Guy Linley-Adams Solicitor

11th June 2018

Ref: GLA/0512002

Mr Richard Kerr
Argyll & Bute Council

By email to
richard.kerr@argyll-bute.gov.uk;

Dear Mr Kerr

Replacement of 10 x 80m circumference cages with 12 x 80m circumference cages of an alternative design, installation of hopper feed system and increase in biomass from 966 tonnes to 1545 tonnes
Airds Bay (Etive 4) Loch Etive 18/01124/MFF

I act for Friends of Loch Etive (FoLE).

FoLE objects strongly to this application and the proposed modifications and expansion at Etive 4, with increase in maximum farmed biomass from 966 tonnes to 1545 tonnes on the grounds of (i) the likely impact on the already precarious wild salmonid population of Loch Etive of the River Awe and (ii) the further harm to the landscape of Loch Etive the proposed development will cause, adding to the increasingly industrialised feel of Loch Etive, both of which are contrary to relevant national and local planning policy.

The Council's screening opinion

This application has already been subject to a screening exercise to ascertain whether an environmental impact assessment (EIA) and Environmental Statement should be required for the application, pursuant to the EIA Directive. The initial screening opinion was issued by the Council on 23rd April 2018.

However, the application the Council had received from Dawnfresh was incorrect in stating the biomass was to increase from 1300 tonnes to 1545 tonnes, a 19% increase. The 2008 planning permission in fact limited the biomass to 966 tonnes. The current application therefore represents a 60% increase in biomass bringing with it a greater and significant extra threat of impact to wild salmon, sea trout and the wider ecology of Loch Etive and surrounds.

The screening exercise was re-run, but the replacement screening opinion has not yet been issued by the Council. It is not clear that all screening consultees were made aware of the error in the initial screening consultation exercise, the email notifying consultees of the error only being sent to Scottish Natural Heritage, Marine Scotland and SEPA, but not the Argyll District Salmon Fishery Board, arguably the most relevant consultee in respect of the impact of the proposed biomass increase that had been inaccurately described in the initial

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consultation. Note that the ADSFB has already called for no further increases in biomass of farmed fish on Loch Etive, to protect wild salmonids.

This objection is made on the assumption that the Council will continue to conclude that no environmental impact assessment nor Environmental Statement will be required.

The planning permission at the current Etive 4 farm has expired

Importantly, the application now made does not recognise that the planning permission at the existing Etive 4 has expired and that, in law, this needs to be an application 'from scratch'.

The planning history of the existing Etive 4 is not good.

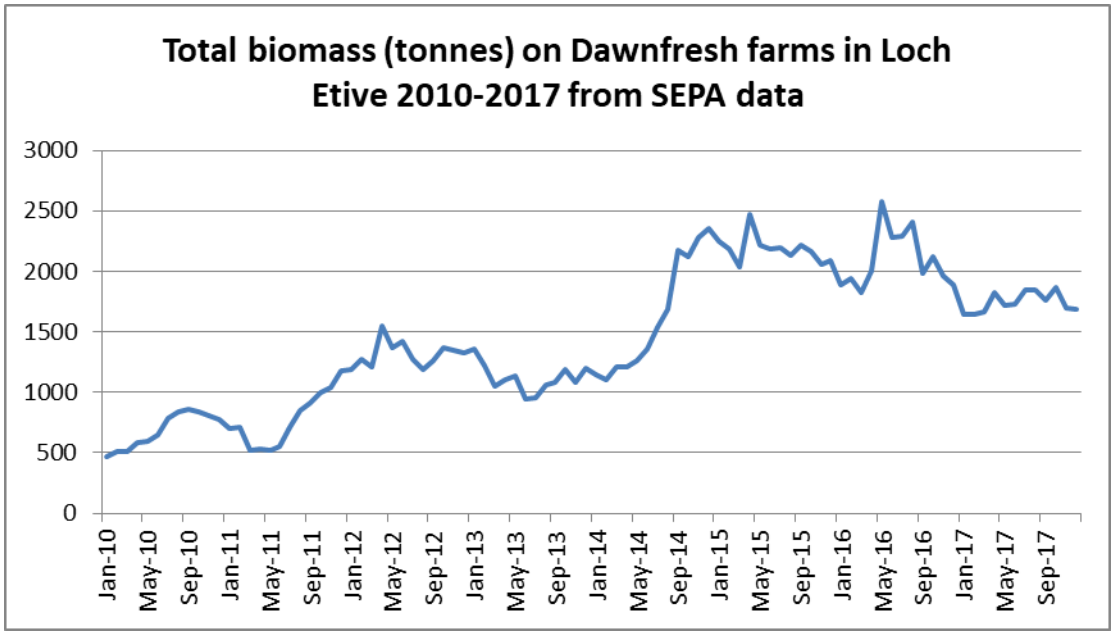
In 2013, FoLE drew the Argyll and Bute Council's attention to a breach of planning at the Etive 4 farm, which was being and is still operated at the same time as Port Na Mine (Etive 3) and not being fallowed as per its permission, both contrary to planning conditions set down by the Council in 2008. Etive 4 is now operated in a very different manner and with very different impacts to those envisaged in the 2008 Environmental Statement, not least because of the presence a few hundred metres away of the new large farm at Sailean Ruadh (Etive 6) that did not exist in 2008. The Council should therefore have very little confidence in any commitments made by the applicant as to the future running of this or other Etive farms.

Further, in 2015, without first securing the requisite planning permission, Dawnfresh moved the Etive 4 farm cages further out into the loch. As a result, the Council has since taken the view that the current re-positioned farm does not have the requisite planning permission to operate and served a Section 33A Notice (under the Town and Country Planning (Scotland) Act 1997), requiring Dawnfresh either to remove the unauthorised equipment from Etive 4 or submit a retrospective planning application, neither of which Dawnfresh did within the requisite period, in contravention of the Notice.

To reiterate, there is no extant planning permission at Etive 4, a position with which the Council agrees, and had confirmed on a number of occasions since 2015, most recently in May 2018. As a result, the current application, although it is stated to be for the *replacement* of all 10 existing cages, with 12 new cages, and the installation of new feed hoppers, is in effect for a *modification* of an existing but unpermitted site. Importantly, the application does not envisage a full replacement of all equipment currently on site, including mooring blocks. As such, this application should not have been accepted as valid by the Council, as there is no permission for what is on site at Etive 4 at present. Even if now granted the permission as applied for, the fish farm at Etive 4 would still not have the requisite permissions it requires to operate.

The environmental impact of Etive 4

Since the Etive 4 fish farm was first granted by the Argyll and Bute Council on 17th March 2008, it has had a number of environmental problems, causing associated impacts on the wider Loch Etive, many of which have worsened considerably since Dawnfresh began to increase the biomass of farmed fish held on Loch Etive from 2010 onwards, as shown in the graph below.



Protecting vulnerable populations of wild salmonid fish on Loch Etive

The wild salmonid fisheries of Loch Etive and surrounds, including the River Awe, support valuable recreational rod and line fisheries, which in turn support the local Etive economy. Both Atlantic salmon and sea trout are important species for conservation, are Priority Marine Features in Scotland, and are listed as a priority species for conservation under both UK and EU law.

The Scottish Government recognises that aquaculture can result in elevated numbers of sea lice and is likely to increase the infestation of wild salmonids with sea lice, in turn potentially having an adverse effect on populations of wild salmonids in some circumstances. The Council has acknowledged its statutory functions in relation to this interaction with wild fish that the sea-lice issue creates - "*wild fish interactions are a material planning consideration".*

Independent science has clearly shown the likely impact on wild salmon and sea trout of farm-derived sea-lice. On sea trout, Shephard et al (2016) concluded that "*research carried out in Ireland and Scotland has shown that Infestation of sea trout Salmo trutta L by salmon lice Lepeophtheirus salmonis is associated with increased mortality risk and possible sub-lethal effects. Sea trout captured closer to salmon farms had significantly higher levels of lice infestation, and that this effect was exacerbated in warmer years. Sea trout sampled closer to salmon farms also had significantly reduced weight at length (impaired condition), with the strongest impact in dry years. results imply a rather general impact of salmon farming on lice infestation and body condition of sea trout".*[1]

On wild salmon, a recent review commissioned from the Norwegian Institute for Nature Research (NINA) concluded that "*the combined knowledge from scientific studies provides evidence of a general and pervasive negative effect of salmon lice on salmonid populations in intensively farmed areas of Ireland, Norway and Scotland. … Levels of additional mortality by salmon lice as indicated in several scientific studies may result in salmon stocks not achieving river specific conservation limits and, if sustained over time, could result in significant cumulative reductions in adult salmon recruitment*."[2]

[1] Shephard S, MacIntyre C and Gargan P (2016) Aquaculture and environmental drivers of salmon lice infestation and body condition in sea trout Aquaculture Environment Interactions Vol. 8: 597–610, 2016
[2] Thorstad, E.B. & Finstad, B (2018) Impacts of salmon lice emanating from salmon farms on wild Atlantic salmon and sea trout. NINA Report 1449: 1-22.Trondheim, Norway, January 2018

The effect on wild salmonids of the increase in permitted biomass across Loch Etive and the intensification of Dawnfresh operations since 2014 may now be emerging in the wild fisheries data for 2016 and 2017.

Sea trout sweep netting carried out in 2015 showed the worst sea lice infections ever recorded in wild fish and in 2016, the Argyll District Salmon Fishery Board has reported that it could not catch any sea trout to sample. To the middle of November 2017, the annual upstream count for wild Atlantic salmon passing the Awe Barrage fish counter on the River Awe was only 480 fish. The previous year's total, to the end of November 2016, was 800. The five-year rolling average is 1,400 fish and the longer-term average closer to 2,000 fish.

In 2017, the River Awe experienced the lowest salmon run on record by some margin.

Although conclusive proof that the sea lice issues experienced on the applicant's Loch Etive farms in 2015 to 2016 has caused or contributed significantly to the drop in the number of returning adult fish in 2017 is impossible to gather, the drop in numbers of returning adult fish is what would be predicted if the sea lice issues on the Dawnfresh farms on Loch Etive had created increased mortality in emigrating wild smolts, with sea lice leaving the Etive farms in very large numbers.

Given this a more precautionary approach would seem to be necessary, ruling out, in the medium term, any increase in biomass on fish farms. However, although the Council recognises that "*it is generally accepted that lice produced on farms pose a threat to the health of wild fish and that this threat will increase with numbers of fish being farmed"*, in the context of the damage to wild fish populations caused by fish farms, it has stated its position to be that "*it would not be appropriate to routinely refuse applications on a precautionary basis simply because definitive information was not available…*"[3].

However, the situation in Etive is not routine, as the available wild fish data is perhaps the best there can be, given the existence of the fish counter at the Awe barrage producing very reliable data on wild salmon stocks.

In common with all Scottish public authorities, Argyll and Bute Council has a biodiversity duty under the Nature Conservation (Scotland) Act 2004. The recent ECCLR Committee report on the environmental effect of salmon farming emphasised that *"Scotland's public bodies have a duty to protect biodiversity and this must be to the fore when considering the expansion of the sector".*

Additionally, when the UK signed up to the UN Rio Convention in 1992, it agreed to apply the precautionary principle, as follows: *'Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'*

This principle is also incorporated in the OSPAR Convention, to which the UK is also a signatory, requiring that *"preventive measures are to be taken when there are reasonable grounds for concern that human activities may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship. A lack of full scientific evidence must not postpone action to protect the marine environment. The*

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https://brage.bibsys.no/xmlui/handle/11250/2475746

[3] Email Angus Gilmour, Head of Planning, Argyll and Bute Council, 2nd May 2018, to Friends of Sound of Jura

principle anticipates that delaying action would in the longer term prove more costly to society and nature and would compromise the needs of future generations"[4]*.*

These agreements impose clear legal and policy obligations on the Council when determining fish farm planning applications.

Further, in all fish farm-related planning decisions the National Marine Plan requires that the Council uses sound science responsibly in reaching its decision on this application. Policy GEN 19 - Sound Evidence – requires that "*decision making in the marine environment will be based on sound scientific and socio–economic evidence*". Where the science is incomplete or contested, at para 4.8.1, the NMP states that "*where evidence is inconclusive and impacts of development or use on marine resources are uncertain, reasonable efforts should be made to fill evidence gaps and decision makers should apply precaution within an overall risk-based approach*".

In the context of the threat of harm to wild salmonids, the North Atlantic Salmon Conservation Organisation (NASCO), an international organization, established by an inter-governmental Convention in 1984, to which Scotland is a *de facto* party by way of EU membership, sets agreed objectives to conserve, restore, enhance and rationally manage Atlantic salmon through international cooperation taking account of the best available scientific information. NASCO has adopted a range of agreements relating to fish farming which all parties are required to implement.

In 2009, NASCO adopted expert 'Guidance on Best Management Practices to Address Impacts of Sea Lice and Escaped Farmed Salmon on Wild Salmon Stocks' . This BMP Guidance was developed jointly with the International Salmon Farmers Association and adopted by ISFA. The Guidance established international goals for NASCO Parties and jurisdictions relating to containment and sea lice management. For sea lice, the international goal is "*100% of farms to have effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild salmonids attributable to the farms*".

Indeed, this appears to have been recognised by the applicant, Marine Scotland Science stating in their response (28th March 2018) to the Council's initial screening consultation process, that Dawnfresh is "*aware of the potential impacts on salmon and sea trout*" and will have a "*target of zero adult female lice in the spring*". Of course, a target will have no effect if it cannot be achieved in practice and is not, in itself, any sort of mitigation.

MSS also note that "*sea trout are present in these inshore waters [Loch Etive] all year round and not just during the spring smolt migration periods. We therefore suggest that strict control of sea lice should be practised throughout the year"* and that *"adherence to the suggested criteria for treatment of sea lice stipulated in the industry CoGP may not necessarily prevent release of substantial numbers of lice from aquaculture installations".*

In effect, what NASCO and MSS require is the achievement of zero ovigerous lice (note this is not zero lice) on Loch Etive's farmed fish all year round, which is only logical given the extremely large number of host fish within each fish farm and the potential for a very low level of adult female lice on a farm nevertheless massively to increase background levels of lice larvae in the wider sea loch.

Sea lice numbers and treatment on Loch Etive fish farms

Historically, due to its brackish nature, there was no issue with sea lice on fish farms in Loch Etive while fish farming was conducted at a relatively low intensity prior to Dawnfresh's

[4] https://www.ospar.org/about/principles/precautionary-principle

intensification and expansion. In 2008, the Environmental Statement for Etive 4 stated that "*sea lice is not considered to pose a major problem at this site given the brackish condition of the water in Loch Etive*". Dawnfresh stated in 2012 that none of it sites on Loch Etive had ever required a sea lice treatment. In its 2015 Supporting Information, which accompanied a similar application made to the Council for expansion at Etive 4, but subsequently withdrawn, Dawnfresh again stated that "*the brackish conditions of Loch Etive prevent sea lice infection"*.

However between 2011 and 2015, there was a 500% increase in the total biomass of farmed rainbow trout held by Dawnfresh on Loch Etive, using the new farm at Etive 6 and employing a greater intensity of farming at its other sites, including Etive 4. The recent record of treatment for sea lice at all of Dawnfresh farms since then shows these statements made about sea lice ability to survive in brackish Loch Etive are simply wrong.

Unlike the salmon farming industry, Dawnfresh does not publish its on-farm sea lice data and has refused to provide data to allow assessment of the extent of the problem with sea lice on its farms. However, both Fish Health Inspectorate (FHI) reports and the Scottish Environment Protection Agency (SEPA) data, published online, shows that Dawnfresh farms have had a sea lice problem from 2014 to 2017, with adult female sea lice levels going above industry thresholds, and, at Etive 4, above the Scottish Government's new trigger levels which require the formulation of site specific escalation plans to deal with sea lice.

Since 2014, Dawnfresh has been forced to treat its fish with the full range of chemical treatments for sea lice.

Note also that the Chairman of the ECCLR Committee, Graeme Dey MSP, has just written to the industry[5] asking for an explanation as to why the historic farm-specific sea lice data, that the Committee requested in its Report of March 2018 should be published by the industry by the end of April 2018, was not yet available.

The suggested 'attestation' (per page 4 of the letter from Marine Scotland Science, dated 8th June 2018, made in response to this application) is patently insufficient and contradicts the ECCLR Committee's recommendations. Happily, the Council can (and should) use its powers under the Town and Country Planning (Scotland) Act 1997 to require more information from the applicant, to require full publication of all historic and current farm-specific sea lice and mortality data from Dawnfresh relating to all the Loch Etive farms, prior to determination of this application, so that all consultees can examine and have an opportunity to make representations to the Council on the sea lice record on the basis of real data and not the applicant's promised future achievements as to sea lice control, which the evidence suggests have, in previous applications, proven rather hollow.

In relation to sea lice, the Council's Screening Opinion has already decided that this application should also be accompanied by:

"2) A sea lice management strategy with identified escalating prompts for intervention. This should identify mechanical interventions available in addition to chemical treatments....
5) A risk assessment for the non-synchronous stocking/fallowing of Farm Management Area M-36…
8) Details of pre-application discussions – in particular with the District Salmon Fishery Board".

[55] Letter from Graeme Dey MSP, 1st June 2018, at http://www.parliament.scot/S5_Environment/General%20Documents/20180601_Conv_to_SSPO.pdf

In response, in its Supporting Information, Dawnfresh claims that it "*has strengthened sea lice control measures over the past number of years and is now in a very strong position with regards to sea lice control on Loch Etive".*

However, this statement is not supported by the facts.

Can Dawnfresh use cleaner fish?

As to novel treatment techniques, Dawnfresh acknowledges that it cannot use wrasse as cleaner fish on Loch Etive. In its Farm Management Statement of 13th February 2018, it states that

"Marine Scotland does not allow the use of Wrasse within Rainbow Trout pens due to the risk of VHS (Wrasse are proven carriers: Rainbow Trout are acutely susceptible to VHS unlike Salmon: VHS is a notifiable disease). Marine Scotland presumes against the use of Lumpsuckers within Rainbow Trout pens for the same reasons and hence DFF does not seek permission for their use. Cleaner fish are also inherently contra-indicated in Loch Etive for the following reasons:-

Very low salinities/brackish conditions will kill or stress cleaner fish.

Very high current speeds experienced in Etive will kill or stress such cleaner fish.

The brackish and stratified nature of the loch means that temperatures outside of the normal range for Wrasse (8oC to 20oC) are experienced".

Can Dawnfresh rely on Slice – emamectin benzoate in-feed treatment?

In its Farm Management Statement of 13th February 2018, Dawnfresh states that it *"does not currently use Slice® as lice counts have shown* ***little to no evidence of efficacy****…" (emphasis added)*

Dawnfresh therefore acknowledges that it cannot rely on Slice as its own use has shown little or no efficacy – in other words, Slice has not worked to control lice on Dawnfresh farms, possibly because, like elsewhere, the sea lice of Loch Etive are showing increased tolerance and/or resistance to Slice.

Has Dawnfresh mechanical sea lice treatment capacity?

Dawnfresh acknowledges that it does not have its own mechanical sea lice treatment systems - "*Dawnfresh Farming Limited do not have provision for mechanical intervention in-house at present*" - and is only now 'investigating' the hire or purchase of the same. Patently, there is no track record of such use by Dawnfresh and it is pure speculation to assume whatever mechanical treatment may, or indeed may not be purchased, will work on Loch Etive.

Further, the use last year of mechanical treatment for lice, which was hired in, caused an escape of farmed fish from their Etive 6 farm[6].

[6] http://aquaculture.scotland.gov.uk/data/fish_escapes_record.aspx?escape_id=2000458

What is left?

In short, Dawnfresh is left to use either azamethiphos (organophosphate) or deltamethrin (synthetic pyrethroid) chemicals to treat sea lice on its farms.

Note that Dawnfresh has no wellboat licence for use at Etive 4 and so, currently it is limited to bath type treatment using tarpaulins only.

In relation to azamethiphos, Dawnfresh breached its pollution control licence at Etive 6. In 2017, SEPA has confirmed a breach of its Etive 6 pollution licence by Dawnfresh on Loch Etive, involving the use and release of azamethiphos, which is highly toxic to marine crustaceans, such as crabs, prawns and lobsters. SEPA confirmed to FoLE that "*following receipt of your e-mail we looked more closely at the site's bath treatment records and confirmed that there were a number of occasions in October, November and December 2016 when consecutive bath treatments with azamethiphos were carried out less than 24 hours after the first treatment. Those treatments were therefore were not in compliance with the CAR licence"*. [7]

Importantly, both azamethiphos and deltamethrin are the subject of increasing tolerance and resistance in sea lice, including across the west coast of Scotland[8], with this is mentioned in many Fish Health Inspectorate reports of their inspections of fish farms[9]. This means that the clearance rates after treatment – that % of sea lice removed and killed during treatment – is dropping, requiring more frequent treatments and at higher concentrations of active ingredient, a cycle that inevitably ends in the chemical treatment becoming ineffective.

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[7] Azamethiphos is an organophosphorus insecticide which acts by inhibition of cholinesterase activity.
It is used as a pesticide spray for control of flies and cockroaches in warehouses and other buildings.
In fish farming, it is used to control external parasites of salmonid fish, including rainbow trout, by "bath" treatment, whereby tarpaulins are used to enclose the fish and the concentrated azamethiphos put into the water. The treated water is then released after the treatment period (1 to 2 hours) into the wider sea loch.

[8] See for example, Jansen, Grøntvedt, Attila Tarpai, Helgesen and Horsberg (2016) Surveillance of the Sensitivity towards Antiparasitic Bath-Treatments in the Salmon Louse (Lepeophtheirus salmonis)
PLoS 2016; 11(2) at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4759459/

[9] http://www.gov.scot/Topics/marine/Fish-Shellfish/FHI/CaseInformation
or
NASCO (2016) Council Paper CNL(16)42 Drug resistance in sea lice and integrated lice management strategies (Armin Sturm, James Bron) http://www.nasco.int/pdf/2016%20papers/CNL_16_42_TBSS_Sturm.pdf

There are no other novel chemical treatments available. Without these two chemicals remaining efficacious, Dawnfresh would currently be unable effectively to treat sea lice at Etive 4.

This obvious reliance on chemical bath type treatment that is now proposed is at odds with what Dawnfresh stated in the Supporting Information for its aborted planning application seeking expansion at Etive 4 in 2015 that *"medicinal treatment in response to the outbreak of disease and sea lice infection is probably the single greatest concern in modern salmonid farming. In terms of environmental impacts and escalating production costs. For this reason, it is imperative that finfish farms decrease the use of treatment medicines by reducing the potential for disease and sea lice infection".*

In the circumstances, that 'potential' for sea lice infection cannot sensibly be reduced by increasing the number and density of host fish available to sea lice at Etive 4, which will result in more and not less use of treatment medicines.

As the SAMS Report for the ECCLR Committee, also published this year, concluded "*the main treatment methods used in Scotland are experiencing reduced efficacy in dealing with sea lice on farms. New techniques are being applied, although the long-term success of these is uncertain. The legislative and voluntary frameworks that underpin the management of lice levels on farms are not transparent. They appear neither to be succeeding in controlling sea lice, nor capable of addressing the environmental effects of the lice.*"[10]

What Dawnfresh now propose in their application is fundamentally no different to the failing methods and frameworks that SAMS describe. It would therefore be irrational if the Council were to ignore or downplay such strong criticism and considered the Dawnfresh sea lice treatment proposals as satisfactory with respect to wild fish impacts, especially given the parlous state of the River Awe wild salmon population.

Further, while most fish farmers attempt to deal with sea lice by loch-wide fallowing, a method supported by Marine Scotland Science, that lets sea lice levels within a loch to drop back to levels that do not cause problems, as Dawnfresh confines all its seawater production to a single loch and operates continuous production, it cannot operate a policy of loch-wide simultaneous fallowing. Indeed, since mid-2014, there has never, at any stage, been less than 1,500 tonnes of rainbow trout present in the cages on Loch Etive. While Dawnfresh operates continuous production on Loch Etive, this presents a significant risk that sea lice numbers could continue to build up over time in Loch Etive, despite the available chemical or mechanical treatments, which salmon farmers are increasingly discovering, do not always work to clear sea-lice. Any expansion at Etive 4 is likely to make that build-up both quicker and worse. The Fish Health Inspectorate too has highlighted to Dawnfresh the risks this lack of loch-wide fallowing in Loch Etive brings.

The Argyll District Salmon Fishery Board has commented that "*it has been established in the salmon farming industry that it is not sufficient to treat sea lice with drugs and chemicals. It is also necessary to simultaneously fallow the farm sites within a sea loch every two years in order to break the reproductive cycle of the lice. Now that sea lice have established themselves on the trout farms in Loch Etive, we expect these farms to be fallowed according to the proven system. Further expansion of farms in the loch should not be contemplated until a fallowing regime has been agreed".*

Marine Scotland Science's 2018 *Ten Year Farmed Fish Health Framework,* only just published, also recognises the problems that Dawnfresh has created by confining its

[10] Para 2.1.4 at page 15

production to a single loch, but the Strategy notes, in relation to rainbow trout farming, that the problems created have not yet been addressed by Dawnfresh:

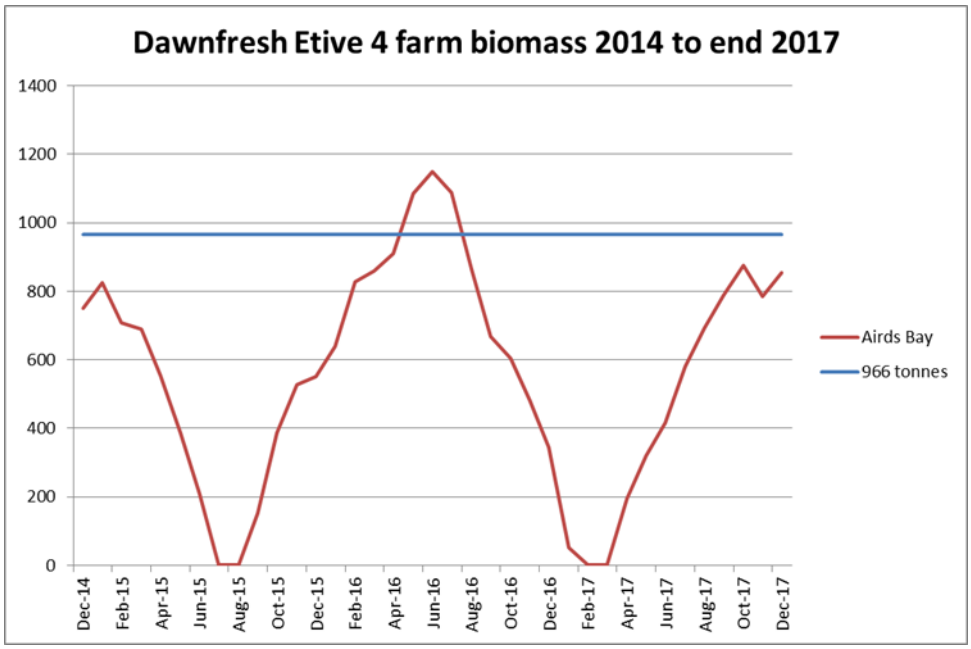
*"Fallowing allows for a break in sea lice and other pathogen biological life cycles and could be done more frequently under shorter farming cycles. Contiguous area fallowing would also provide benefit for rainbow trout fish health and welfare, a concept which is yet to be explored fully". (*emphasis added*)*

That exploration needs to happen before any increase in biomass on Loch Etive can be considered.

As to the actual sea lice numbers on Etive 4 and Dawnfresh's performance in controlling them to the NASCO zero ovigerous female target, Marine Scotland Science confirmed in their response (28th March 2018) to the Council's initial screening consultation process "*in more recent production cycles, sea lice levels have increased on Loch Etive sites*."

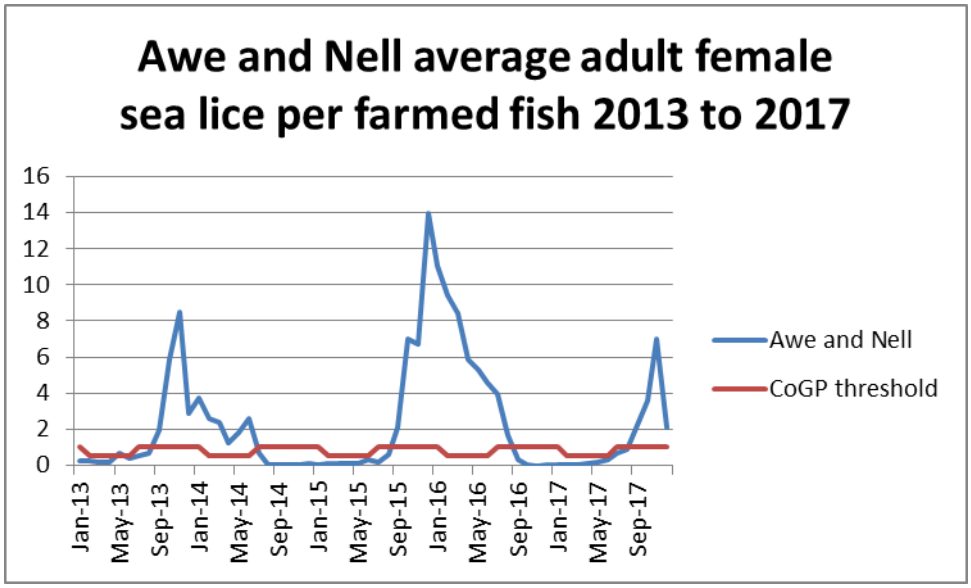
The available evidence shows that Dawnfresh is failing to keep sea lice under control in its existing farms

While Dawnfresh has provided some sea lice data covering May 2017 to January 2018, it would be nonsensical if the Council were to rely on less than 9 months of data as evidence that Dawnfresh can control sea lice numbers. As the graph below shows, the period for which Etive 4 lice data has been provided coincides with the first year of the production cycle at Etive 4, whereas it is accepted across all parties that the sea lice issue on fish farms are most serious during the second year of the production cycle. This is also identified by Marine Scotland Science in its response of 8th June 2018.



That sea lice control has been poor is evidenced by the fact that sea lice numbers increased on Etive 4 during 2016 and went over the Scottish Government's reporting trigger level of 3 adult fish per lice, reaching 5 adult female sea lice per fish in week 49 of 2016, as reported to the Fish Health Inspectorate.

MSS states that "*while it is not possible to accurately predict the future lice levels on a farm the performance of existing farms within the area could act as a guide. The SSPO publishes Fish Health Management Reports providing average sea lice counts for an area".* That data, illustrated below, shows that over the last three production cycles on-farm average female sea lice numbers have risen each time to well in excess of the CoGP thresholds, in some cases up to 19 times the stipulated thresholds.



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Finally, it is noted that the Council's Screening Opinion requests evidence is provided of discussions with the Argyll District Salmon Fishery Board (and Community Councils). The pre-application discussions to which Dawnfresh then refers in it Supporting Information, at section 7, are in fact discussions held in relation to an earlier application, do not relate to this application. (in respect of the Taynuilt and Ardchattan Community Councils, the discussions are 3 to 4 years old). Dawnfresh does not record any new discussions with the Argyll District Salmon Fishery Board (which has called for moratorium on any increase in farmed fish biomass on Loch Etive) and with respect to the Argyll Fisheries Trust (which also wants a moratorium on any further increase in farmed fish biomass on Loch Etive). The 2015 discussions pre-date the crash in River Awe wild salmon count to its lowest recorded return in 2017.

Further, in 2015, during the earlier screening scoping process for a similar application, the Argyll District Salmon Fishery Board asked that the outcome of discussions Dawnfresh was to have with Marine Scotland, as to whether the predictive models used to estimate the environmental sensitivity of sea lochs were appropriate to Loch Etive, should be included. There is nothing in the application to suggest these discussions have even occurred.

Applying the precautionary principle to sea lice control on Loch Etive

Applying due precaution within a risk-based approach to the negative interactions between fish-farm derived sea-lice and wild salmonids, where the real evidence indicates a major collapse on the wild population on the River Awe, would require, at the very least, two full production cycles at Etive 4 at the current biomass, during which period it must be demonstrated sea lice control meets the NASCO goal that "*100% of farms to have effective*

sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild salmonids attributable to the farms".

Without such evidence of a clear demonstration of effective sea lice control on Etive 4, for the Council to grant this application would breach National Marine Plan policies GEN 19 and Aquaculture 7.

Further, Policy Wild Fish 1 of the National Marine Plan requires that "*the impact of development and use of the marine environment on diadromous fish species should be considered in marine planning and decision making processes. Where evidence of impacts on salmon and other diadromous species is inconclusive, mitigation should be adopted where possible and information on impacts on diadromous species from monitoring of developments should be used to inform subsequent marine decision making".*

The only relevant monitoring is that carried out at the Awe barrage, on the River Awe, which shows the wild salmon population of the River Awe to be in serious decline, together with the results of the sweep netting carried out by the Argyll Fisheries Trust. The Council should note that its monitoring has led both the Argyll Fisheries Trust and the Argyll and District Salmon Fishery Board to call recently for a moratorium on fish farm expansion on Loch Etive.

To permit an increase in Etive 4 biomass now, on a 'suck it and see' basis, risks permanent and irreversible damage to the River Awe wild salmon population and would breach the precautionary approach required by the National Marine Plan and advocated strongly by the ECCLR Committee.

In fact, this is already reflected in the Council's Local Development Plan Policy LDP 3 – Supporting the Protection, Conservation and Enhancement of our Environment – which requires that in all development management zones, Argyll and Bute Council "*will assess applications for planning permission with the aim of protecting conserving and where possible enhancing the built, human and natural environment"*. Further "*a development proposal will not be supported when it (A) does not protect, conserve or where possible enhance biodiversity … water environment and the marine environment…".*

The Council's LDP Written Statement goes on the states that "*where there is significant uncertainty concerning the potential impact of a proposed development on the built, human or natural environment, consideration will be given to the appropriate application of the precautionary principle, consistent with Scottish Planning Policy"*.

It is Supplementary Information, Dawnfresh states that "*the modest expansion of the Airds Point fish farm to a 12 pen farm operating to a tonnage of 1,545T is not likely to have a significant impact on the level of lice control being achieved".* However, the increase from 966 tonnes to 1545 tonnes is not a modest increase in the numbers of available host fish for sea lice - in fact, it is a 63% increase - and there is no evidence, by way of a track record of successful sea lice treatment, that Dawnfresh can control sea lice numbers at Etive 4 to meet the NASCO goals.

The Council must therefore decide whether the holding of yet more farmed fish on Loch Etive is acceptable or whether the balance between wild and farmed fish interests has already been reached, or is perhaps already too clearly in favour of the fish-farmers.

History of escapes of farmed fish at Etive 4

Escapes of farmed fish are also a major issue on Loch Etive. In 2008, when Etive 4 was first considered for planning permission, objections were raised as to the likely problem with

escapees, but the Council's Delegated Report at the time commented that the operator *"has a contingency plan in place if there is an incident of escapees, however the risk of this occurring is minimal given the predator control plan put in place".*

The Council's confidence has proven to be completely misplaced. According to the Scottish Government's Scotland's Aquaculture database, since then, Etive 4 has suffered from numerous officially reported escapes since 2008:

Date of escape	Number of fish lost
03/04/2015	2091
08/09/2009	523
17/06/2009	523
02/09/2008	1062

Non-native farmed rainbow trout, if they escape, can compete for food with native salmon and sea trout in Loch Etive and predate upon juvenile wild fish. Marine Scotland Science says that rainbow trout can pose a threat to wild fish through this direct competition for resources and also through the transfer of disease. Escapes also cause great disruption to wild salmon and sea trout fishing on the River Awe.

Importantly, Etive 4 is located within a very short distance indeed of a number of burns and rivers known to contain Atlantic salmon and sea trout populations, including the River Awe.

The very large escape of farmed rainbow trout fish from Etive 4 in 2015, with over 2,000 non-native rainbow trout reported as being lost into Loch Etive, lead to many appearing in the River Awe.

Last year a further escape occurred at neighbouring Etive 6, losing 216 fish in August 2017, with farmed rainbow trout again being caught in the River Awe, and a massive escape of 5,400 rainbow trout occurred at Dawnfresh's freshwater farm on Loch Awe in February 2018.

Overall, Dawnfresh's Loch Awe and Loch Etive farms have an extremely poor record of losing non-native farmed rainbow trout from their cages. There have been just under 30,000 reported rainbow trout escapes into Loch Awe and Loch Etive since the start of 2008, the year Dawnfresh bought the farms. Despite the claims made in the application, the available evidence suggests that farmed fish can and will escape from farms on Loch Etive. More cages with more fish at Etive 4 (increased biomass) increases yet further the risk of escapes.

Impact on landscape from the proposed new cages and feed hoppers

As the Council appreciates, multiple aquaculture sites as exist on Loch Etive can exert an influence on the landscape. The landscape of Loch Etive is particularly valuable to businesses not associated with the fish farm including tourism, recreation, hotel, guest accommodation and the like.

The Loch Etive Integrated Coastal Zone Management (ICZM) Plan remains of great significance to this application as supplementary planning guidance. The ICZM Plan strongly suggests the proposed expansion at Etive 4 should be refused, though the application makes no reference to the ICZM Plan.

This not surprising as the proposed development sits within Policy Zone D of the ICZM plan where there exists "*a presumption against new agriculture developments in addition to existing sites due to the number of existing sites which largely occupy the most appropriate*

locations for development resulting in limited capacity for the landscape to accommodate new development".

As the Council acknowledged in its screening and scoping opinion from 2015 (ref 15/01814/MFF), *"the conclusion of the landscape study and the Loch Etive ICZM plan (at time of writing) was that within Policy Zone D there was an appropriate balance between developed and undeveloped areas, and that the introduction of aquaculture development in hitherto undeveloped locations could upset this balance to the detriment of landscape character. For that reason, a presumption against new aquaculture sites was established, in recognition that there still remains potential to expand the productive capacity of the loch via the rationalisation or consolidation of both shellfish and finfish existing sites".*

Of course, the consenting in 2013 of the Etive 6 farm (10 cages plus feed barge) at Sailean Ruadh, in replacement for two very unobtrusive mussel long-lines, has more than 'used up' any capacity for consolidation and rationalisation within Policy Zone D, hence the need under the section 75 agreement, attached to the Etive 6 permission, to remove the Etive 5 farm at Ardchattan in 2017. The current application at Etive 4 is for a straightforward expansion - two more cages bring the total to 12, the installation of obtrusive feed hoppers on each cage and an increase in biomass from 966 tonnes to 1545 tonnes. Importantly, there is absolutely no element of consolidation or rationalisation whatsoever, nor does the applicant suggest there is. As such, the application does not comply with the ICZM Plan.

The Landscape Visual Assessment provided by the applicant, despite using projections from some distance, from unrealistic viewpoints, nevertheless demonstrates that this application will add to the industrialised feel to this part of the loch.

Overall, the assessment of the applicant, that the visual impact of the proposed development is insignificant, is wrong. The viewpoints affected include those from a designated Area of Panoramic Quality covering the land to the east of Bonawe and the landscape view from the Priory at Ardchattan.

Of particular relevance to this application is Argyll and Bute Council Local Development Plan Policy LDP STRAT 1 - Sustainable Development - requires that development should "*respect the landscape character of an area and the setting and character of settlements*".

Policy LDP 3 covers Council policy in relation to the protection, conservation and enhancement of the environment. It is stated that development will not be supported if it does not protect, conserve and where possible enhance the established character and local distinctiveness of the landscape and seascape in terms of its location, scale, form and design. The proposed increase to the number of cages and size of grid at Etive 4 does not meet the requirements of LDP3.

In relation to Policy LDP 4 – Supporting the Sustainable Development of our Coastal Zone - the Council states, at 3.5.2 that Argyll's "*extensive and varied coastline is of national, and in some parts international significance, containing many areas of special landscape and ecological significance. It is therefore important that the character and environmental qualities of the Argyll and Bute coast are protected from inappropriate development…"*

The Loch Etive ICZM Plan confirms that in the relevant Policy Zone of Loch Etive, the entire coastline, which includes the application site, is classified as Sensitive Countryside and the coastal hinterland adjacent to this policy zone is part of the North Argyll Area of Panoramic Quality. The Council's Local Development Plan Supplementary Guidance, at para 1.1.1, notes that "*the Council has identified Areas of Panoramic Quality….These APQs are important not only for their physical landforms and scenic value, but also for the environmental assets that they represent. These qualities could easily be destroyed or*

damaged by even a relatively small, insensitive development. They therefore must be protected".

SG LDP ENV 13 then states that the *"Argyll and Bute Council will resist development in, or affecting, an Area of Panoramic Quality where its scale, location or design will have a significant adverse impact on the character of the landscape unless it is adequately demonstrated that: (A) Any significant adverse effects on the landscape quality for which the area has been designated are clearly outweighed by social, economic or environmental benefits of community wide importance;*
In all cases the highest standards, in terms of location, siting, design, landscaping, boundary treatment and materials, and detailing will be required within Areas of Panoramic Quality".

Therefore, to be granted permission, Dawnfresh must be able to demonstrate that the negative impacts upon landscape of the proposed increase in the number of cages, with added feed hoppers, are clearly outweighed by social, economic or environmental benefits of community-wide importance.

However, the application submitted falls very far short of meeting that requirement.

It may serve the applicant's ambitions to expand yet further at the general expense of the Loch Etive community, but that is very far from constituting social, economic or environmental benefits of community wide importance.

The refusal of two more cages for Etive 6 in 2016

It is also extremely relevant to his application that only recently, in the same Policy Zone of Loch Etive, the nearby farm of Etive 6 was refused permission by the Council in 2015 for two further cages, largely on landscape grounds. That refusal was appealed by Dawnfresh, but the Reporter confirmed the Council's decision to refuse permission in 2016.

As the Reporter recorded, in his decision on the appeal against the Council's refusal to grant permission for two extra cages at Etive 6, at para 3: *"The reason for refusal as given by the planning authority refers to the original planning permission for the fish farm known as Etive 6 and to the context in which that decision was made. The Loch Etive Integrated Coastal Management Plan (2011), a non-statutory plan which does not form part of the development plan, is referenced in the context referred to. The planning authority also references conflict with local development plan policy LDP 3 and the draft supplementary guidance on aquaculture in its argument, in the decision, to the effect that the economic arguments supporting the enlargement of the fish farm would not warrant setting aside the adverse landscape, visual and cumulative impacts identified"*[11].

And at Para 4: *"I am satisfied from my inspection of the area that in views from the road on the north side of the loch and in particular the view from the road leading from Barcaldine to Bonawe (B845 at viewpoint 1 indicated in the visual impact assessment) this extension would have a significant impact in landscape and visual amenity terms. The impact would also be greater in winter particularly from the vicinity of Viewpoint 2 (as indicated in the applicant's visual assessment) than at the time of inspection due to less screening from vegetation located between the road and the loch".*

In comparison to the two cages proposed for Etive 6 and refused, the two new cages now applied for at Etive 4 will be more visible, prominent and intrusive, as viewed from the

[11] Planning appeal reference: PPA-130-2056. Sailean Ruadh, Loch Etive, Argyll and Bute. Appeal by Dawnfresh Farming Limited against the decision by Argyll and Bute Council. Modification of fish farm from 10 No. 80 metre circumference cages to 12 No. 80 metre circumference cages, with increase in mooring area (no increase in biomass). Date of appeal decision: 3 October 2016

viewpoints on the north side of the loch, referred to by the Reporter, and importantly, from the community of Taynuilt, on the south side of the loch, in a way that the two extra cages refused at Etive 6 would not have been. It would therefore be nonsensical to have refused permissions for two extra cages at Etive 6 and now to grant two extra cages at Etive 4.

The benthic impact at Etive 4 and the Council's responsibility

In 2008, the Council's Delegated Report noted what the Environmental Statement stated would be the production cycle at Etive 4 - that rainbow trout would be produced at Etive 4 "*over a 16 month production cycle with harvesting commencing after 11 months. An eight month fallow period will follow before the site is restocked for the next production cycle" and that "the site will be run in conjunction with KFF's [*Kames Fish Farming, now replaced by Dawnfresh Farming Limited] *Port Na Mine site located in Loch Etive and at any time only one of the sites would have fish on site*." It was on that basis that permission was granted in 2008.

At the time, the fallowing of the Etive 4 and Port Na Mine (Etive 3) fish-farms was not designed only for benthic pollution reasons (which is controlled by SEPA under the CAR licencing procedure), but in the planning context, it was aimed at maintaining a fair balance between fish-farmers and other loch users and stakeholders by time-limiting the disturbance through fish-farm activity on the loch as a whole.

In fact, information published by the Fish Health Inspectorate and SEPA shows that since 2009 no such eight month fallow has been conducted, nor has Etive 4 been run such that only either Etive 4 or Port Na Mine (Etive 3) contains fish at any one time. Despite these breaches having been drawn to both Dawnfresh's and the Council's attention in May 2013, and the matter reported by Planning Officers to the Council's PPSL Committee in December 2013, the Council "*resolved to exercise its discretion not to pursue formal enforcement action in seeking compliance with condition 2 in respect of the fallow period and the simultaneous stocking of fish at both Etive 3 and Etive 4. Whilst there has been a breach of condition 2 in that the site is not being operated wholly in accordance with matters specified in the ES, this was regarded as a technical breach rather than one raising planning issues requiring remedy…*".

This lack of proper fallowing at Etive 4 is likely to be the cause of the series of less than satisfactory benthic reports, which look at the level of fish-farmed derived waste (uneaten food, faeces etc) causing organic pollution of the sea bed under and spreading out from a fish-farm. Since 2009, there have been five such self-monitoring surveys, with only two in being satisfactory:

18/08/2016	Satisfactory
30/09/2014	Borderline
20/11/2012	Not Accepted
29/04/2011	Satisfactory
29/07/2009	Borderline

According to SEPA's Fish Farm Manual[12] a borderline classification *"indicate(s) that a site is close to having an unsustainable impact on the environment…in response to such a classification, the responsible person should consider taking further action to ensure continued compliance with standards. Such action may include…an extension to the fallowing period to allow recovery of the seabed".*

[12] http://www.sepa.org.uk/media/114940/fish-farm-manual-attachment-15.pdf

It is worth noting that this 'borderline' condition has occurred despite earlier modelling supplied to SEPA and the Council suggesting it would not do so. This demonstrates that modelling produced by consultants to fish-farm operators, with the specific aim of obtaining consents or permissions, should not automatically be assumed to be representative of what will actually occur in the lochs. In the context of this application, the Council should also not assume that the addition of two more cages, with the associated increase of biomass of farmed fish of 60%, will improve the benthic pollution situation. Logic suggests that 1545 tonnes of farmed fish will produce considerably more pollution than 966 tonnes, even if held in 12 and not 10 cages.

Nor should the Council merely delegate responsibility for benthic pollution to SEPA. The Council has duties to further nature conservation, including of the Priority Marine Feature of burrowed mud in deep waters, as found in Loch Etive at the Etive 4 site. Priority Marine Features are habitats and species which Scottish Natural Heritage consider to be marine nature conservation priorities in Scottish waters. One of the key objectives of the international Convention on Biological Diversity, the UK Biodiversity Action Plan, and the Scottish Biodiversity Strategy (SBS), is to halt the loss of biodiversity, and to reverse previous losses, through action for species and habitats. Habitats and species that are a priority for action towards this aim have been placed on the Scottish Biodiversity List, as required under the Nature Conservation (Scotland) Act 2004, which also places a general biodiversity duty on all Scottish public bodies, such as the Argyll and Bute Council, to oblige them, when exercising functions such as the planning, to "further the conservation of biodiversity".

In its response to the screening and scoping exercise in 2015, Scottish Natural Heritage confirmed that *"this proposal will have an impact upon a priority marine feature habitat and will therefore have an effect on the receptors or issues identified*", although by 2018, in its very short response to the initial screening consultation exercise, SNH felt able to conclude that *"the proposed increase in biomass will not cause impacts that require further consideration by SNH",* an apparent change of view that probably reflects SNH's lack of internal resourcing, rather than a change of environment in Loch Etive.

Overall, FoLE believes that the near 500% increase in trout biomass held on Loch Etive fish farms means that the benthic impact on Loch Etive, as a whole, will have increased significantly in the last 7 years and should now not be permitted to increase further still.

Conclusions

All Scottish public authorities with an influence over Dawnfresh activities on Loch Etive, including the Council, need to take serious note of the ECCLR Committee Report into fish farming, released in March 2018[13], which concludes, inter alia, that:

"there appears to have been too little focus on the application of the precautionary principle in the development and expansion of the sector"

"the current consenting and regulatory framework, including the approach to sanctions and enforcement, is inadequate to address the environmental issues. The Committee is not convinced the sector is being regulated sufficiently, or regulated sufficiently effectively".

[13] Environment, Climate Change and Land Reform (ECCLR) Committee report on the environmental impacts of salmon farming. At http://www.parliament.scot/S5_Environment/Inquiries/20180305_GD_to_Rec_salmon_farming.pdf

“Scotland’s public bodies have a duty to protect biodiversity and this must be to the fore when considering the expansion of the sector. We need to progress on the basis of the precautionary principle”

“The Committee is unclear all agencies are fully discharging their duty in the Nature Conservation Scotland Act 2004 to further the conservation of biodiversity with respect to salmon farming.”

Given the serious concerns of the ECCLR Committee, and for all the reasons stated above, FoLE objects to this application and urges the Council to refuse to grant the planning permission sought. The Council must now recognise that any further expansion of the trout farming operation upon Loch Etive as a whole, is unacceptable.

Yours sincerely

Guy Linley-Adams
Solicitor