RURAL ECONOMY AND CONNECTIVITY COMMITTEE

SALMON FARMING IN SCOTLAND

SUBMISSION FROM DIVE & SEA THE HEBRIDES

I have answered the specific questions of to your enquiry in my first submission and now submit separately an account of the impact of fish farming on my business to demonstrate the effect fish farming has other local marine business users.

Dive & Sea the Hebrides was established in 1986 after I returned home to Skye from a 13 year commercial diving career in the middle-east. That had secured me the finance to begin my fledgling business to provide for a growing demand in scuba diving holidays on the Scottish west coast. Joined by my wife, we have operated that business at this premise continually since 1986. In the last 10 years we have complimented diving activities with wildlife watching and it was the intention that our 2 sons, now 15, would join the business and assist in its expansion in the growing activity and wildlife tourism market, taking it on into the next generation. That intention is now seriously in doubt, as a direct consequence of the potential for significant increase in negative environmental impact caused by the Salmon Aquaculture industry, and the government's current proposals for rapid expansion via the Salmon Aquaculture Growth Plan 2030 and the move to develop innovative development sites.

Over the years we have garnered an excellent reputation for delivering world class diving holidays, widely recognised in the dive media. We do not compete within Scotland for customers' we compete in a challenging international market where divers have abundant choices. So quality is essential, mediocre will not do! Delivering that standard is becoming increasingly demanding, and in fact it may not continue to be possible. The need for evolution and diversification is even greater now, due to the environmental damage caused at local dive sites and the threat of future damage from the Salmon Farm Aquaculture Industry, but yet, that personal financial investment may not be wise. We are in a catch 22 position, treading water, losing momentum, just waiting to see what comes next from the salmon farm industry, supported heavily and facilitated by the Scottish Government. It's fair to say, government support, despite the policies and objectives outlined in Scotland's National Marine Plan and European Law, seems very heavily weighted in favour of the salmon farm industry and as such, poses a very real threat to our future.

So, I should explain how the environmental damage caused by the Salmon Aquaculture business has very directly and negatively affected my business. It is important to understand the destruction of the underwater environment in context of visiting divers' expectations and how exclusion from geographical sites impacts on the daily operation of my business.

Starting from the seabed and working through the water column I will demonstrate how fish farm practices impact negatively on scuba diving activities at sea. Sadly though the world is largely unaware of this destruction, divers have evidenced it throughout the last 30 years.

When fish are fed, a certain amount of food unavoidably and despite best intentions, falls uneaten through the open cage net systems to the seabed. When fish eat they obviously excrete waste which also falls through the open net to the seafloor. Medicated feed treatments compound that problem with the addition of toxic chemicals settling in the sediment on the sea floor. All of that amassing detritus changes the physical nature of the seabed habitat from coarse sand to fine silt. That in itself suffocates some species. The settled and ever accumulating mass then putrefies, and soon turns into anoxic mud which cannot sustain life. It is unsightly, it pollutes, it changes the chemical and physical character of the seabed, destroys biodiversity and kills ecosystems. Nothing lives in anoxic mud except worms feeding on dead organic matter.

Specific species succumb quickly, some more slowly, many to irrecoverable population levels. Quite simplistically, the part that those lost species play in the ecosystem is unfulfilled, the food chain is broken, the species balance changes, more species are lost and so it goes on. It would simply not be accepted above the waves, but in the sea it is a case of out of sight, out of mind.

Simultaneously the gas produced from the anoxic mass on the seabed is changing the water column. The extra chemical loading in the water column from medicinal treatments is adding to that upset in balance. This causes algal blooms which are harmful to some species, toxic to others causing species mortality, and at the same time reduces underwater visibility, all of which are undesirable to a diver.

It is widely believed by those who are not privileged to experience the underwater environment that this happens 'only' beneath the cage system. But, the Depomod modelling used by SEPA to administer the CAR license applications and to undertake EIA’s for seabed lease applications, fails to account for dispersion due to tide, resuspension due to seabed disturbance and local tidal anomalies. But, please accept that the damage spreads beyond the cages and re-suspended silt is widely distributed to accumulate on underwater boulder slopes, reefs and cliff walls, covering sponges, soft corals and innumerable other species often leading to their ultimate mortality. Aside from being destructive to the seabed environment and the species that live there, it’s very unattractive to witness as a diver.

The change in the chemical and biological composition in the seabed, along with chemical discharge into the water column, all compound to cause eutrophication. This in turn enhances algal blooms, some of them toxic, and both ourselves and our divers have had the misfortune to witness mass mortalities of underwater species on a number of occasions directly related to this scenario. It is not a pretty scenario to encounter and not one that Scotland should be proud to exhibit to visitors.

Add to that a reduction of all species of crustaceans due to chemical lice treatments, a reduction in the population of wrasse and lump sucker as cleaner fish and the future of underwater populations look bleak.

So if we accept the analysis of habitat and species loss described above, then let us begin to understand how it affects the daily operation of our business.
Situated in Lochbay, with historical good access to quality sheltered diving, we were able to guarantee a good diving experience in all weather. As the Scottish islands

are renowned for their changeable gulfstream weather, this access to quality protected diving is a vital selling point.

After the fish farm was established in Lochbay in 1992/3, the water quality grade A was lost almost immediately. The deep basined sea loch was slow to flush and the effluent that fell below the cages could never disperse into deeper water and the wider environment from the loch as it was assumed to do. It did have an almost immediate impact on one of our prime local sites, within a mile of the dive centre, one much enjoyed in bad weather. Here we evidenced a gradually reduced visibility as stocking densities at the fish farm increased, general habitat loss, reduced biodiversity and generally less abundant life and colour.

This damage was further compounded by unlicensed chemical sea trials circa 1996, the circumstances of which are as follows. We had a dive expedition aboard and when diving locally at the site adjacent to the fish farm in Lochbay, divers started to comment that everything was dead or dying. Starfish, sea urchins and crabs were falling off the cliff walls amongst numerous other species. A day or so later the staff at the adjacent fish farm gave us labels from medicated feed bags and asked us if we could find out what was in them as a number of staff had become unwell since they had been dispersing it. (headaches, nausea, vomiting etc). We contacted the suppliers for the safety data, and were surprised to discover that it contained Teflubenzuron as it was not a licensed treatment at that time in this country. The data provided detailed it to be ‘acutely toxic to the marine environment’.

At the same time, fish were flapping up the beach trying to escape the water, asphyxiating on the shore. Happening in August in peak tourist season, visitors were horrified.

We contacted the authorities to ask if there had been a license granted for the use of Teflubenzuron, and if so, when was its’ use advertised. We advised SEPA that we were not aware of the intention to use Teflubenzuron at the local fish farm site; that we had divers in the area, fisherman were creeling adjacent to the site and that it was a chemical not licensed for use in the country at the time. SEPA gave little explanation or comment. Obviously there were numerous public safety issues to consider, not to mention environmental concerns. We collected samples of the mortalities but nobody was interested in investigating this. We passed the details to our local MP, who was at that time fighting the local community corner on number of fish-farming issues. In the end, he discovered that no advertisement had been made of the intention to use Teflubenzuron, so therefore no license had been granted, and that an 'informal' sea trial had being undertaken. It was suggested that this was with the licensing authorities ‘awareness’ and the chemicals had been brought in the back door from Ireland! This is one incidence we uncovered, but we wonder how often similar circumstances arise. We did not dive at that site, a grave yard, for the remainder of that season. In fact we only dive that site in extreme bad weather now or at night. Despite the fish farm site having failed in its viability and now having been fallow for 8 years, the seabed composition has been permanently changed in texture, species lost forever and the site diminished in its’ appeal to the diver.

Historically we dived in nearby Loch Dunvegan, at 6 or so dive sites, a short distance of 3 – 5 miles away. These were viable in all but the worst of weather conditions and

constituted part of our weekly ‘portfolio’ of dive site destinations, offering diversity of experience in our dive package. However over the last 20 years, 4 fish farm sites have been established in Loch Dunvegan. It started with 2 sites, they relocated on request from SEPA due to unacceptable damage to seabed habitat, and subsequently an additional 2 new sites were established. All of these sites currently have proposals in the application stage to expand significantly. Undoubtedly they will be permitted. Through these developments we have lost the use of 6 dive sites due to both, physical exclusion due to the cage installations themselves and to all of them due to environmental damage. We now have access to only 1 viable dive site in Loch Dunvegan.

Now we rarely dive locally (within 3-5 miles), aside from poor weather diving around Lochbay Islands, which are situated at the outer edge of Lochbay on the edge of Loch Dunvegan, 2-3 miles away. Accepting that we now have no reasonable dive options locally, every day that the weather permits, we travel out of Lochbay and Loch Dunvegan, to the next good dive destinations 5-10-20 miles away. Clearly this has increased cost and time implications and not all of that can be passed onto the customer if we are to remain competitive. The need to travel farther afield is problematic. On some weather days we cannot go out of the loch, so in being restricted to 3 or 4 dive sites our product is diminished. On good days the need to go out of the loch has increased our fuel bill, wear and tear on the charter vessel, the need for a larger vessel with more onerous and costly passenger license, increased staff hours, and lengthened the days for the customer. None of these impacts are reasonable when imposed due to the environmental damage cause by others, over whom we have no control and who appear to go unregulated, ineffectively monitored and unpunished. The polluter is most definitely not paying, every other user of the marine environment is, and heavily.

So, having accepted the need to travel further afield when the weather permits, 10-20miles each way, each day, we just get on with it, what else can we do? However very recently after a 3 year application battle, 2 of these sites have become threatened, likely to significant environmental degradation, due to the granting of a new fish farm site at the entrance to Loch Pooltiel. This permission is wrong on so many grounds. It is wrong because the tidal anomalies that exist there mean that the Depomod modelling cannot be accurate. It is a pristine marine environment that will now be lost. It is a recognised cetacean and basking shark feeding ground and the risk to those species through the use of ADD’s and potential entanglement in lines and nets is indisputable. That contravenes European Law. Specialist scientific representation on that matter was ignored in the application assessment. The site is exposed to the worst of weather and tidal flow that exists in The Minch and physical damage to the cage systems is very likely with loss to the wider environment of salmon and all of the issues that accompany that. The granting of permission at this site is incredible, and evidence that the expansion of the salmon aquaculture business is being supported at any cost to habitat, wildlife or local business is a worrying message that has been communicated very clearly to us and the wider local community.

So what next we wonder? Can we survive this? If the Aquaculture Growth Plan 2030 and the innovative site proposals are implemented with the same impunity, we cannot survive. We will cease to trade. Who will compensate our loss?

This is all happening because a burgeoning, bullying business, the salmon Aquaculture industry is overwhelming the inadequate systems being used to assess applications, grant licenses, monitor impact, and to hold offenders accountable. These systems are widely acknowledged in the local communities as being totaly inadequate, ill-researched, negligibly lacking in data other than that provided by the aquaculture industry, ill informed, not listening, and lead by the industry with the government's authority to do so. We are unaware of any fish farm being prosecuted for environmental offences.

For a small business, living with the constant threat of new salmon farm development has always created pressure and doubt, and now with the imminence of implementation of the Aquaculture Growth Plan 2030 and proposals for new innovation sites, there is potential for conflict on an unprecedented scale.

Every business needs to invest, evolve and diversify to meet customer demands and the financial costs and responsibilities can be significant and are most often self-funded by that small community business. Such investments are a lifetime's commitment for the future of the family, and if it goes wrong for any reason, that family can lose everything. To make these kind of financial decisions in the current climate of uncertainty due to the intended fish farm expansion, is a precarious one and some would say it's safer not to. But you cannot tread water forever, and yet that to our detriment is what we are doing. Why, because at this time, the Scottish Salmon Aquaculture industry, which has a detrimental impact on most other marine users, would appear to have the might of the Scottish Government behind them, with the political will, support, and funding to create innovation and growth at any cost. This disparity of power is unjust and is crippling investment in those small local businesses, who ironically do not have an impact on the marine and coastal environment.

Recent history demonstrated how fish farm seabed lease applications progress through the system to successful granting. An application is lodged, including a flawed EIA based in inadequate CAR modelling. The local community and businesses respond and if they manage to apply sufficient pressure to weaken the likelihood of approval, that application is withdrawn by the applicant. The applicant then remodels the application with that knowledge gifted to them through local community objection, and moves it to a new location, often an environmentally insignificant move of 500m or so. This resubmission or new application often coincides with the peak tourism season, when a busy and local business objector, just cannot manage a response in the 21 days given, so typically objections the 2nd time round are less. At this time if it is recommended for approval it goes to planning committee, and is granted or not. In a recent application we were involved in which directly affected us, the local councillors unanimously voted to overturn the recommendation to grant permission and refused it on sound legal basis. The applicant then lodged an appeal and as this system is heavily weighted in his favour, the decision at this point was almost inevitable but still it dragged on in uncertainty for another 9 months. This part of process seems pointless. It is clear that the fish farm industry is able to put pressure on the Appeal Reporter as there is clear influence evident in the decision comments. In our experience those decision's lack legal basis, fail to uphold European Law, ignore scientific advice, are based on factual inaccuracies and therefore have no integrity. However, that decision is final

and can only be challenged in court, an action which small local business can simply not afford.

There is no route to compensation for loss to these small local businesses, no decommissioning schemes from the government who permit this environmental destruction, and no diversification and retraining for those businesses directly affected, just a need to make way for the fish farm industries expanding environmental damage.

It would appear that the Salmon Aquaculture industry is being supported in causing detrimental environmental impact and in so doing causing a directly negative impact on local businesses - the environmentally kind businesses, the local economy, discouraging local entrepreneurial spirit and destabilising the young population. Why would they stay for the inevitable fight?

I believe there should be a moratorium on the establishment of any new salmon farm sites and on expansion of existing sites, until sea lice, disease, pollution and environmental damage are independently monitored. Operators must be accountable for the damage they cause and sites must be operated to acceptable environmental standards. Further damage to ecosystems, wildlife habitats and the marine environments of local communities must be avoided to protect the environment for both wildlife and those whose livelihood depends on them. Existing laws must be upheld and the objectives of the Scotland's national marine plan must be upheld.

Dive & Sea the Hebrides
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