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Mr David Paisley,  
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Department of Agriculture, Food and the Marine,  
National Seafood Centre,  
Clonakilty,  
Co. Cork,  
P85 TX47.

8<sup>th</sup> September 2022

Our Ref: SCP220401.2

## **Re. Draft Seafood Development Programme 2021-2027 and SEA Environmental Report**

Dear Mr Paisley,

We acknowledge your notice, dated 27<sup>th</sup> July 2022, in relation to the Draft Seafood Development Programme 2021-2027 (the 'Plan') and SEA Environmental Report.

The EPA is a statutory environmental authority under the SEA Regulations. In our role as an SEA environmental authority, we focus on promoting the full and transparent integration of the findings of the Environmental Assessment into the Plan and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the plan. Our functions as an SEA environmental authority do not include approving or enforcing SEAs or plans.

The EPA recognises the cultural and economic importance of the fishing sector to the rural economy in Ireland. The EPA's [Ireland's Environment - An Integrated Assessment](#) (SOER2020) addresses Ireland's the marine environment stating that while our marine waters are clean and reasonably healthy, they are not as biologically diverse and productive as they could be. They are affected by several human-induced pressures including fishing, climate change and marine litter such as plastics.

As an island nation with an extensive marine area, Ireland needs to ensure that robust governance and legal frameworks are in place to protect marine ecosystems and the services they provide to society. There needs to be governance systems in place that coordinate and integrate the

implementation of relevant directives where there are crossovers, such as those covering marine strategy, marine spatial planning, water quality, waste, biodiversity and protecting fish stocks.

Our observations in this submission are supplementary to those raised at the SEA scoping stage. The key points of this submission are highlighted below and relate to integration of the SEA into the Plan, transboundary consultation, alignment with other key national plans, monitoring of significant environmental effects, food waste prevention and management of end of life fishing gear. It will be important that the Plan provides solutions to address the key points raised in this submission to ensure that the Irish seafood industry is an environmentally sustainable sector of the economy.

#### 1. Integration of SEA into the Seafood Development Programme

The Plan should include clear commitments to implement the recommendations and mitigation measures identified in the SEA Environmental Report. The integration of the key findings in the SEA Environmental Report and the Plan will reinforce and maximise the potential for positive environmental outcomes.

In order to ensure the effectiveness of the environmental assessment the integration of the SEA should be completed prior to submitting the Plan to the Commission for approval.

#### 2. Transboundary Consultation

The SEA ER should provide clarity regarding the level of transboundary consultation that has been undertaken in preparing the Plan and the associated SEA. It is clear that transboundary consultation has been undertaken with the appropriate authorities in Northern Ireland at scoping stage, however, given the nature of the seafood and fisheries industry in Ireland it may be appropriate to undertake transboundary consultation with authorities in England, Wales and Scotland and any other EU Member States fishing in Irish waters. Where transboundary consultation has been undertaken with non-EU member states, the relevant requirements of the SEA protocol<sup>1</sup> under the ESPOO Convention should be taken into account and referred to.

#### 3. Alignment with other key plans and programmes

The Department of Agriculture, Food and the Marine (DAFM) should also ensure that the Plan aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Marine Planning Framework.

#### 4. Monitoring

Article 10 of the SEA Directive states that the significant environmental effects of implementing a plan/programme shall be monitored in order, *inter alia*, to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action. Table 10.1 of the SEA environmental report sets out the proposed SEA monitoring for any significant environmental effects for the implementation of the Plan. However, the monitoring requirements set out Table 10.1 relate to the monitoring for the National Marine Planning Framework and the draft Programme of Measures for the Marine Strategy Framework Directive. This proposed monitoring framework

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<sup>1</sup> <https://unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocolenglish.pdf>

does not allow for monitoring of the significant environmental effects of the implementation of the Seafood Development Programme. The proposed monitoring for the implementation of this Plan needs to be revised to meet the requirements of the SEA Directive. The monitoring framework should outline various data sources, monitoring frequencies and responsibilities for undertaken the monitoring.

5. Food waste prevention

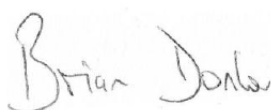
To support the stated vision for the Plan, the impact of process waste, in particular food waste, from the sector should be considered. Preventing food waste should be the top priority and any unavoidable food waste should be managed in accordance with the food waste hierarchy, maximising reuse and valorisation of resources. The Plan should also include a commitment to reduce food waste in line with EU and national policies.

6. Management of end-of-life fishing gear

The plan should take into account and reflect new and emerging requirements in relation to the design of fishing and aquaculture equipment and the management of end-of-life fishing gear. The Plan should be aligned with and identify opportunities to support and advance commitments relating to the management and design of fishing gear in various legislation and national policies, including the Single Use Plastics Directive, the Extended Producer Responsibility Scheme and Ireland's Whole of Government Circular Economy Strategy 2022-2023

If you have any queries or need further information in relation to this submission, please contact me directly. I would be grateful if you could send an email confirming receipt of this submission to: [sea@epa.ie](mailto:sea@epa.ie).

Yours Sincerely,



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**Dr Brian Donlon**  
*Senior Scientific Officer*  
*Office of Evidence and Assessment*

## **Appendix 1: Comments on the SEA Environmental Report**

### **General Comments**

It should be noted that the Plan put out for public consultation does not seem to be consistent with that on which the Strategic Environmental Assessment was undertaken. A fundamental aspect of the SEA process is for the assessment and the Plan to be undertaken in parallel to ensure that environmental considerations are fully integrated into the Plan prior to its adoption.

### **Outline of the contents of the plan**

The overview of the Plan should be updated to ensure it refers to the correct version of the Plan. In addition, Section 2 of the SEA ER is difficult to understand. It should be clear in explaining that the Seafood Development Programme is the mechanism for allocating funds from the European Maritime Fisheries and Aquaculture Fund.

### **Relationship with other plans and programmes**

We note the inclusion of Figure 4-5 – *Hierarchy of Relevant Fisheries and Maritime Plans and Relevant Plans to Marine Planning and subject to SEA and AA*, but this does not seem to align with the text of Section 2 explaining the relationship between the Seafood Development Programme and the National Strategic Plan for Sustainable Aquaculture Development, nor does it explain either how the Plan is related to the MSFD, OREDP, CFP, MPA and MSP (or indeed what the acronyms stand for). Both the SEA environmental report and the Plan would benefit from inclusion of a clear schematic showing the hierarchy and relationships of the key seafood, marine and fisheries related plans e.g. Seafood Development Programme, National Strategic Plan for Sustainable Aquaculture Development, FoodVision 2030, National Marine Planning Framework, Programme of Measures for the Marine Strategy Framework Directive. Furthermore, it is important that there is consistency and alignment between the goals and implementation of these plans and programmes.

We welcome the reference to the United Nations Sustainable Development Goals. However, a key goal to consider in the context of this Plan is Goal 14: Life below water – conserve and sustainably use the oceans, sea and marine resources for sustainable development. Given that the vision for the Plan is to “*To support a resilient, climate smart, environmentally sustainable and profitable Irish seafood sector.....*”, it is crucial that the relationship between this Plan and how it will contribute towards achieving SDG 14 in terms of over-fishing, eutrophication, marine pollution, acidification and ocean warming be considered as part of the SEA.

In addition, Figure 4-3 *Relevant EU Legislation* lists the Shellfish Water Directive. It should be noted that the Shellfish Directive was repealed in 2013. All responsibility for legislative protection of shellfish waters was subsumed into the Water Framework Directive. Consequently, the list of plans and programmes should be reviewed to ensure that reference is not being made to revoked legislation or previous versions of plans.

### **Relevant aspects of the current state of the environment**

This is an extremely detailed description of the state of the environment. The clarity of this part of the assessment would be enhanced if more concise information was presented. The baseline information presented is limited information relating to fish only– the core element of the Plan. The

baseline information would benefit from the inclusion of information relating to the state of certain stocks within the Irish fishing zones. Chapter 8 ([The Marine Environment](#)) of the SOER report notes that the status of commercial fish and shellfish stocks in Ireland is not fully compatible with Good Environmental Status. Ensuring that Ireland implements a transition to sustainable fisheries, and complies with scientific advice and catch limits, is crucial to ensure not only the continued availability of this resource but also the health of the associated food webs.

#### Likely evolution of the environment in the absence of the Plan

It would be useful to discuss the likely evolution of the environment without the Plan to include discussion around the NDP, the Common Fisheries Policy, expected climate related policy, etc., in place. Furthermore, this discussion would benefit from consideration of the evolution of the environment without the Plan in relation to trends in global warming, the biodiversity crisis, etc.

#### Assessment of Alternatives

The assessment of alternatives includes a comprehensive discussion of how the alternatives were considered. However, the assessment of alternatives would have been greatly enhanced had it included a discussion of the alternatives considered under the variations of the Plan as it was developed. For example, discussing specific objectives that differ between the Plan presented for public consultation and that on which the SEA was undertaken.

#### Mitigation Measures

We note Table 9-1 National Mitigation Measures which proposes mitigation measures to avoid or minimise potential significant effects from the implementation of the Plan. Many of the mitigation measures proposed in the SEA relate to the National Marine Planning Framework and other national plans including new Offshore Renewable Energy Development Plan II, currently in preparation. It is not clear from the SEA environmental report as to how these measures apply to the Seafood Development Programme.

The Plan should include clear commitments to implement the mitigation measures proposed. We also recommend including a section in the Plan showing how the findings of the SEA have been integrated into the CSP.

#### Monitoring

The Monitoring Programme should be flexible to take account of specific environmental issues and unforeseen adverse impacts should they arise. It should consider and deal with the possibility of cumulative effects. Monitoring of both positive and negative effects should also be considered. The monitoring programme should set out the various data sources, monitoring frequencies and responsibilities.

If the monitoring identifies adverse impacts during the implementation of the Plan, DAFM should ensure that suitable and effective remedial action is taken.

Article 10 of the SEA Directive states that the significant environmental effects of implementing a plan/programme shall be monitored in order, *inter alia*, to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action. Table 10.1 of the SEA environmental report sets out the proposed SEA monitoring for any significant environmental effects for the implementation of the Plan. However, the monitoring requirements set out relate to the monitoring for the National Marine Planning Framework and the draft Programme of Measures

for the Marine Strategy Framework Directive. This proposed monitoring framework does not allow for monitoring of the significant environmental effects of the implementation of the Seafood Development Programme. The Directive does not distinguish between monitoring for positive/negative effects. There should be some clear environmental effects related to the implementation of this Plan that could be monitored, e.g. reduction in by-catch, reduction in marine litter, purchase of more energy efficient engines/motors, etc.

In addition, the monitoring framework should consider including monitoring parameters relating to over-fishing, eutrophication, marine pollution, acidification and ocean warming in order to monitor Ireland's progress towards achieving SDG 14, as discussed earlier in this submission.

Guidance on SEA-related monitoring is available on the EPA website at <https://www.epa.ie/publications/research/environmental-technologies/research-306-guidance.php>

#### State of the Environment Report – Ireland's Environment 2020

In finalising the Plan and integrating the findings of the SEA into the Plan, the recommendations, key issues and challenges described in our State of the Environment Report [Ireland's Environment – An Integrated Assessment 2020](#) (EPA, 2020) should be considered, as relevant and appropriate. This should also be taken into account, in preparing the Plan and SEA.

#### Future Amendments to the Plan

You should screen any future amendments to the Plan for likely significant effects, using the same method of assessment applied in the “environmental assessment” of the Plan.

#### SEA Statement – “Information on the Decision”

Once the Plan is adopted, you should prepare an SEA Statement that summarises:

- How environmental considerations have been integrated into the Plan;
- How the Environmental Report, submissions, observations and consultations have been taken into account during the preparation of the Plan;
- The reasons for choosing the Plan adopted in the light of other reasonable alternatives dealt with; and,
- The measures decided upon to monitor the significant environmental effects of implementation of the Plan.

You should send a copy of the SEA Statement with the above information to any environmental authority consulted during the SEA process. Guidance on preparing SEA Statements is available on the EPA website at the following link: <https://www.epa.ie/publications/research/environmental-technologies/research-306-guidance.php>

#### Environmental Authorities

Under the SEA Regulations, you should consult with:

- Environmental Protection Agency;
- Minister for Housing, Local Government and Heritage;
- Minister for Environment, Climate and Communications; and,
- Minister for Agriculture, Food and the Marine.

## Appendix II: Comments on the draft Seafood Development Programme 2021-2027

### General comments

The Plan is an extremely detailed and complicated Plan. However, due to the manner in which it is written, it is difficult to understand what it will achieve and therefore what the impacts of the Plan will be. The structure of the Plan is perhaps a prerequisite for the Commission to ensure consistency between Member States. However, in order to address the issue of complexity and ensure clarity and transparency for all stakeholders and the public, the summary document would benefit from the inclusion of an explanation of the relationship between the European Maritime Fisheries and Aquaculture Fund (EMFAF) and the Seafood Development Programme. It would also be useful to highlight what actions will be undertaken to address the various priorities of the EMFAF.

Consideration should also be given to the naming of the Plan where it refers to 2021. There is merit in considering if the Plan should refer to 2022/23 in the title depending on the intended date for adoption. In addition to this, the name of the Plan is interchanged in both the SEA environmental report and the Plan itself between the EMFAF and the Seafood Development Programme. The naming convention for the Plan in both documents should be consistent.

### Vision

The draft Plan states its vision as follows: *"To support a resilient, climate smart, environmentally sustainable and profitable Irish seafood sector in order to maximise its contribution to jobs and growth and maintain the economic and social activities of our most vibrant and sustainable coastal communities"*

To support the stated vision for the Plan, the impact of process waste, in particular food waste, from the sector should be considered. Preventing food waste should be the top priority and any unavoidable food waste should be managed in accordance with the food waste hierarchy, maximising reuse and valorisation of resources.

### Integration of the SEA and Appropriate Assessment Mitigation Measures

The Plan should include clear commitments to implement the recommendations and mitigation measures identified in the SEA Environmental Report. The integration of the SEA Environmental Report and the Plan will allow for cross-checking thereby reinforcing and maximising the potential for positive environmental outcomes.

A high level of integration between the Plan and the SEA environmental report will contribute towards robust governance to protect marine ecosystems and the services they provide to our society.

In order to ensure the effectiveness of the environmental assessment the integration of the SEA should be completed prior to submitting the Plan to the Commission for approval.

## PFAS Compounds

The Plan should be mindful of the presence of PFAS<sup>2</sup> compounds (per- and poly-fluoroalkyl substances) in the marine environment. The Plan should consider research focusing on the pathways by which PFAS compounds can enter the food chain. These PFAS substances can be found in waters, wastewater, leachate, soils, waste, packaging, food and in people as evidenced from human biomonitoring studies<sup>3</sup>. Many PFAS pose serious risks to both human health and the environment, the extent of which is currently not fully known, but what is known about these threats is they include increasing the risk of cancer, reprotoxic effects, reduced body immune response, endocrine disruption and increased cholesterol levels.

## Food Waste Prevention

Government Policy supports the UN Sustainable Development Goals and EU ambition to reduce food waste by 50% by 2030, e.g. Climate Action Plan, Waste Action Plan for a Circular Economy, Food Vision 2030. The Government is preparing a National Food Waste Prevention Roadmap that will set out an overarching strategy and priority actions for the delivery of Ireland's target of halving food waste by 2030.

Reducing food waste is an effective climate action. Food waste is a significant contributor to climate change; it is estimated that food waste generates about 8% to 10% of global greenhouse gas emissions.

Reducing waste also has potential for cost savings. Many businesses underestimate how much food waste is costing them (international studies estimate that it could be as high as 4% of turnover), reducing food waste therefore has potential to improve businesses turnover.

Through the Circular Economy Programme, the EPA-led food waste prevention programme drives awareness and action on food waste prevention, and develops supports to lead to measured reduction in food waste in households and businesses. A priority action for the programme is to establish a robust data set for food waste quantities across the supply chain, i.e. processing and manufacturing, retail and distribution. This will provide a solid baseline from which awareness and interventions can be designed and measured. In addition, the EPA has developed a national food waste measurement protocol to support a consistent approach to measurement in food sector businesses and resources and guidance are being developed to support capacity building in the sector for food waste reduction (see below for more information). To showcase approaches and share insights on food waste reduction, the EPA is also gathering good practice examples that are published on <http://foodwastecharter.ie> website.

The Plan should include a commitment to reduce food waste in line with EU and national policies.

## Innovation & Demonstration

Ireland's Circular Economy Programme (2021-2027) is the driving force for Ireland's move to a circular economy. The vision for the Programme, which is led by the EPA, is an Ireland where the

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<sup>2</sup> Poly- and Perfluoroalkyl Substances

<sup>3</sup> [HBM4EU – science and policy for a healthy future](#)



circular economy ensures that everyone uses less resources and prevents waste to achieve sustainable economic growth. One of the ways that the Circular Economy Programme works is providing innovation funding supports to organisations to drive circular economy activity in Ireland. Green Enterprise<sup>4</sup> is the programme's annual innovation funding call that supports organisations to pilot/trial circular economy related business models or processes. The thematic areas for the Green Enterprise call are linked to the Circular Economy Programme priority areas<sup>5</sup> and organisations are funded up to €100k for short-term (18-24 month) projects. The following are examples of projects that have been (or are currently being) funded through Green Enterprise.

- [Irish Fish Cannery project](#) (completed) used Design of Experiments to structure their approach to production improvements at the facility. The project achieved a 26% reduction in waste per tonne of product produced. Energy was also saved due to the changes made, with a 26% reduction in heating oil and 28% in energy use per tonne of product, due to optimising cook times and reducing reworks.
- The NetMap project (completed) provided a resource of mapping the management of waste fishing nets and rope (FNRs) in Ireland. The project demonstrated the potential for using this waste as a resource which could have societal, environmental and economic benefits. The project demonstrated reusing wasted fishing nets in concrete as a material for the construction industry.
- The Sea Synergy project (ongoing) is working on the full aspect of the fishing net reuse process, from collection and cleaning to reprocessing and new product creation.

The Plan should include a section on innovation to promote circular economy in the Irish seafood industry.

### End of life fishing gear

The plan should take into account and reflect new and emerging requirements in relation to the design of fishing and aquaculture equipment and the management of end-of-life gear.

In terms of management of end of life gear, the Single Use Plastics Directive requires Member States to monitor fishing gear placed on the market in the member States and waste fishing gear collected, and to report annually to the Commission. Member States will need to establish national minimum annual collection targets of waste fishing gear containing plastic for recycling. An Extended Producer Responsibility Scheme for producers of fishing gear containing plastic must be established by 31<sup>st</sup> December 2024.

In terms of product design, the Single Use Plastics Directive commits to developing a harmonised standard for the circular design of fishing gear to encourage preparing for re-use and facilitate recyclability at end of life.

There are also national commitments to significantly increasing the circularity of the Irish economy in Ireland's Whole of Government Circular Economy Strategy 2022-2023.

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<sup>4</sup> [Green Enterprise | Environmental Protection Agency \(epa.ie\)](#)

<sup>5</sup> Food, Water & Nutrients, Packaging, Plastics, Textiles, Construction & Buildings, Batteries & Vehicles, Electronics & ICT.

The plan should align with and identify opportunities to support and advance these commitments in the various legislation and national policies.

### The Diversity and Resilience of Kelp Ecosystems in Ireland

In Ireland, kelp dominates rocky substrata along moderately exposed coastline (approximately 3,010 km out of the 7,524 km of national shoreline). These ecosystems potentially provide a range of ecosystem services (ESs), including important primary and secondary production in local or adjacent habitats, carbon fixation and sequestration, and protection of coastal habitats via physical attenuation of wave action, food web and ecosystem structuring, and recreational activities.

Knowledge gaps remain in our understanding of kelp forests in Ireland and the potential for fishing related activities to impact on the kelp forests. Filling these gaps would provide important information for calculating Ireland's "blue carbon" mitigation strategies for meeting the Paris Agreement targets and defining the ESs provided by kelp, including how they add to nature's contributions to people. The indicators and the satellite remote-sensing tool piloted in the recent EPA research report (Schoenrock, et al, 2022<sup>6</sup>) should be used for future management of kelp on the Irish coast under the Habitats Directive. These ecosystems should be specifically identified in both the Marine Strategy Framework Directive and the Water Framework Directive as monitoring targets for good environmental or ecosystem status. The Plan should consider research focussing on the knowledge gaps relating to our understanding of kelp forests in Ireland, in particular research relating to the impact of fishing activities on these areas of our marine environment.

### Training, industry collaboration and collaboration with public bodies

The Plan makes reference to facilitating training, industry collaboration and collaboration with public bodies. In addition to developing supports and resources, the EPA also works with stakeholders and recognised training bodies such as Solar (whose Skills to Advance Green Skills programme is delivered through the Education Training Boards) and Skillnet Ireland, to ensure good practice food waste quantification and prevention is included in training for industry personnel. The Plan could promote linkages with these between the seafood industry and these education and training bodies.

### Maintenance of fishing ports

The Plan should address any requirements for capital or maintenance dredging in the fishing harbours and ports. The Plan should be mindful of potential impacts on habitats as a result of dredging and disposal activities that may be required.

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<sup>6</sup> Kathryn Schoenrock, Stacy Krueger-Hadfield, Kenan Chan, Rory O'Callaghan, Tony O'Callaghan, Aaron Golden and Anne Marie Power (2022), The Diversity and Resilience of Kelp Ecosystems in Ireland (2018-W-MS-35) EPA Research Report No 413. [https://www.epa.ie/publications/research/epa-research-2030-reports/Research-Report\\_413.pdf](https://www.epa.ie/publications/research/epa-research-2030-reports/Research-Report_413.pdf)