are you looking at general and environmental research in terms of noise levels and all those sorts of things?

Dr HONE - Yes, we can send you the parameters we are studying, but we are not looking at noise, we are not looking at other attributes - it is just looking at one component to inform the biogeochemical model - but we can give you those parameters, if you would like.

Mr VALENTINE - Are they the biogeochemical studies that took two years to run? Is that right?

Dr HONE - Roughly, two years, yes.

Mr VALENTINE - Thank you.

Dr HONE - Rob, for your information we are going to provide a website where people can actually access the graphical user interface for some of those models so they can actually explore the models themselves. That will be coming out, we are hoping, relatively soon.

Mr VALENTINE - Thank you very much.

CHAIR - Just one more go at clarifying - it might be helpful for us - this concept of baseline information and the sufficient baseline information on which to make decisions. Acknowledging your role is not decision-making, it is to provide information to feed into that. When we as a committee, for example, hear assertions that there is not sufficient baseline information, or there was not at a certain time and there needed to be more, what is your suggestion for us what to interpret when we are making a judgment or trying to understand whether there was sufficient information or not? Is there some generally agreed way it would be decided - yes, there is sufficient information on which to make this decision about this, say, expansion or would that always be situational and relevant to a risk appetite?

Dr HONE - It is a really good question, Meg. I sit on another committee called the National Marine Science Committee and we have a subcommittee looking at baseline research from the marine environment from the Great Barrier Reef to everywhere. We have a problem in Australia about collecting baseline data, because by nature people do not like to collect baseline data because it is not seen as research. It is not publishable, so it is harder to get funding to do baseline research; that is why things like the Integrated Marine Observing System is so important.

Noting that baseline is really difficult to get investment, when we come into an area like Storm Bay, we do a lot of work sitting down with the stakeholders, the government and the community to try to understand which key components of the baseline will be critical to decision-making. This will come down to a cost trade-off - at some point a decision is will have to be made in a cost trade-off situation where we just cannot afford to collect all the data people want. We have to try to focus on key critical biological processes and the data to inform them.

That is where scientists will come into their own and will give us information about the key parts of the biological processes systems we are studying and which bits of the data they think are most important, particularly when we talk about what is called a simulated processivity of the system to accept a particular impact. For example, if you are putting nitrogen into a system: What is the assimilation system? What part of the system do we need the baseline to understand that, not just in the near field but in the broad field, not just the local, but the cumulative impact beyond that environment? They will give us the key components we need to collect in that data. The FRDC probably funds significant amount of that baseline research around the country for this very reason.

Mr HORVAT - A simple way to summarise it is that we are looking for the canary in the coalmine. What are these single bits of information underpinning the model you give to policymakers and regulators that provide enough information to monitor, track and make informed decisions?

Ms FORREST - Do we know what the canary looks like then or are we still looking for it?

Dr HONE - I would say that history in Tasmania is that we have evolved understanding, one of the key components we have to study. We have been now studying oyster farms, abalone farms and salmon farms. We have a fairly good understanding of the parameters we need to study to provide information to decision-makers and where that focus should be. I would say at the moment we have a pretty good understanding. The trick for us will always be understanding how the science then fits into a decision-making framework.

You have heard a lot at the moment about the EPBC act and the need to have standards. It is still fair to say that environmental standards are relatively good in Australia but they are not uniform across the country or even in regions, so from a science perspective having an understanding of what the standard is we are trying to understand the science to inform whether a particular development is going to meet that standard, those standards are absolutely critical. There are various agencies in Tasmania responsible for setting up the state-based standards. It is important they are harmonised across federal and state levels.

Ms FORREST - The Government is setting up a standard at the moment. Is it fair to say there are some people who do not like intensive farming, which is what this is at all, so there will always be another canary they want you to find and effectively monitor before they will be happy all the research is done.

Dr HONE - If FRDC had to remove all the uncertainty in decision-making, you would never go fishing, you would never have fish farming, nothing would happen, so you are quite right in that.

Mr HORVAT - On the other point - we did a study on the sustainability of what people saw as the fundamental principles for sustainability. That process ran eight years ago; if we ran the same process now we would come up with a completely different set of metrics as to what the community values and judges as being sustainable. There is always an ongoing tension between the shift in community values and the need for intensive farming or whatever the activity may be.

If all the borders were shut down and we had to be self-sufficient for food, the perception of intensive farming would change again.

It is this always ongoing evolution that we need to deal with. We need to be aware of it, and if it needs to be acted on, it then becomes a priority.

Ms FORREST - Is it fair to say the more you know, the more you want to know, too?

Mr HORVAT - Correct.

CHAIR - You've picked up on a point that I wanted to finish on, around sustainability. Earlier on in your statement today, you talked about the end point of the research being important in terms of determining how you go about it and then knowing you've delivered what the end point expectation was.

If the end point is a sustainable salmon industry, for example, in Tasmania, then working back from that, I imagine, would be how we would determine what's required at, say, certain key decision points when we ask ourselves, 'Do we have enough data and scientific information to inform us at this decision point in order to deliver what we have identified as a sustainable salmon industry', Is that a way of looking at it? In that case, isn't it quite important we have quite a well-articulated and agreed concept of sustainability?

Dr HONE - I think that's a reasonable hypothesis. I think it's also reasonable to say that many people are interested in that conversation, and also in how you would actually measure it. We are very strong supporters of third party certification, which often exceeds the requirements of what a government perhaps needs, so there are many ways we inform ourselves

about what that end point is. In Tasmania, for example, many salmon farms pursue Aquaculture Stewardship Council certification. It's a very high level of environmental performance, and it puts even more requirements on us to collect the additional data, even beyond what government might want.

I think this is a balance of making sure that you know what the end point is, but also that you know there are different ways people describe that end point.

CHAIR - Thank you. I am mindful we've gone quite far past time. Do you have a question, Rob?

Mr VALENTINE - Just a very quick one. We're talking about baseline data, and how there wouldn't be an appetite for investment to gain that baseline data. Clearly, you have IPAs, which are there to deliver for the industries involved in that investment profile. Surely, because there are public moneys involved, all your research projects aren't linked to IPAs? There must be some that are or could be linked to undertaking some of this baseline data information, to be able to know whether it is sustainable to expand?

Dr HONE - Quite right. Probably about 25 to 30 per cent of our funds are linked to industry partnership agreements; the rest is in 'public good' described priorities and activities. Some of them are functional, like biosecurity and aquatic animal health. Others are around social and Indigenous, so you are quite right.

We fund research relevant to aquaculture from our public good funds where, while we'll have regard for the views of the industry partnership agreement, that's not the main driver of why that priority got up in the first place.

Mr VALENTINE - It must get to a point where it's simply not sustainable to expand further rather than assuming it is sustainable to expand further, and how you go about making sure what the measures are that need to be taken. To answer that question you need baseline data, and that's why I was asking that question.

CHAIR- Thank you so much for your time, Patrick, Peter, Josh and Heidi. We really appreciate it, especially because we've gone over time a little, and the information has been really helpful. I know you've committed to sending quite a deal of information to us. We will confirm that to you in writing, to make sure that is clear. Thank you for that effort as well.

Mr VALENTINE - That was fascinating. It was very good.

Dr HONE - Can I just appreciate the fact that you are interested in our science.?

Ms FORREST - We are.

Mr VALENTINE - We love science.

Dr HONE - Our biggest metric is being relevant.

Mr VALENTINE - Ours too.

THE WITNESSES WITHDREW.

Ms JANE GALLICHAN, CHIEF EXECUTIVE OFFICER, TARFISH, WAS CALLED, MADE THE STATUTORY DECLARATION AND WAS EXAMINED.

CHAIR - Welcome, Jane. This is a public hearing for the Government Administration A Subcommittee Inquiry into Finfish Farming in Tasmania. The evidence taken at this hearing is protected by parliamentary privilege, but once you are outside the committee context, it is not necessarily afforded that privilege, so be mindful of that. The evidence you are presenting is being recorded. A *Hansard* version will be put on to the committee website. We are also broadcasting the hearing today.

The way we are going to proceed is that if you would like to make some opening remarks to the committee, we will follow that up with some questions and some interaction. If there is anything that you feel should be heard in camera, you can make the request to the committee that we go to *an in camera hearing*, and we will consider that request.

I hope that is all fairly clear. If you would like to make some opening remarks, please go ahead.

Ms GALLICHAN - Thank you for the opportunity to present to the inquiry this morning and, yes, I would like to make some opening remarks.

TARFish made a written submission based on our salmon farming policy, and I hope you have all had an opportunity to review that submission.

Our policy is the product of almost a decade of engagement with salmon farming. Through that experience, and through talking with recreational fishers all over the state, we have identified four key recreational fishing issues associated with salmon farming -

- (1) Loss of access to marine waters.
- (2) Impact on the marine environment.
- (3) On-water safety of marine farming infrastructure, and marine debris.
- (4) The need for an open, transparent and fair aquaculture planning process that considers the needs of recreational fishers.

It is not the role of TARFish to support, or not support, salmon farming.

Our role is to look after the interests of recreational fishers in all matters that may affect us, and that is why we have, and will continue, to proactively support the interests of recreational fishers through advice to industry and the Government in relation to the effects of marine farming on recreational fishing. Salmon marine farming has significantly developed in Tasmanian waters over the last 30 years and has become a key economic driver for Tasmanian, with particular social and community benefits at a regional coastal level; we accept that.

However, as the industry has commenced a significant expansion into new waters, the scope, breadth and potential impacts have created a heightened awareness within the recreational fishing community. That awareness has focused on the future of the industry and how it may impact on recreational fishing activity and the environment on which it relies in

relation to term of reference (1) regarding the implementation of the sustainable industry growth plan for the salmon industry and its impact.

It is TARFish's view that very little verified data has been compiled and published at an industry or local area level by government relative to recreational fishers and waterway users generally. Of particular interest are interactions with marine farm equipment, marine debris and waterway health. The EPA data portal provides generic information on marine debris, the amount collected and the percentage attributable to marine farming and basic compliance data.

The salmon plan states the Government will establish deadlines for the universal adoption of best practice tracking technologies and simple ways to identify the source of debris. I am not aware of any government-produced publicly available information that -

- (1) Details the deadline for the universal adoption of tracking technologies.
- (2) Provides simple ways to identify debris.

We accept that not all marine debris is produced by salmon farms; we also accept that it is the responsibility of a vessel operator to keep a safe lookout under Rule 5 of the International Regulations for Preventing Collisions at Sea.

What we do not accept is that recreational fishers have access to information about marine debris in a publicly available, consolidated and meaningful way. For example, there is no information on the adoption of technologies and what equipment those technologies are applied to. There is no information on identification to source found debris. It is not clear about the obligations to report the interactions with marine debris that are occurring.

This means we do not know the extent of the problem.

As the peak body representing recreational fishers, we regularly hear about incidents with marine debris from fish farms. Items like feed pipes that sit low in the water and are dark in colour making them difficult to see as well as hitting rope - so propping the rope, in particular, are things we hear about. For the community and recreational fishers specifically to have confidence that the safety risks posed by marine debris interactions are being well managed, we need to be assured and shown that two things are happening continuously - prevention and management.

Prevention means how items like feed pipe are prevented from breaking away in the first place; and management means what systems and processes exist to ensure if they do, it is identified early and actioned immediately. Whilst overall it is generally agreed the salmon farms have made efforts in this area and the amount of debris is reducing, the risk posed to recreational fishers and boaters remains relatively high. TARFish believes it requires swift and immediate action.

Another point I want to make is on waterway health. As a result of salmon farming, huge numbers of research studies and reports have been written on the health of the waterways; they operate in both in broad- and fine scale. However, recreational fishers are not typically marine biologists or ecologists, and it would be of assistance to have information synthesised and made

accessible to the community. By accessible, I mean in plain English, easily found, on topics of interest, and regularly updated.

The Government produced a snapshot for 2018-19. It is deficient - it does not report on the health of waterways, or on other matters of direct relevance to other users of shared waterways, like regulatory compliance, marine debris and safety incidents. The three salmon farming companies all have sustainability dashboards; it is pleasing all of them have recognised the need to put information out in the public arena. However, very limited information is made available via the EPA portal and I suggest that is even less than a bit terribly meaningful.

The EPA director has flagged the development of a new environmental standard for regulating salmon farming in Tasmania. We would like to see that standard published and the industry performance reported on against that standard.

Moving on to the progress in the development of an industry-wide biosecurity plan, the salmon plan states that the analysis of existing marine farming development plan areas used for salmon farming, particularly with a view to strengthening biosecurity, will primarily be led by industry. The important point here is that the community relies on the Government to regulate the industry and protect the waterways in which it operates. Recreational fishers are reliant on the quality of the waterway and a mass salmon mortality event would be devastating for the environment and, therefore, recreational fishing.

What is concerning is that three years after the release of the salmon plan, the industry has been unable to reach agreement on a biosecurity program. In TARFish's view, the Government should provide the leadership necessary to design and implement a robust and effective biosecurity program that protects our waterways. This is a regulatory responsibility of government.

As fellow users of shared waterways, it is a reasonable expectation that the Government will implement sufficient regulation - in this case, biosecurity measures - to protect the health of shared waterways for all users.

Regarding term of reference (2), I would make three key points. The first relates to the planning process regarding expansion; the second relates to appeals of decisions; and the third to the board of advice and references.

Regarding expansion, and I will use the Storm Bay example here, all three companies signalled their intention to extend their operations in Storm Bay, which would effectively double the size of the industry. Two companies were able to make amendments to existing plans and the third required a new plan. In effect, there are multiple plan areas for one waterway.

The Marine Farming Planning Review Panel considers each plan amendment separately. What is difficult, and I will go so far as to say unreasonable, is that community and recreational fishers specifically would not experience those changes separately. Whether it is increases in boat traffic and marine debris, or loss of access to fishing areas, their impacts must be considered collectively and cumulatively.

We understand government does not want to inhibit industry growth, but it should not facilitate industry growth at the expense of an orderly and appropriate process that allows genuine participation by the community and fellow waterway users.

The Government's salmon plan outlines a proposed pathway for testing, planning and allocating new waters for finfish farming.

I note legislative changes are needed and a target date of 19 July has been identified; however, the legislative changes are not referenced in the Government's snapshot update and it is unclear how these processes of opening up new water will take place.

Regarding appeals, under the current Marine Farming Planning Act, the marine farm development panel advises the minister on marine farm development plans and the minister then makes a final determination on those plans.

There are no appeal provisions against the minister's final approval of a plan. Appeals to the Resource Management and Appeals Tribunal are possible under section 95 against amendments to plans, but these limited appeal grounds are geared to the operators of salmon farms when a minister decides against issuing a planned amendment or refuses to direct the panel to prepare a draft amendment to an existing plan.

One solution could be to expand section 95 to include provisions for appeal on a wider range of matters and by third parties to ensure communities have fair and reasonable access to appeal against decisions.

This applies similarly to section 75 of the act where there are appeals to RMPAT against lease refusals and lease conditions, but not against the granting of a lease. They need to consider expansion of the ground for appeal and third party access to appeal provisions appear to be supported by the RMPAT decision database, which I believe contains only three appeals against marine farm decisions - one against a refusal to renew a marine farm lease, one against a refusal to renew a marine farm license, and one relating to the making of an emergency plan. These were all between 1998 and 2001.

The Marine Farming Planning Act also contains provisions for a board of advice and references under section 49 of the act. The board's advice may relate to the experience and knowledge of the applicant, employment opportunities, the applicant's contribution to industry or site-specific research, the applicant's capacity to address social and environmental matters, and any other matter the board considers appropriate. The board's advisory role is not limited to lease allocations, however.

Section 50 of the act allows the minister to seek advice from the board on any matter and to direct the board to perform any function. The board was abolished by the minister in July 2015 under the existing provisions of that act, and currently there is no alternative to it.

The board of advice and references could be the right government approach to developing a biosecurity program, for example. The salmon plan indicates a tender advisory board would be established for expansion into new water; again this could be a role for a board of advice and references.

What can be seen is that the salmon industry is growing and the legislative framework in its entirety needs to be reviewed and updated.

There were some minor amendments made in 2019 that had environmental powers formally handed to the EPA director and this was a missed opportunity. In TARFish's view, a wider legislative review that takes in a living marine resources act, the Marine Farming Planning Act and the Environmental Management and Pollution Control Act, would be a sensible approach.

Thank you.

CHAIR - Thanks, Jane. That is a good comprehensive opening statement which gives us lots to interact with. It's very much appreciated.

Mr VALENTINE - To give us an understanding of TARFish, can you paint a picture as to whom it represents and how many groups are involved - people or members?

Ms GALLICHAN - TARFish is the Tasmanian Association for Recreational Fishing. We are made up of a number of member organisations and individual members. Currently our membership is around 3500 recreational fishers, and we have organisational membership of the Game Fishing Association of Tasmania, the Charter Boat Operators of Tasmania and the Australian Fishing Trade Association.

Mr VALENTINE - And they all have their individual members?

Ms GALLICHAN - On the board. We operate with a volunteer board; as its CEO, I am the only employee of the organisation.

In terms of representation, we are the formally recognised peak body by the government and we have been undertaking that function for some time.

Mr VALENTINE - So, membership across all of those groups. Do you understand the quantum of that?

Ms GALLICHAN - I could not tell you off the top of my head, but what I will say is there are 100 000 fishers in Tasmania today.

Mr VALENTINE - Pretty big.

CHAIR - One in four Tasmanians, we are given to understand.

Mr VALENTINE - That is fair enough. What sort of communication, interaction or consultation do you have with the industry itself? Do they reach out at any point in time and consult with you about what they are planning to do and where they are planning to place equipment et cetera?

Ms GALLICHAN - I have been in the role as CEO since February this year, so I cannot speak to what has happened in the past except in the most general terms to say that when the industry has been willing to secure new leases or change their lease arrangements, they have contacted TARFish. I can see that from our records, and they have certainly attempted to

consult with the industry on that basis. It has largely been on a company-by-company basis. We have no formal arrangement in place at all. It is not as if we have a quarterly meeting, say, with the Salmon Growers Association, and there is no advisory committee of which or other mechanism by which we would be a member in order to interact with salmon farmers generally.

Mr VALENTINE - Thanks for that.

Ms FORREST - Thanks, that was really comprehensive.

I would like to focus on some of the areas you suggest we, as a committee, could make recommendations in. A couple of the areas I heard you talking about particularly relate to the operations of the panel in its assessment of amendments and new plans. Currently there is no requirement for a member of that panel to be a community representative or even a recreational fisher representative. Do you see that as an oversight? Do you think that person adds value, bearing in mind a lot of science has to be assessed - I am not saying recreational fishers do not have the capacity to do that; I am asking: Who do you think should be on that panel? Should it extend as far as community representation and potentially recreational fishers?

Ms GALLICHAN - I think it should. I understand at the moment a person has been appointed by the minister to act effectively as a community representative. I think that is a local council representative.

Ms FORREST - Heather Chong

Ms GALLICHAN - I suppose if I could put my comments in this way: if you have three salmon farming operations that want to expand in Storm Bay and they are being considered separately, there is actually no mechanism for the community to have representation directly in relation to that in a coordinated way. If there were to be somebody representing the community and recreational fishers specifically so there was an overall understanding of all those amendments or new plans, that would be of assistance.

Ms FORREST - If it is any comfort to you, I would like to read the evidence we have from the members of the Marine Farming Review Panel who said, with regard to Storm Bay, that they actually had requested of the minister that they assess them together because of the nature of it. That was the process, but as you say, under the act it is a requirement they are assessed individually. Maybe that is an area that needs to be addressed.

The other area you talked about was the appeal provisions. They are limited to an amendment, not to a new plan; even within the appeal capacity, it is more around conditions and things like that. How do you think that should be addressed in terms of appeal rights - not just in terms of amendments, but what do you think would be an appropriate appeal mechanism?

Ms GALLICHAN - I'm not a lawyer.

Ms FORREST - Just in broad terms.

Ms GALLICHAN - As I said in my opening remarks, I think what would be of assistance is an expansion of the grounds on which it can be appealed, and also allowing appeals from

third parties, because at the moment there is no capacity for communities or other third parties that may be impacted by these decisions to have any recourse.

Ms FORREST - From memory - and I have been here a little while - I cannot remember the legislation that dealt with it, but when we did do some amendments to this process, it actually removed third party reference. I remember it used to be there at one stage.

Ms GALLICHAN - It may well have been, I am not sure about that.

Ms FORREST - There was a process, anyway. What difficulties could that make where you have, in fairness, some very strong views? Some groups who do not want to see salmon farming at all in our waterways and if there are unlimited appeal rights, it just comes a circular process where no-one achieves anything except lots of frustration and money spent in lawyers' offices.

Ms GALLICHAN - We are not suggesting that it is an unbounded set of appeal rights, but certainly there could be broader grounds, in our view, for appeal rights.

Ms FORREST - Do you have an idea around the parameters of the appeal rights rather than a broad third party appeal? What areas do you think? Should we include plans as well as amendments, for example, because obviously the section 75 of the act sets out the areas of appeal. Do you have any ideas from your perspective as the recreational fishers' view, what sort of areas should there be a capacity to appeal?

Ms GALLICHAN - If in the view of recreational fishers, it is a significant impost or impact on the recreational fishing activity itself, that would have to be substantiated, obviously, but that is one ground I think recreational fishers would support. The other is around probably potential environmental impacts and whether they have been effectively assessed, particularly in terms of how that relates to target species for recreational fishers.

CHAIR - Primarily, the point you made was you believe third parties should have the standing on which to make an appeal?

Ms GALLICHAN - Yes.

CHAIR - That was the primary point.

Ms FORREST - Yes, but also limited in that scope, not just broadly. You are not asking for appeal rights in every point to go on and on forever.

Ms GALLICHAN - I am suggesting that there are currently no third party appeal rights whatsoever and there are very limited grounds for appeal now. They are not sufficient to address some concerns that may arise. I am not suggesting they have previously, but I am saying that it does not have any provision to address those at the moment.

CHAIR - It is before your time, because you have only been with TARFish since early in the year, but are you aware of TARFish's involvement in that panel process when those Storm Bay amendments and the new plan were being considered? Did TARFish at that time make submissions or appear at public hearings related to that?

Ms GALLICHAN - I am not certain. I am happy to check, if you would like to take that on notice, and can advise the committee.

I believe TARFISH had some direct engagement with all three salmon farming companies to discuss the concerns of recreational fishers.

Mr VALENTINE - In your opening brief to us, the statement with regard to equipment and technologies, are there particular aspects of that which are of concern to you? Are there navigational issues you or your members have in getting up-to-date data? Can you expand on that a little?

Ms GALLICHAN - It is not so much around up-to-date data because a notice to mariners is put out when a piece of equipment is identified as missing. The issue becomes: When does the marine farming operation determine when that is missing? How quickly does that happen? There can be lags in that, which is of concern, because the missing equipment can be well and truly dispersed within a waterway before they are aware of it.

The second is the capacity to remove it quickly and safely, if you have a large piece of equipment. We accept that they operate in increasingly higher energy environments, and those types of equipment can be identified as being out of position and collected. That is one part of it. The other is the ability to know where that equipment is to protect the safety of people using the waterways, whether that is increasing the ability to see that equipment, whether it is colour, reflectors and that type of thing. We know in the past, and certainly very recently - and I need to be cautious here, because it is not been formally attributed to salmon farms - a 40-metre length of pipe was hit by a recreational fisher in Storm Bay.

He gave me a call about that and he was very irate, because it was his birthday and he was out fishing with his family, and it was a really dangerous situation. He was travelling at around 25 knots, which is quite a normal speed for fishers traversing in waterways, and the reason he hit that pipe is because that particular piece of equipment sat low in the water and was very difficult to see. If you going at that speed, it is unlikely that you would be able to avoid a collision with it.

In that regard, it is making sure that the equipment is sufficiently visible, that it is known to be missing, and that it is reported as missing.

Ms FORREST - Ideally it is secured properly in the first place.

Ms GALLICHAN - That was the other point I was making in my opening remarks, around prevention. I guess the question I have is whether the Government or other regulatory entity are actually doing any analysis? If we know that five notices to mariners in the last two years have been for the same piece of equipment, what analysis is done about when it is breaking away, why it is breaking away, and what can be done to prevent it happening in the future?

CHAIR - To pick up on that further, we heard yesterday from MAST that 10 infringement notices have been issued in the past couple of years. Those infringement notices are around \$668 each, I believe. Does TARFish have a view on those penalties, and whether that is a sufficient response to the debris issue?

- **Ms GALLICHAN** There are probably two parts to my response on this. The first is that my understanding of the purpose of issuing a fine or demerits is actually to modify behaviour. If that modification isn't happening, that tends to suggest that the penalties are insufficient. I also suggest that the cost of the equipment being lost is likely to be more expensive than the fine itself. I have lost my train of thought, I apologise.
- **CHAIR** Perhaps I can prompt you with another aspect to that. From your members who are reporting to you instances of encountering debris, and in some cases colliding with it, is there some way we could come to understand or quantify the cost being incurred from the recreational fisher's side of things in terms of debris?
- **Ms GALLICHAN** This probably goes to the availability of information on those interactions. There is an obligation to report those interactions. I hold some questions about how many of those interactions are actually reported. The other thing is that sometimes you will not know if the debris that you have hit is from a marine farm, and that goes to the ID of the equipment. In that regard, I think there is some work to be done in order to improve and to understand that. As I said earlier, it is around analysing it to prevent it happening again.
- **CHAIR** Are there any insurance implications for recreational fishers who collide with or encounter debris, and then potentially incur costs and damage?
- **Ms GALLICHAN** There are certainly costs involved. I do not know if any of you are recreational boaters, but if you 'prop' a rope and you have to get your vessel out of the water, and have your propeller removed, inspected or replaced or repaired, they are all costs that will either be borne by your insurance, or, if you are not insured or insufficiently insured, you will typically have to bear that cost yourself.

In some instances, I think salmon farms may have contributed to the repair of vessels, but I could not speak to that in any detail.

Ms FORREST - A bit of an ad hoc sort of arrangement, I imagine.

Ms GALLICHAN - I suspect so.

- **Mr VALENTINE** Do you have a database of events like these that your members have encountered?
- **Ms GALLICHAN -** No. Again, that is one area of particular interest to us, and it goes to on-water safety and understanding what the scale of this is as an issue and, to be frank, we do not know right now. There is no public reportage on it. I am not sure if MAST correlates that information and provides it to the Government or elsewhere.
- **CHAIR** We received some information about that yesterday, but it's probably incomplete.
 - Ms FORREST Their evidence is on the record, if you want to have a look at that, too.

Ms GALLICHAN - Yes, thank you, I will.

CHAIR - In terms of the waterway health issue, you talked about having information available to the community in a format and to a level of detail that's accessible. What is the purpose behind wanting that for your members - what is the intention there? How would that be utilised by your members if such information was provided and made available in the public domain?

Ms GALLICHAN - I think there is a need for recreational fishers to be sufficiently assured that the operations of a salmon farm are not impacting their recreation, and that means: Is salmon farming impacting the overall health of the waterway, which therefore would impact the health of the fish species within it? Or, conversely, are there are any direct impacts on target species for recreational fishers? That's one area of interest for all recreational fishers, I suspect, but that's not easily found - and certainly as a result of that, there are also some assumptions and assertions that salmon farming may be actually having impacts that it is not having, and it is equally important to debunk myths that are occurring.

CHAIR - That's an interesting point.

Ms FORREST - I know a number of recreational fishers in the north-west are very concerned about Petuna's potential expansion into that area, particularly as there are many fish nurseries and other really important habitats around that area - closer into the inland waters there or close to shore. Some of them, I believe, feel they're not heard in all of this.

What do you think would be a good mechanism to ensure they felt their voices were heard? What's the process to do that? Obviously, having been heard and having all your ideas taken on board are two different things. We know what it's like here on our side at times.

What mechanism would you see as being most effective in ensuring that the voices of the recreational fishers were heard, in terms of their concerns around shark nurseries and other breeding grounds of other species, and also with the overlay of climate change, which is seeing different species appear in our waterways now?

Ms GALLICHAN - First, I suggest that all those recreational fishers become members of TARFish and that they contact me directly so I can represent them.

Ms FORREST - Sure.

Ms GALLICHAN - The second point I would make is that if a company is planning to expand, they should be in touch with the peak body so that they can get an understanding of what the concerns of the recreational fishers are first, and that they can also provide information.

Ms FORREST - Have you had discussions with Petuna and Tassal around King Island?

Ms GALLICHAN - I've not spoken with Tassal. I had a short initial conversation with Petuna several weeks ago, just asking who is the best person they should be speaking to with regard to recreational fishing and the concerns of recreational fishers in the area. That was not a detailed conversation, but I expect it will be in the weeks and months to come.

Ms FORREST - That was at your initiation?

Ms GALLICHAN - It was, yes. The third point I would make is that in terms of the forums available to communities, and specifically to recreational fishers, to raise these issues in a coordinated way that has the hearing of government. I think the Government, while not expecting it to be a cheerleader for the industry, has a responsibility to understand what the community's expectations and concerns are around salmon farming and its expansion. It should take the trouble to inform itself before it actually goes to the Marine Farming Planning Review Panel and the like.

Ms FORREST - That's really a matter for the companies to actually address internally, perhaps?

Ms GALLICHAN - I'm suggesting it's also a matter for government. The companies will inform themselves and interpret the information they receive to their best advantage in order to progress with their applications. What I'm suggesting is that the Government needs to understand what those concerns are and assure itself that those concerns are adequately met.

Mr VALENTINE - I'm interested in exploring the statement you made in your opening comments with regard to an industry-wide biosecurity plan. Can you expand a little on your concerns there at the moment, and whether you are having input into that, or not, as the case may be?

Ms GALLICHAN - There is real potential. In almost all salmon growing regions around the world mass mortality events have occurred as a result of disease. That can happen in intensive farming situations.

Waterways are not paddocks, and they are not fenced. If pathogens make their way into waterways, it is unclear whether they can be contained in any way; that is why biosecurity for salmon farming is paramount. So far, the industry has managed to avoid having such a widescale incident.

In terms of the biosecurity plan itself, that would be critical. I am not sure if you are aware, but the salmon farming industry is well over around 50 000 tonnes now. Imagine if half of those died within a week of each other. How would they be gotten out? How would decomposing fish impact on a whole range of things? Whilst the term biosecurity is a boring one, if I can put it like that, its implications are absolutely serious.

Mr VALENTINE - Not boring for the industry, I can tell you.

Ms GALLICHAN - I am sure. It would have strong implications for recreational fishing because we do not know what impact, first, the pathogen may have in crossed species, and, second, what impact a mass mortality event would have on the overall health of the waterway. That is why we think it is imperative for those biosecurity measures to be in place.

Have we been consulted around that? Not that I am aware. I am happy to check it, but I do not believe so.

CHAIR - Again, this is something you might not be able to answer now because it predates your time with TARFish, but perhaps you could follow it up once you have checked: when the Sustainable Industry Growth Plan for the Salmon Industry was developed, did

TARFish have a role in providing input to, or was it consulted on, the development of that plan? Or at the one-year review? Was there was any input sought around the review time?

Perhaps, more specifically, as part of the plan, as you would have seen, there is a map that shows the grow and no-grow zones around the state. The delineation of those zones would have been something that fishers would have been quite interested in. I would be interested to know if input was provided to, or a process engaged with, come up with those zones.

Ms GALLICHAN - I believe TARFish was consulted. I am not sure of the detail of the form of that consultation, but certainly I am happy to take on notice.

Mr VALENTINE - Can we get a copy of what you are reading from? That was very informative.

CHAIR - Would you like to table a copy of your initial statement, or send it through later by email? That would be useful.

Thank you very much for your time today, Jane. Would you like to finish up by saying anything further that perhaps we have not covered or that has occurred to you during our discussion which might be useful for us to know before we finish up?

Ms GALLICHAN - I do not think I have any further comments, but I do appreciate the opportunity to come and present evidence today.

CHAIR - Thank you very much. We appreciate it too.

THE WITNESS WITHDREW.