Friends Of the Sound Of Jura

Registered Charity No: SC049740
https://www.friendsofthesoundofjura.org.uk

Response of Friends of the Sound of Jura coastal community group to the Argyll and Bute proposed Local Development Plan 2
Paragraphs 5.20 and 5.26 of which express a 'presumption in favour of aquaculture in coastal areas'. Policy 28 supports Sustainable Aquatic and Coastal Development, including finfish farms (without defining 'sustainable').

Friends of the Sound of Jura represents thousands of people who live and work in, or visit mid-Argyll. Our supporters are not all opposed to finfish farming on principle, but they object to how it is being done in Scotland at present, in particular how it will still be done if the industry is allowed to double its capacity by 2030, as it intends.

Argyll's finfish farms harm our seas because they use open nets, which dump pollution, sea lice and fish disease vectors into the sea. They also encourage seals to bite the fish, through the nets, which allows many to escape (further harming wild fish through interbreeding, competition and disease) and leading farmers to shoot the seals. Farmers try to scare the seals away by using Acoustic Deterrent Devices, which also (illegally) disturb cetaceans.
Open net farms are especially prone to fish escaping when they are sited in the high energy locations now being championed by SEPA, in a bid to reduce pollution in sheltered locations.

None of this would happen if the farms used proven, economically viable alternatives, such as those developed by AkvaFuture and used successfully in Norway and Iceland:
https://www.akvafuture.com/
https://salmonbusiness.com/aquafuture-makes-a-profit-out-of-closed-cage-salmon-production-for-first-time/
https://www.undercurrentnews.com/2018/09/05/akvafuture-plans-expansion-to-icelandic-closed-containment-farms/
https://www.undercurrentnews.com/2018/09/06/akvafutures-planned-20000t-iceland-salmon-farm-clears-first-hurdle/

Protecting Brand Scotland and jobs

Growing public awareness of the impact of finfish farms on wild salmon and the wider environment is giving a bad name to Scotland's vitally important food and drink sector. 'Brand Scotland' is a precious commodity global and must not be squandered by the irresponsible behaviour of one sector, at the expense of many others and the wider economy.

Fish farmers rely on the image of their fish being raised in Scotland's pristine seas. The realities are becoming more widely known: The One Show and Panorama have exposed the environmental impacts of fish farming in Scotland, Sir David Attenborough and Jeremy Paxman have made films deploring the practices of fish farming, the NTS and STCS have called for moratoriums on further fish farm development, while, among much other reporting in the press, the Scottish Mail on Sunday (19 May 2019) said that the Coop will no longer print the words 'sustainably sourced' on sandwiches including Scottish farmed salmon, the film '*Artifishal*' is raising awareness of the impact of fish farming, including a petition to the governments of Iceland, Norway and Scotland, that now has hundreds of thousands of signatories.

The rush to expand

The 2018 report of the Rural Economy and Connectivity Committee on the environmental impact of salmon farming made this recommendation:
'The Committee strongly agrees with the view of the Environment, Climate Change and Land Reform Committee (ECCLR) Committee that ***if the industry is to grow, the "status quo" in terms of regulation and enforcement is not acceptable****.*
It is of the view that ***urgent and meaningful action needs to be taken to address regulatory deficiencies as well as fish health and environmental issues before the industry can expand****.'*

The rush to double the capacity of finfish farming is happening before the Scottish Government has acted on this recommendation, in particular without having taken ***urgent and meaningful action to address … environmental issues before the industry can expand****.*

Paramount is that no assessment has been made of the west coast's capacity to assimilate the impacts of a doubling of finfish farming, before allowing this expansion to happen.
The Scottish Government has done no Strategic Environmental Assessment of this plan. Instead the expansion is being considered, one farm at a time, through a planning and regulatory process that is incapable of considering the bigger picture.

Impacts on wild salmon and sea trout

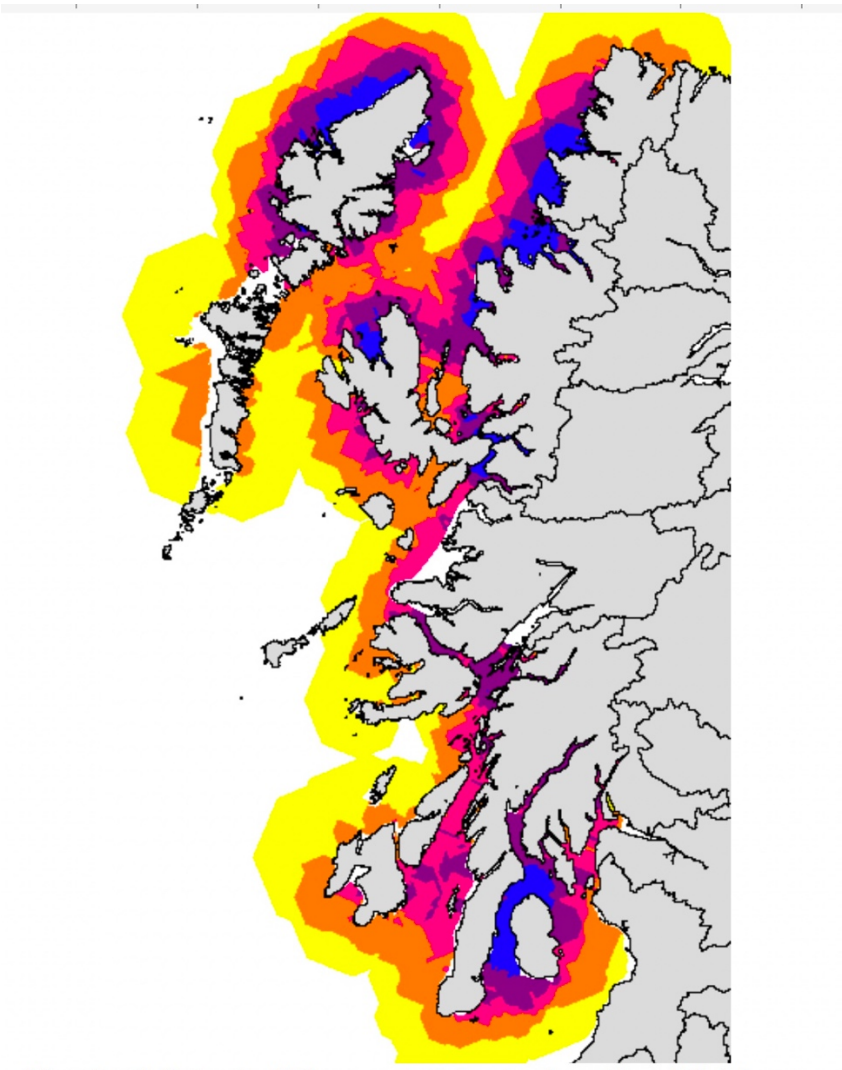
Argyll's and Scotland's wild salmon and sea trout populations are in steep decline. The impact of parasitic sea lice from fish farms are acknowledged by Marine Scotland to be a major factor in this, having significant impacts up to 30km from farms.
Despite this, Argyll and Bute Council, as one of only two consenting bodies for the overall salmon biomass in its region (with SEPA), has done no assessment of the cumulative impact of the sea lice released by all these extra fish, despite sea lice numbers being directly correlated to biomass.

Argyll's planners know that the measures available to them for managing sea lice impacts on wild salmonid fish are wholly inadequate, and in its written responses to the Scottish Parliamentary Inquiry, the Council described the few EMPs it has imposed as planning conditions for this purpose, as 'a sticking plaster' and 'ad hoc'.

The council also acknowledged to the Parliamentary Inquiry that the terrestrial planning process is flawed when dealing with marine issues, and appealed for its responsibility for impacts on wild salmonids to be removed.

The council also frequently complains that the advice it receives from its statutory consultee, Marine Scotland Science, on the risk of impact of farms on the wild salmon and sea trout PMF species, is also inadequate ('sitting on the fence'); rather than offering the site-specific detail that the council needs to make safe decisions.

MSS is perfectly capable of giving site-specific, risk-based advice on sea lice impacts, as shown by the map below, published by RAFTS in 2013, based on MSS-funded research:

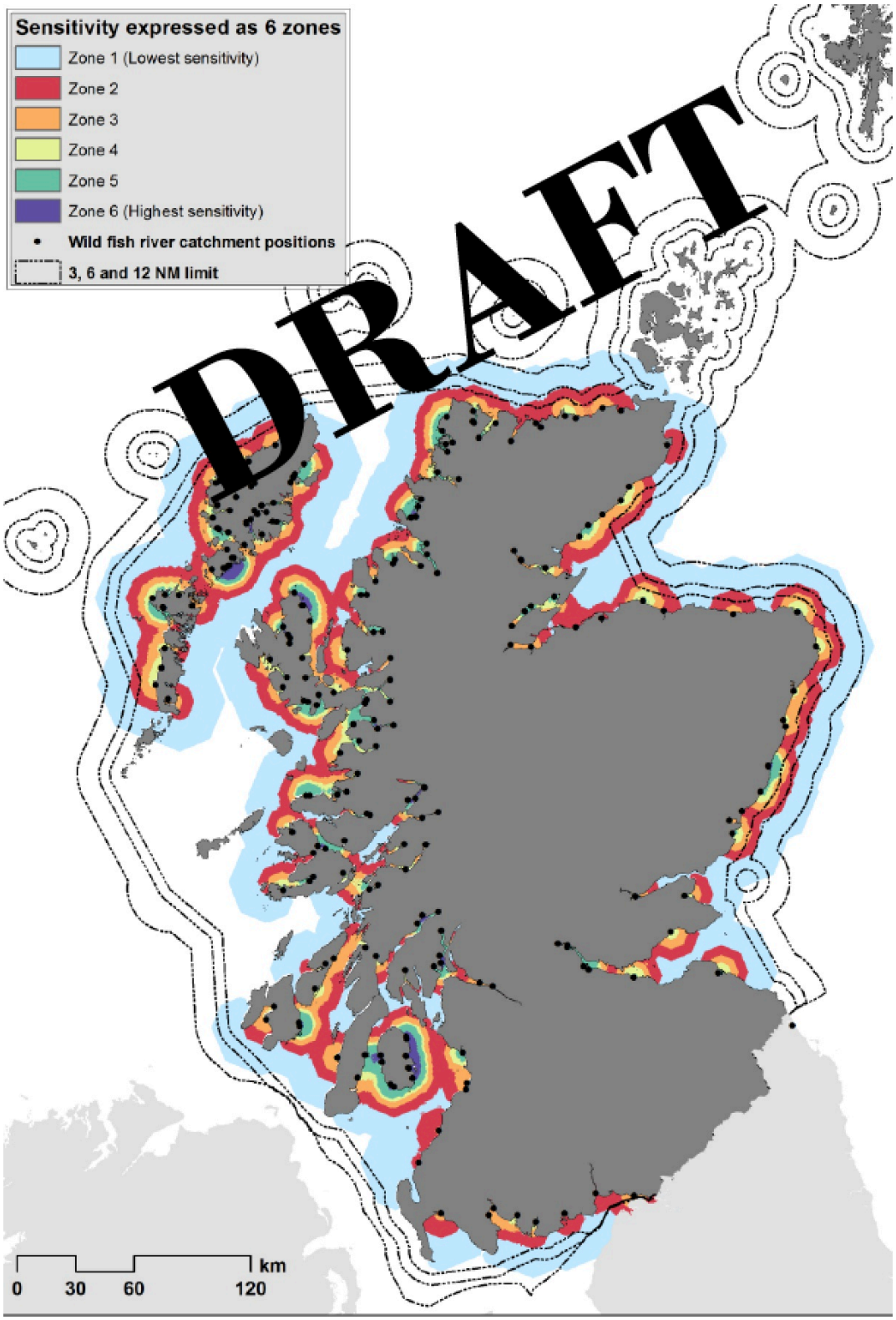


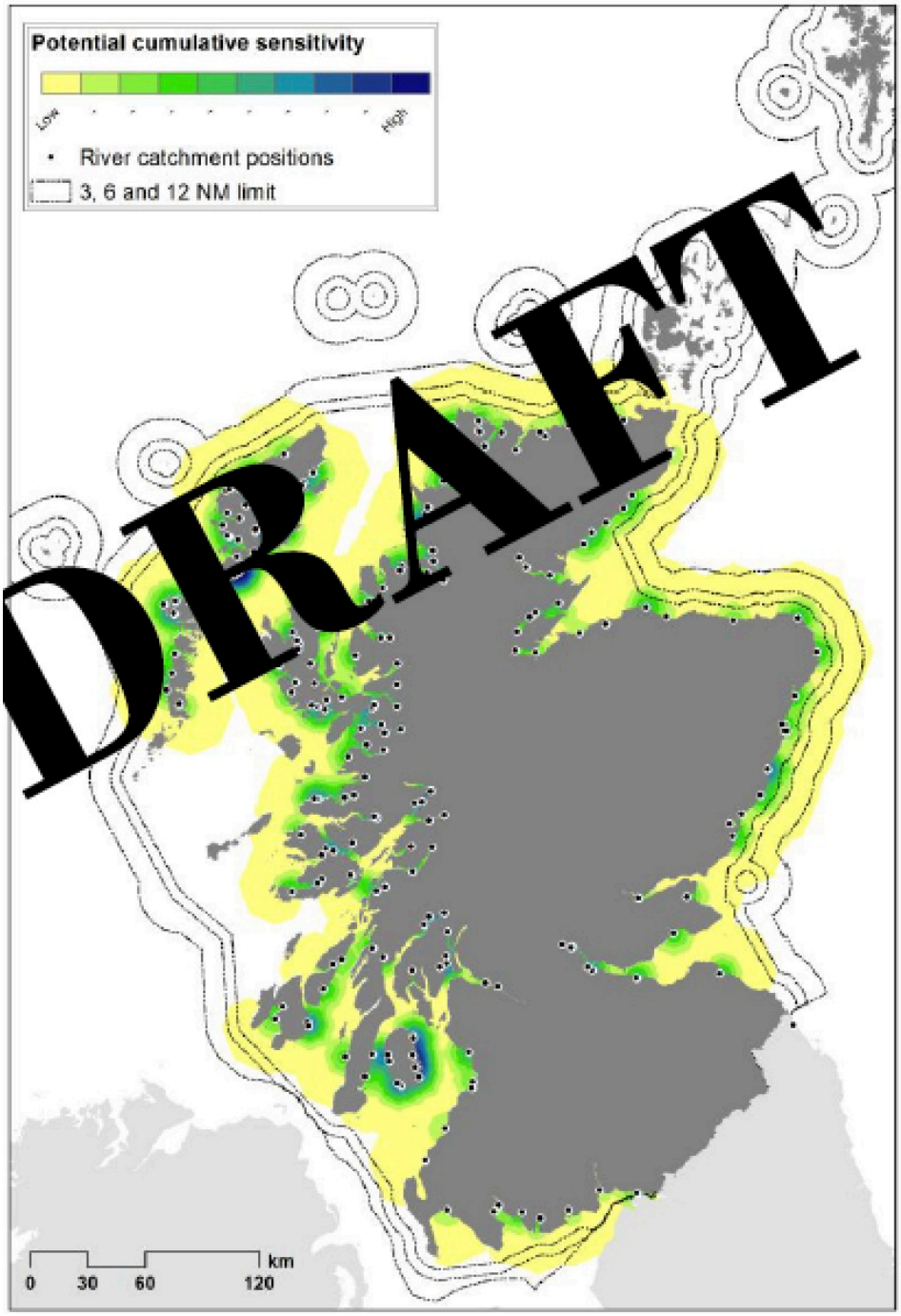
Map 1: v1 Output of River and Fisheries Locational Guidance
(the most sensitive areas are those in blue and purple)

MSS has also produced its own 'heat maps', showing the degree of risk in different areas, that sea lice will harm wild salmon and sea trout. The planners in Argyll and Bute

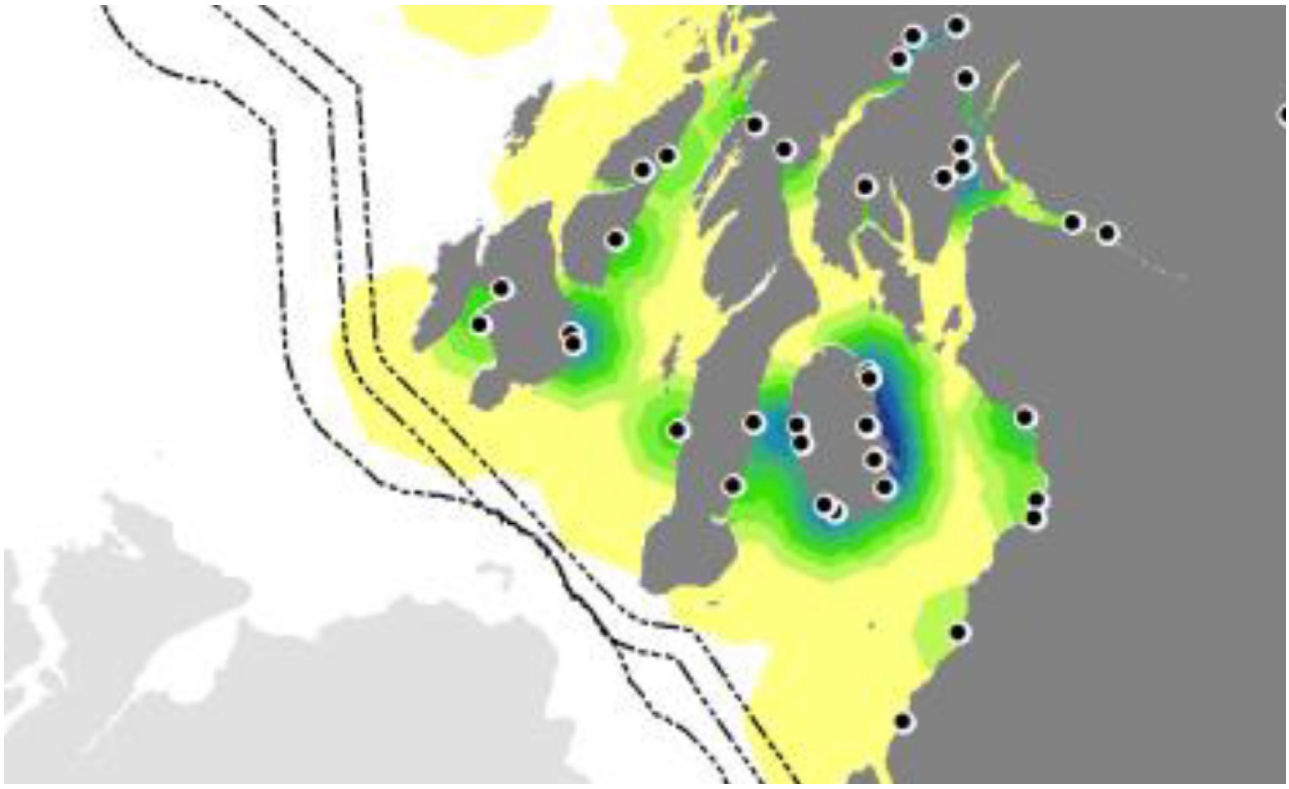
Council are familiar with this ‘Matt Gubbin’s project’, called ‘Aquaculture Constraints and Opportunities’.
Its results include detailed maps, capable of showing the relative degree of risk that sea lice from farms sited anywhere in Argyll will impact wild salmon and sea trout.

Some of these maps are reproduced below.
The first two relate to salmon. The last one is for sea trout.





Sensitivities for salmon weighted by conservation regulations. Less good conservation status more sensitivity.



marinescotland

The science used in preparing these maps means that they represent a mimimum, precautionary assessment of the risk posed to wild salmonids by sea lice.
The Scottish Government's Wild Fish Working Group is now preparing advice to ministers on incorporating this data into updated locational guidance for finfish farms. This is due to be presented to ministers in the next few months.

It would be a dereliction of the Council's biodiversity duty as a public body, for it to press on with consenting extra biomass solely on a farm by farm basis, while the risk of harm from sea lice is known to be high in the areas shown by these two independent studies.

The duty to conserve biodiversity is legally-binding on all Scottish public bodies, as is the precautionary principle.

In 1992 the UK signed The United Nations Convention on Biological Diversity. At its heart is Principle 15, which states that:

> *'In order to protect the environment, the **precautionary approach** shall be widely applied by States according to their capabilities. 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.'*

That agreement in Rio was followed by the UN Convention for the Protection of the Marine Environment of the North-East Atlantic, which the UK signed, and which also incorporated a commitment to adopt a precautionary approach:

> *'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 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.'*

The Precautionary Principle is also mentioned in the **RECC report of 2018** in the following ways:

RECC RECOMMENDATION 40

*Although there is a lack of definitive scientific evidence of the various factors that are contributing to the decline of wild salmon stocks, the Committee is nevertheless of the view that **a precautionary approach should be taken which will seek to minimise the potential risk to wild salmon stocks wherever possible**.*

Location of salmon farms

RECC RECOMMENDATION 45

The Committee shares the view of the ECCLR Committee that the siting of farms in the vicinity of known migratory routes for wild salmon must be avoided

*The Committee understands that there is at present only limited empirical scientific evidence to suggest that wild salmon are infected by sea lice as they pass salmon farms. However, it is noted that the **Norwegian Government** has taken the decision to act decisively on this matter. It **applies a strict precautionary approach and does not issue licences for salmon farms in the vicinity of wild salmon routes**.*

RECC RECOMMENDATION 46

*The Committee is of the view that **a similar precautionary approach must be taken in Scotland to assist in mitigating any potential impact of sea lice infestation on wild salmon**.*

*It therefore recommends that **there should be an immediate and proactive shift towards siting new farms in more suitable areas away from migratory routes and***

that this should be highlighted in the strategic guidance on the siting of salmon farms.

RECC RECOMMENDATION 47

The Committee recognises that it will take time for the range of current activity by the Scottish Government (e.g. Fish Health Framework initiatives, consenting review) and regulatory bodies (e.g. SEPA finfish sector review) and action on the Committee's recommendations to be completed, with outcomes known, agreed and implemented. ***Therefore, until this work is completed and the enhanced regulatory and enforcement regime is in place, the precautionary principle should be applied in a meaningful and effective manner in relation to applications for new sites and expansion of existing sites.***

RECC RECOMMENDATION 48

The Scottish Government should provide strong and clear leadership in ensuring that the precautionary principle is applied, producing appropriate policy and guidance documents as necessary*. These should make clear that the potential impact on the environment, known wild salmon migratory routes and other species must be comprehensively and robustly assessed and fully taken into account as part of the consideration of salmon farm applications.*

RECC RECOMMENDATION 49

The Scottish Government should support and assist planning authorities by ***producing planning guidance which sets out clearly how the precautionary principle should be applied and managed.***

The **ECCLR Committee's report** earlier in 2018 reached these conclusions:

> *344. It is clear to the Committee that the same set of concerns regarding the environmental impact of salmon farming exist now as in 2002 but the scale and impact of these has expanded since 2002. There has been a lack of progress in tackling many of the key issues previously identified and unacceptable levels of mortality persist.*
>
> *345. Over that period there appears to have been too little focus on the application of the precautionary principle in the development and expansion of the sector.*
>
> *346. Scotland is at a critical point in considering how salmon farming develops in a sustainable way in relation to the environment. The planned expansion of the industry over the next 10-15 years will place huge pressures on the environment. Industry growth targets of 300,000 -400,000 tonnes by 2030 do not take into account the capacity of the environment to farm that quantity of salmon. If the current issues are not addressed this expansion will be unsustainable and may cause irrecoverable damage to the environment…*
>
> *354. The Committee is supportive of aquaculture, but further development and expansion must be on the basis of a precautionary approach and must be based on resolving the environmental problems.* ***The status quo is not an option.***

> *355. 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. This needs to be addressed urgently because further expansion must be on an environmentally sustainable basis.*

Under the Scottish Government's 'Working Arrangements for Aquaculture', Argyll and Bute Council is the body responsible for protecting wild salmon and sea trout from harm from fish farms. Given all of the above, the Council should issue no more consents for new or expanded finfish biomass until the Scottish Government issues new spatial guidance that includes sea lice heat maps, and until measures are in place to ensure that the risk of harm to wild salmonids is zero throughout its region.

We also urge Argyll and Bute Council to request that the Scottish Government provides new Planning Advice on the application of the precautionary principle regarding aquaculture, particularly in light of MSS's failure to provide adequate statutory advice, despite having had the means to do since at least 2013.

There are number of other reasons why a presumption in favour of finfish farming is incompatible with the aims of the LDP2:

Socio-Economic Impacts

Despite exaggerated claims by the industry, direct employment on finfish farms is relatively small and increasing automation is reducing this further.

The Clyde Marine Regional Assessment 2017 (http://www.clydemarineplan.scot/wp-content/uploads/2018/02/Clyde-Marine-Region-Assessment-2017.pdf) shows that total direct employment in aquaculture in that area in 2014 was 160 jobs, a decline in numbers of 30 jobs since 2010. GVA had increased to a figure of approximately £11m at the end of 2013 although employment had decreased, most likely due to greater levels of automation across the sector.
This is borne out by the recent SSC application to enlarge its farm at Ardyne, almost doubling the tonnage of fish produced without increasing employment.

The response of the Clyde Fishermens Association to the application to enlarge the fish farm at Ardyne shows several ways in which the Clyde's fish farms are impacting their jobs and livelihoods.

These and environmentally sustainable jobs in other sectors, which bring money into the local economy, are being impacted by this foreign-owned industry, whose profits do not benefit the local economy so much.

Meanwhile the CMRA report's figures show that there were 35,000 sustainable tourism jobs in the same region in 2014, with total sustainable tourism turnover in the wider CMR in 2013 just under £2billion.
The Argyll and Bute Economic Forum Report 2016 said that 15% of all jobs in Argyll and Bute are tourism related.
The Scottish Government report *Tourism in Scotland: The Economic Contribution of the Sector (April 2018)* shows that in 2016, tourism contributed £6 billion or 5% of total GVA and supported 207,000 jobs or 8% of total jobs in Scotland. The report *Scotland's Marine*

Economic Statistics (October 2018) reported that in 2016 aquaculture contributed £216 million or 0.16% of total GVA, supporting 2,300 jobs or 0.09% of jobs in Scotland.

Argyll and Bute's spectacular coast is one of greatest assets. Its beauty helps to retain permanent residents and draw visitors and new residents to the area.
This region should not be degrading such a valuable asset, with little local benefit and for minimal jobs. Instead we should look at how best to enhance and showcase our natural assets, to encourage visitors whose spending will help the communities they visit and create/maintain more jobs.

Visual and Landscape Impact

Argyll and Bute's economy relies greatly on tourism. Visitors do not want to see fish farms, bathers do not want to swim in fish farm pesticides and sewage, sailors and sea kayakers do not want to be pushed from coastlines and safe havens by fish cages.

Two SARF-funded studies (in 2009 and 2012) are often quoted as showing that tourists do not mind seeing fish farms in the landscape.
(*'28823-393273.sarf045-tourism-report-final'* and *'Assessment Of Tourists' Impressions Of Fish Farming And The Scottish Coastline SARF079 52148-55644.sarf079'*).

In fact these studies showed nothing of the sort:
In the 2009 study: 48% of respondents said the expansion of fish farming would negatively impact the scenery, 46% said it would negatively impact the natural environment, a quarter did not want to see an increase in the number of fish farms, over a third didn't want to see them get any bigger and 10% said they would be less likely to visit these locations.

In the 2012 study: *'The effect of a fish farm on the respondents' perception of the area was found to be more negative in 2011 compared to 2008.'* Younger people minded more than those over 65. Six out of eight sailors questioned were very negative, as were 50% of scuba divers interviewed. For *'impact of human activities on respondents' experience of Scotland's coastline*' fish farms had the highest level of negative responses, compared to all other activities. *'The largest negative response was related to the impact on the natural environment and the scenery, as respectively 28% and 20% of respondents scored these negatively*.' '*…a quarter believe that they do have an effect on the beauty or appearance*', *'23% strongly agree or agree that fish farms spoil the appearance of the coast*.' *'26% strongly disagree or disagree that fish farms have no real effect on the beauty or appearance of the Scottish coastline*.' *'10% strongly agree or agree that they would be less likely to visit those places in Scotland where fish farms are sited*.' '*34% of respondents believing expansion of fish farming would negatively impact the natural environment and 37% believed it would negatively impact the scenery.*' *'Approximately one third of respondents did not want to see an increase in the number of fish farms along the Scottish coastline and 41% did not want to see existing fish farms get any bigger*.' *'An increase in the number of fish farms received a less negative response, therefore suggesting a preference towards smaller farms. This is contrary to current practices which tend to focus on expansion of existing sites rather than establishing new sites…*' '*…further expansion of fish farming would make 14% more respondents unwilling to revisit and a further 12% felt their activities would be affected compared to current levels of fish farming*.'

A recent survey by the Buteiful Coasts group included this question:

In general, do you think that fish farms have an impact on tourism in the area they are sited?
76.8% (43 respondents) said they had negative impact.

The Bute Economic Forum Report 2016 contained employment figures specific to Argyll and Bute: At the end of 2013 there were 35,485 total jobs. 5,322 (15%) were in the tourism sector, while only 489 (1.3%) related to finfish.

The report said that:
'F*rom visitor surveys we know what the customer wants from Argyll and Bute:*
SIGHTSEEING AND LANDSCAPE 56%
TRYING LOCAL FOOD 54%
SHORT WALK, STROLL 49%
VISITING A BEACH 43%
LONG WALK, HIKE, RAMBLE 40%
VISITING A HISTORIC HOUSE OR SITE 38%
SHOPPING 38%
CENTRE BASED WALKING 35%
(Source: Visit Scotland Visitor Survey 2011)
So this tells us the key focus areas for our branding: scenery, food, walks and cultural sites. It also stresses five things from an operational point of view:
1. *We need to do everything we can to preserve our landscape.'*

Allowing widespread industrial-scale finfish farm is not a means to preserve Argyll's landscape.
If it expands unchecked, the increased number of jobs in fish farming will never compensate for the numbers of jobs lost in tourism.

A&B Council hopes not only to increase tourism but to halt the fall in the region's population. Allowing fish farms to mar the scenic beauty and degrade the water quality of our coastal waters is not a good way to keep your oung people here, or to tempt newcomers to settle, bringing money to local communities, children to small schools etc.

A healthy, productive sea is a shared public asset. It is wrong to allow its degradation for the profit of private companies, to the exclusion and detriment of other users.

The sea is degraded by finfish farming in the following additional ways:

<u>Pollution</u>

SEPA has confirmed to us that finfish farms are already the largest polluters of Scotland's seas, <u>before</u> they double in capacity. This pollution takes several forms:

All finfish farms discharge **toxic chemicals** into the sea, including the pesticides emamectin benzoate, azamethiphos, cypermethrin, deltamethrin, as well as hydrogen peroxide. Scientific research shows beyond doubt that these kill crustaceans and other organisms, sometimes at considerable distances from the proposed site. These can include commercially fished species. Farms also discharge significant quantities of toxic metals, such as copper and zinc.

This would be unacceptable on land, where farmers and other polluters must bear the costs of processing and disposing of their waste, according to the legally-binding, 'polluter pays' principle, agreed by the UK and Scottish Governments. Fish farm owners bear no such costs, to the detriment of the environment we all share.

Fish farms also discharge very large quantities of **solid organic waste**, most of it as fish faeces.
Dr Richard Luxmoore, senior nature conservation officer of NTS, says that a *'single fish farm, which currently has a maximum size of 2,500 tonnes, produces the sewage equivalent of a town twice the size of Oban'* (The Herald 15 March 2018). So any large fish farm is adding the equivalent sewage of approximately 35,000 people to the surrounding waters.

Recommendation 29 of the RECC report 2018 states: '*The Committee believes that it is essential that the issue of waste collection and removal is given a high priority by the industry, the Scottish Government and relevant agencies. It is clearly one of the main impacts on the environment and needs to be addressed as a matter of urgency.'*

All fish defaecate but the sewage from fish farm is concentrated around Scotland's 200+ fish farm sites where it accumulates on the seabed, killing or otherwise affecting many animals and plants that live there. At the large BDNC farm in Loch Shuna, the area of seabed where SEPA allows pollution to kill everything except two types of burrowing worm is the size of two football pitches. The area beyond that farm which can be impacted by pollution to below SEPA's target for all of Scotland's seabed (of 'good' ecological status) is 186,405 m^2; the same as 26 football pitches.
This is completely unnecessary as closed-containment farms would capture this waste and allow the farmers to dispose of it responsibly, or use it as an input in the circular economy that all of us must accept is the future, for instance to make biogas.

Farmed fish also excrete very large amounts of **dissolved nutrients**.
The industry's vision for its expansion: *'Towards 2030: potential gains and growth'* says '*sustainably achievable projections for 2030 could be in the range of 300,000 to 400,000 tonnes per annum for finfish production'*.
The Scottish Executive's figures in the '*LOCATIONAL GUIDELINES FOR MARINE FISH FARMS IN SCOTTISH WATERS 2004 V1304.pdf'*, show that farmed salmon discharge 48.2 kg of dissolved nitrogen per tonne of fish. Multiplied by 300,000 or 400,000t, that means the expanded industry will discharge 14,460 to 19,280 tonnes of dissolved nitrogen into the sea each year.

Dissolved nitrogen (much of it as ammonia) promotes the growth of harmful algal and bacterial blooms, many of which are deadly for farmed fish and other wildlife.
Marine Scotland advises LPAs of its assessment of the risk that dissolved nutrients will impact waterbodies around fish farm developments. The model it uses to make this assessment is rudimentary and out of date.
As the party responsible for making decisions on the safety of allowing dissolved nutrient discharges into the sea in its region, Argyll and Bute Council should request modern hydrodynamic modelling of dissolved nutrients, in order to assess the cumulative impact of this major source of pollution across its whole area. This has been the normal procedure for all other sources of dissolved nutrients for years, supervised by SEPA. Fish farming is unique among polluting industries in that it continues to be given special treatment.

The same hydrodynamic modelling has been done by SAMS in Oban for the dispersion of sea lice larvae. This must form part of the Council's assessment of the risk of all farm proposals to wild salmonids.

During very calm weather in 2019, a harmful algal bloom killed thousands of farmed salmon at several farms in upper Loch Fyne, including Quarry Point and Furnace. Argyll and Bute Council had recently allowed these farms to abandon their previous biomass caps.
On what evidence does Argyll and Bute Council rely to be certain that this and other harmful blooms were not caused by dissolved nutrients released by fish farms?

Acoustic Deterrent Devices

Fish farms use ADDs to deter seals that might harm their nets. As a last resort they also shoot seals, which is terrible for the reputation of salmon farming and for Scotland's reputation as a wildlife tourism destination.
The effectiveness of ADDs on seal predation was questioned in the ECCLR report.
ADDs disturb porpoises, dolphins and whales. This is illegal and unnecessary, as viable alternatives are used by the same companies elsewhere, for instance correctly tensioned double nets.

Wild Wrasse Populations

The use of cleaner fish is a multiplier of the unsustainability of fish farming. The capture of wild wrasse for this purpose decimates their wild population and causes imbalances in the environments they are taken from. They are all killed after 22 months, when the salmon/trout are harvested. All these cleaner fish need to be fed, which means that even more feed is sourced unsustainably.

Unsustainably sourced feed

It takes 1.7 kg of dry fishmeal to make enough feed to produce 1 kg of farmed salmon. This much dried fish meal requires 5 kg of wild 'forage' fish to be caught, which is a waste of precious natural resources. Scotland's fish farming industry uses the same amount of fish as is eaten by the entire UK population in one year, to produce the fish feed it gives to farmed salmon, according to the NGO Feedback's '*Fishy Business*' report.

Recirculatory Aquaculture Systems

It is time to change and Scotland is lagging behind the rest of the world: Denmark has now banned open cage fish farming in the sea. Washington State in the US has banned open cage fish farms while Alaska has had such a ban for decades. All fish farms are being removed from the sea in British Columbia, by order of the Canadian government. Norway is encouraging the development of land-based recirculating aquaculture systems (RAS).

The major overseas markets sought by Scottish producers, the US and China, are also pursuing alternatives to open cage farms. In China they are beginning to farm salmon on land as well as on ships. In the US, land-based Recirculating Aquaculture Systems (RAS) are under development in Maine, Virginia, Maryland and California. Atlantic Sapphire, already successfully operating a RAS in Denmark, is set to produce 9,500 tonnes of salmon in 2020 at its new RAS in Miami.

Atlantic Sapphire intends to produce 90,000 tonnes of salmon per year - 50% of the current production of all the salmon farms in Scotland.

RAS production is cutting the food miles and carbon footprint associated with eating imported salmon, as well as creating fertiliser and biogas from the waste produced by the fish.
In comparison to this, why will anyone in America buy Scottish fish, that is shown to be treated with pesticides, fouling the sea and that needs to be transported thousands of miles?
Younger people especially are increasingly aware of these issues.

If Brand Scotland's salmon are to exist for another decade, the industry must stop using open cages.

In addition, a recovery of wild salmon and sea trout populations would help to restore the rural jobs provided by the anglers who used to come to Scotland for salmon fishing. The Sunday Post (5th May 2019) reported: '*The general consensus amongst anglers is that an industry worth over £120m to the economy, supporting in excess of 3,000 jobs and generating an average spend on fishing trips to Scotland by tourists of around £5,000 per trip is largely being ignored. That has to end.*' (https://www.sundaypost.com/fp/what-we-are-risking-is-an-ecological-disaster-as-potent-as-losing-eagles-from-our-skies-but-there-is-still-much-we-can-do-today-as-a-national-icon-of-scotland-fights-for-its-very-survi/).

Local authorities that continue to give permission for new fish farms without fully assessing the risks to wild fish will find themselves presiding over the extinction of wild salmon.
Surely this is unthinkable to Argyll and Bute's councillors, planning department and most of its population?
Where there are so many unknowns about the impacts on wild fish in particular, the precautionary principle must apply until these uncertainties are resolved by better data.

2020 has been declared Scotland's Year of Coasts and Waters. Let's make sure Argyll's new Local Development Plan does not undermine its magnificent coasts and marine environments.

A&B Council states numerous times throughout the LDP2 document that developments will not be considered at the expense of the environment. Below are excerpts from the LDP2 which we believe are incompatible with doubling industrial finfish farming in Argyll's waters, using open nets:

> *P4 Vision…A successful, sustainable place; A low carbon place; A natural, resilient place*
>
> *P5 The vision for the LDP2 is: ….an economy based on sustainable development that benefits both economically and socially from its outstanding natural environment whilst protecting those very same special qualities*
>
> *P5 LDP2 policies and design guidance promote the creation of safe, inclusive and high quality places where people want to live, work, invest and visit and where they are encouraged to lead active lifestyles.*

P7 High Quality Environment: the LDP2 through its policies and design guidance will protect, conserve and enhance qualities of the natural, historic and built environment

P8 The spatial strategy for the LDP2 seeks to promote a simpler and more flexible approach to new development in Argyll and Bute, whilst recognising the importance of all new development encompassing a sustainable approach…..without compromising the ability of future generations to meet their own needs.

P22 Climate Change and Principles of Sustainable Development: 3.37Climate change caused by the burning of fossil fuels coupled with the consumption of natural resources and the generation of waste now represent existential threats to human civilisation globally

P23 3.40 ….Waste must also be reduced to avoid polluting our environment….

P23 3.43 …Encouraging development that is sustainable in terms of design, siting, types of materials and energy consumption; Protecting and enhancing our biodiversity through our policies, the ecosystem approach taken in the Local Biodiversity Action Plan (LBAP) and the inclusion of a biodiversity checklist for significant development; Safeguarding our existing waste sites and reducing waste at every opportunity; Minimising the impact on the water environment both in terms of abstraction and pollution

P24 3.44 The LDP2 seeks to enable the delivery of long term sustainable development in order to…maintain and improve the quality of life of those living and working in Argyll and Bute; and to protect our outstanding natural and built environment

P24 Policy 04 – Sustainable Development; k) avoid having significant adverse impacts on land and water environment

P26 – 28 High Quality Places – Green Infrastructure 4.6 – 4.10
(Could anyone say that fish farms in any way meet these criteria?)

P27 High Quality Places – Policy 06 Green Infrastructure
(again, could anyone say that fish farms in any way meet these criteria?)

P28 4.19 Sustainable development is defined within the SPP as being development that meets the need of the present without compromising the ability of future generations to meet their own needs

P33 Policy 14 – Bad Neighbour Development

P41 5.3 … The strategic regeneration and environmental improvement aims with a particular focus on Dunoon, Rothesay and Campbeltown will support the delivery of an inclusive economy. The natural and built environments are both key to the economic success of the area. It is , therefore, important that new development safeguards these assets, and, where appropriate, seeks to enhance Argyll and Bute's rich resource….

P49 Diagram 6 Tourism
(Can anyone look at this map, showing cyclists, kayakers, walkers, sailors, artists, motorists, ferry passengers, all expecting to find places of interest, spectacular scenery, etc - and think, 'what a great place to put fish farms'?)

P52 Supporting Sustainable Aquatic and Coastal Development 5.18 The coastal area of Argyll and Bute is an exceptional asset. The 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 coast are protected from inappropriate development, and development that requires a coastal location is directed to the least environmentally sensitive areas.
(Isn't this exactly why fish farms should not be allowed to expand without first understanding their impact and Argyll's capacity to absorb those impacts without any harm ensuing?)

P85 Water Quality and Environment 7.47, 7.48, Policy 59-Water Quality and the Environment
(Could anyone say that fish farms in any way meet these criteria?)

P87 – 88 Waste Related Development and Waste Management 7.52 – 7.56, Policy 63 Waste Related Development and Waste Management
(We support the Zero Waste Plan but wonder why individuals are encouraged/ required to do such things on land, when a fish farm can dump all its unused fish feed, antibiotics, pesticides and fish faeces into the sea?)

P94 High Quality Environment 9.1 Argyll and Bute's natural environment, including our biodiversity, geodiversity, soils, landscapes, seascapes and night skyscapes is recognised by a wide range of stakeholders as being truly outstanding, both in diversity and quality, and is protected through established European and UK legislation, national and local planning policies. It is also increasingly recognised as a significant economic and social asset that local communities benefit from both directly, through the provision of jobs associated with our environment, and indirectly, through increasing our sense of well-being. Therefore, the sustainable development principles and policies of this plan seek to safeguard the natural environment in all its facets.
(This is exactly why industrial fish farms should not be sited all along our coastline)