Submission to finish committee

Prepared by Dr Shea Cameron
[redacted]

To whom this may Concern,

I am a marine ecologist by training and born and trained in South Australia but I have worked as an aquaculture diver and ROV pilot/technician and now operations manager for the last 7 years at two different companies, Marine Produce Australia (MPA) in Broome and Huon Aquaculture in Tasmania. I currently work in the Subsea Dept at Huon Aquaculture overseeing our diving and remotely operated vehicle (ROV) operations. This submission is however my own personal one and is only guided my my own experience and thoughts on the finish aquaculture industry in Tasmania.

For this submission I would like to focus on;

1. The value of an innovative aquaculture industry
2. The need to foster strong state government and industry leadership and expertise in Tasmania's Aquaculture industry that will enable us to influence the national Aquaculture Industry.
3. The strategic need for a blue economy ministerial portfolio for Tasmania to coordinate, support and set the industry.
4. How we could create a more sustainable way forward with Integrated multi-trophic aquaculture.
5. Marine farm lease fee increases and an argument against this.

When I was at MPA in Broome I was struck by the sheer number of Tasmanians up there or had worked there. It's no wonder to me now after working in Tasmania for just under 6 years. The salmon farming operations in Tasmania are huge in scale and are not rivaled by any other Aquaculture in Australia. Our operations are also comparable to the very best we see in Europe and North America.This is something we should be proud of. Ive come across many ex Tasmanian fishfarmers working on the tow boats, feeding the fish, diving and there's even a few running an ROV company supporting oil and gas operations in Brunei! I'd like this story and perhaps what others have submitted, to emphasize that all of this is because we are a Maritime State and have always been. Fishing, Marine science and research and now Aquaculture have been strong social drivers of change and identity in our state's towns and cities. We have always been a resource extracting state and to escape the boom and bust cycles we need to manage our resources carefully and sustainably to ensure that they will support our communities and state well past our own working lives.

Tasmania is well placed to benefit from the 'blue economy' by exporting not just products but training, expertise and technology to mainland Australia and the rest of the world just as we have done with our mining expertise and products (ie elphinestone) but this blue resource extraction industry could operate infinitely if managed properly. With this in mind, I would like to propose we establish a 'blue economy' ministerial portfolio to help oversee it. This portfolio would be responsible for overseeing Aquaculture, Fishing, Marine parks and the Marine Science and education hubs we have in this state. This portfolio would help to better link stakeholders in Tasmania's blue economy and planning a sustainable resource extraction strategy for key products and then overseeing coordinating the effort to train and develop our future leaders and technology to push us further ahead in the 21st century.

Integrated Multi-Trophic Aquaculture (IMTA) is one way we can maximise the output on leases (but minimizing the leases we use along the coastline) whilst sequestering carbon and using the excess nutrients. Tassal is leading the way in Tasmania with their project in Oakhampton but it needs more support on a legislative level to ensure it does not become lost in the focus on high yield salmon production. The same would go for Huon with their joint experiments with the Climate Foundation(?) off Storm Bay. IMTA aquaculture can help traditional seacage beat the controlled efficiency of land based RAS systems that will be the death of major

aquaculture in tasmania as they enable production anywhere on land with a good supply of water. These are often held up by people concerned about fishfarms in Tasmania as the modern way forward. But what is not mentioned is the need to reduce transport costs, that has to make up for increased production costs that operating on land requires. This would mean production would shift to mainland Australia where water is scarce but is closer to major markets and export Hubs. Tasmania should look at IMTA aquaculture as a way to use more up nutrients in the water, re-establish our natural kelp beds and provide more jobs for Tasmanians by producing another product within existing aquaculture leases. There are additional environmental benefits such as habitat creation, improved water quality and potentially carbon sequestration which can add value to other industries in Tasmania.

Some mechanisms for encouraging IMTA could include
1. a gradual draw down of the industries dissolved nutrient cap with macroalgae used to offset it in a common market- this could encourage new smaller farmer to participate in this plus also the carbon sequestration market
2. Develop a common user seaweed hatchery that can supply algae properties.
3. Zone leases with salmon farms in the middle but surround with potential seaweed and mussels leases.
4. Offer these seaweed leases to new players or joint ventures with the big companies at reduced lease prices.

Our blue economy should look at what we have learned from the salmon farming history in Tasmania. We currently have 3 main players or perhaps 2 in reality. They are both the result of industry consolidation and rising costs and scales of production resulting in complex and diverse companies. This has made them powerful, innovative, somewhat brave and responsive to ideas. This innovation keeps both at the top of their game and perhaps the world. Examples include Rov tooling, auv design, cage design, netcleaning and boat design. Two ex-Huon contractors are now building custom ROVs for the Antarctic Division and are producing ROV designs so unique, that Chevron is ringing them up. Their company did not exist 2 years ago and is sustained and protected by contract ROV technical support for Huon Aquaculture. They now employ an additional 2 staff. These private STEM jobs are valuable for Tasmania as they are not reliant on government funding cycles.

Our two Aquaculture companies are large and perhaps appear ready to be charged more for lease payments to the general public. If these payments are increased we introduce another layer of complexity to our marine planning as payments would need to be stratified to differentiate small producers from large companies. As mentioned previously our major companies invest a lot of time and staff in innovation. More money on leases would limit the amount that could be spent on innovation and make our companies less brave. We should focus on both companies' direct R and D expenditure offsetting increased lease fees. By communicating this better we are showing how Tasmania is getting the best bang for it's buck for it's coastal marine lease agreements.

Aquaculture is key part of Tasmanias Blue Economy already. The industry values research and innovation and its place in Tasmania society but like all resource extraction it could be more efficient and sustainable. For it's future and the future of many Tasmanians this desire to innovate should be encouraged and be fostered whilst being overseen to protect the environment that aquaculture relies on. The State government needs to have a closer and more integrated eye and approach on its marine environment, resources, research and training. Getting these four right could mean that we are achieving the maximum production for us and our coasts.

Sincerely Dr Shea Cameron

28 Nov. 2019