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Mr Damien Wyse
Higher Executive Officer
Department of Agriculture, Food and the Marine
Agriculture House,
Kildare St
Dublin 2
D02 WK12

17th September 2020

Our Ref: SCP200802.1

Re. SEA Scoping for Agri-Food Strategy to 2030

Dear Mr Wyse,

We acknowledge your notice, dated 12th August 2020, in relation to the SEA Scoping for Agri-Food Strategy to 2030 (the 'Strategy').

The EPA is one of five statutory environmental authorities under the Strategic Environmental Assessment (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 Strategy and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the Strategy. Our functions as an SEA environmental authority do not include approving or enforcing SEAs or plans.

Where we provide specific comments on plans, programmes or strategies, our comments will focus primarily on the EPA's remit and areas of expertise (in particular water, air, climate change, waste, resource efficiency, noise, radon and the inter-relationships between these and other relevant topics e.g. biodiversity), as appropriate and relevant to the particular plan, programme or strategy.

Overall the EPA welcomes the information and level of detail in the Scoping Report and the associated Appendices. The suggestions in the following sections and Appendices are seeking to inform and assist the ongoing SEA process and the preparation of the Strategy and SEA Environmental Report. We also recommend integrating the findings of the environmental assessments (SEA and Appropriate Assessment (AA)) into the Strategy.

Additionally, the EPA's submission to the Agri-Food Stakeholder Committee '*Strategic priorities to 2030 for A Climate Smart, Environmentally Sustainable Agri-Food Sector*' is included as Appendix 3, to consider in preparing the Strategy and the SEA). The submission sets out the EPA's



overall recommendations to establish an environmentally sustainable agri-food sector, while also recognising the need to achieve a balance between economic, social and environmental considerations. This should be treated as part of this scoping submission and the issues raised should be addressed as part of the Strategy making and SEA processes.

Some of the key aspects raised in the submission to the Agri-Food Stakeholder Committee include:

- Promote the use of protected urea over less environmentally sustainable fertilisers and opt for nutrient management activities that have multiple environmental benefits, supported by relevant training and awareness through ASSAP¹.
- Support the need to focus on breaking the link between animal numbers, fertiliser use and deteriorating water quality. This will also see reductions in greenhouse gases and ammonia emissions.
- In catchments with known nitrogen pollution, measures need to be implemented immediately to halt and reverse the continuing nitrogen emissions to water.
- The Strategy should look to prevent the continued loss of diffuse phosphorus in catchments under pressure, and support measures to protect and use riparian zones/ buffer strips as barriers to protect our water bodies from pollutants. This approach will also serve to protect biodiversity, reduce sediment and pathogens such as VTEC, in our water courses.
- The promotion of more widespread high-nature value farming initiatives, particularly in high status waterbody areas.
- Provide more clarity in terms of how the Strategy will address the EU Farm to Fork Strategy and its targets to transform the EU's food system.
- Support and promote agri-environmental schemes based more on payments for results and ecosystem service activities rather than the current 'payments for costs incurred or income foregone' approach.

Specific comments on the SEA Scoping Report are provided in Appendix 1 and some suggested key high-level plans to consider are also listed in Appendix 2.

Sustainable Development Goals & Key Actions for Ireland

Our most recent State of Environment Report *Ireland's Environment- An Assessment 2016* (EPA, 2016) identified seven Key Actions for Ireland which align with many of the UN Sustainable Development Goals (SDGs). Delivering Ireland's long-term sustainable development and environmental protection goals will require a concerted effort by government departments to address these key actions:

1. *Environment and Health and Wellbeing* - Recognition of the benefits of a good quality environment to health and wellbeing.

¹ Agricultural Sustainability Support and Advice Programme

2. *Climate Change* - Accelerate mitigation actions to reduce greenhouse gas emissions and implement adaptation measures to increase our resilience in dealing with adverse climate impacts.
3. *Implementation of Legislation* – Improve the tracking of plans and policy and the implementation and enforcement of environmental legislation to protect the environment.
4. *Restore and Protect Water Quality* – Implement measures that achieve ongoing improvement in the environmental status of water bodies from source to the sea.
5. *Sustainable Economic Activities* – Integrating resource efficiency and sustainability ideas and performance accounting across all economic sectors.
6. *Nature and Wild Places* – Protect pristine and wild places that act as biodiversity hubs, contribute to health and wellbeing and provide sustainable tourism opportunities.
7. *Community Engagement* – Inform, engage and support communities in the protection and improvement of the environment.

The relevant aspects of these Key Actions and the SDGs should be taken into account in preparing the Strategy and SEA and should be reflected in the principles/objectives/measures in the Strategy. This will ensure that the Strategy aligns with and contributes to achieving Ireland's sustainable development and environmental protection ambitions.

Ireland's Environment 2020 is due to be published in Quarter 4 2020. Once published, the relevant chapters and aspects of the 2020 report should be taken into account in finalising the Strategy. In particular reference should be made to the chapter on agriculture and key relevant related chapters (for example: water, climate, biodiversity, industry) .

The relevant objectives and policy commitments of the National Planning Framework should also be aligned with and considered, as appropriate.

Transition to a low carbon climate resilient economy and society

You should ensure that the Strategy aligns with relevant national commitments on climate change mitigation and adaptation, as well as any relevant sectoral, regional and local adaptation plans.

Scope of the SEA

The Strategy should clearly set out the scope, remit and implementation related elements of the Strategy. These will have implications for the SEA, in terms of guiding the level of assessment applicable at the appropriate level for the Strategy. Where it is envisaged that measures proposed in the Strategy will be implemented via other plans, which themselves have been or will be subject to SEA, this should be explained in the Environmental Report and taken into account in the assessment.

Where specific measures will be implemented directly through the Strategy, further detail should be provided in the Environmental Report and Strategy on the relevant environmental assessments to be carried out at the project stage and relevant mitigation measures to be applied, as appropriate. There may be merit in exploring this issue further with the relevant Environmental Authorities during the Strategy preparation and SEA processes.

Integration of SEA and Strategy

All recommendations from the SEA and AA processes, including mitigation measures, should be integrated in the Strategy. We recommend that the Strategy includes summary tables outlining



the key findings of the SEA and linking the significant environmental effects identified to the proposed mitigation measures, monitoring programme and Strategy policies/measures.

Monitoring, Review & Reporting

We recommend including a commitment in the Strategy to prepare a parallel Implementation Strategy/Programme to facilitate monitoring the implementation of the Strategy, including its ongoing environmental performance.

Establishing an Environmental Working Sub Group would also provide for oversight of the Strategy related environmental monitoring and reporting. The arrangements in place for the implementation stages of plans such as Food Wise 2025, Grid 25, Offshore Renewable Energy Development Plan and the Wild Atlantic Way Operational Programme would be worth considering, as appropriate.

The Strategy should include a commitment to implement the environmental monitoring programme and associated reporting. We suggest including a separate section on '*Environmental Monitoring, Review and Reporting*' in the Strategy, setting out the provisions for monitoring and reporting, including parameters, frequency and responsibilities, on the implementation of the Strategy and periodic reviews. Where possible, aligning the periodic reviews of the Strategy to coincide with existing cyclical reporting would be useful to consider e.g. *Ireland's Environment*, National Planning Framework, Water Framework Directive, Marine Strategy Framework Directive etc.

In between review periods for the Strategy, we recommend that Strategy related implementation reports are published annually, or biennially, as appropriate. We recommend aligning these with the environmental monitoring required under the SEA legislation. This will enable the environmental performance of the Strategy to be evaluated, allow significant negative trends to be determined and acted upon. It will also provide for increased transparency during implementation.

The SEA-related monitoring should address positive, negative and cumulative effects where they are likely to occur and should include provision for on-going review to facilitate an early response to any significant environmental issues including trends that may arise. The Environmental Report should specify the monitoring frequency and responsibilities and include provisions for reporting on the monitoring. To avoid duplication in data collection, the same indicators should, where possible, be used for the Strategy-related environmental monitoring and SEA-related monitoring.

Integration with other key Plans and Programmes

We recommend including relevant schematics in the Strategy and SEA Environmental Report, showing the links and key inter-relationships with other relevant national, regional, sectoral and environmental plans, programmes or strategies.

Available Guidance & Resources

Our website contains various SEA resources and guidance, including:

- SEA process guidance and checklists
- Inventory of spatial datasets relevant to SEA
- Topic specific SEA guidance (including *Good practice note on Cumulative Effects Assessment* (EPA, 2020), *Guidance on SEA Statements and Monitoring* (EPA, 2020),



Integrating climatic factors into SEA (EPA, 2019), Developing and Assessing Alternatives in SEA (EPA, 2015), and Integrated Biodiversity Impact Assessment (EPA, 2012)).

You can access these resources at: www.epa.ie/monitoringassessment/assessment/sea/

Environmental Sensitivity Mapping (ESM) Webtool

The ESM Webtool is a decision support tool to assist SEA and planning processes in Ireland. The tool brings together over 100 datasets and allows users to explore environmental considerations within a spatial area and create plan-specific environmental sensitivity maps. These maps can help planners anticipate potential land-use conflicts and help identify suitable development locations, while also protecting the environment. The ESM Webtool is available at www.enviromap.ie.

EPA SEA WebGIS Tool

Our SEA WebGIS Tool, available through the EDEN portal (https://gis.epa.ie/EIS_SEA/), allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area. It is intended to assist in SEA screening and scoping exercises. This resource is in the process of being integrated with other EPA GIS based Tools.

EPA WFD Application

Our WFD Application provides a single point of access to water quality and catchment data from the national WFD monitoring programme. The Application is accessed through EDEN <https://wfd.edenireland.ie/> and is available to public agencies. Publicly available data can be accessed via the Catchments.ie website.

EPA AA GeoTool

Our AA GeoTool application has been developed in partnership with the NPWS. It allows users to select a location, specify a search area and gather available information for each European Site within the area. It is available at: <http://www.epa.ie/terminalfour/ApproAssess/index.jsp>

State of the Environment Report – Ireland’s Environment 2016

In preparing the Strategy and SEA, the recommendations, key issues and challenges described within our most recent State of the Environment Report [Ireland’s Environment – An Assessment 2016](#) (EPA, 2016) should be considered, as relevant and appropriate to the Strategy. The EPA is currently at the advanced stages of preparing the next iteration of *Ireland’s Environment* for 2020 which should be taken into account, when available, in finalising and implementing the Strategy and in future reviews.

Environmental Authorities

Under the SEA Regulations, you should also consult with:

- The Minister for Housing, Planning and Local Government;
- The Minister for Agriculture, Food and the Marine, and the Minister for Communications, Climate Action and Environment, where it appears that the plan or programme, or modification of the plan or programme, might have significant effects on fisheries or the marine environment;
- The Minister for Culture, Heritage and the Gaeltacht, where it appears to the competent authority that the plan or programme, or amendment to a plan or programme, might



have significant effects in relation to the architectural or archaeological heritage or to nature conservation.

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.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Tadhg O'Mahony', enclosed in a thin black rectangular border.

Tadhg O'Mahony

*Senior Scientific Officer
SEA Section
Office of Evidence and Assessment
Environmental Protection Agency
Regional Inspectorate
Inniscarra, County Cork*

Appendix 1 – Specific Comments on the Scoping Report

Scope of the SEA

We note in *section 2.6 - Spatial and Temporal Scope* that a longer-term view will be taken on potential impacts rather than seeking a set fixed temporal scope. We recommend that the Strategy is supported by environmental monitoring and reporting at regular intervals over its lifetime. The Strategy and SEA should seek to align with other relevant long-term plans / programmes / strategies at national, EU and international level in the context of ensuring the appropriate alignment and integration of relevant environmental commitments and targets over the lifetime of the Strategy.

We note the sustainability topics covered in Table 2.2, we recommend adding an additional row for the inter-relationships between each of those sustainability topics.

Relationship to other plans and programmes

Farm to Fork

While the Scoping report refers to the Farm to Fork Strategy in relation to some key influential plans and programmes, the SEA and the Strategy should consider setting out the specific reduction targets to be achieved under this Farm to Fork Strategy, with regard to fertilisers, pesticides, antimicrobials used on farm animals and ambition to achieve 25% of agricultural lands under organic farming by 2030.

The EU Farm to Fork and EU Biodiversity strategies should receive greater focus in the SEA Environmental Report and the Strategy. The influence of the CAP reform and increased focus on environmental credentials under these EU strategies should also be reflected in the SEA and Strategy.

Baseline

We note that LULUCF is recognised as a key component in helping monitor the national strategic long-term vision for prosperous, modern, competitive and climate neutral economy by 2050. It is important to also recognise in the Strategy the role LULUCF can play in monitoring land use change. Monitoring land use/ land use change will help us understand how well land use activities are progressing when it comes to supporting the national efforts of addressing climate change and the decline in nature.

Biodiversity / Natural Capital

We suggest a subsection is included which incorporates Biodiversity and Flora and Fauna (as set out in the SEA Directive). Natural Capital could be addressed as a sub-section under biodiversity.

We also note that Chapter 3 includes a subsection on socio-economics. In the SEA Directive, these are addressed under the criteria 'Population and Human health'. We suggest that the population and human health aspects are retained in the SEA, while the economic related aspects be moved into the Strategy for consideration there, rather than in the environmental assessment itself.

In relation to Green Corridors, the SEA could promote the need to protect, and where possible enhance, existing important ecological corridors on farmland.

With regards the impact of nitrogen on ecosystems, a recent EPA Research Report '[Critical Loads and Soil-Vegetation Modelling](#)' (Aherne et al., 2020) highlights several relevant concerns in relation to the impact of agricultural nitrogen emissions on ecosystems:

- Based on current scenarios, exceedances of critical loads of eutrophication is not predicted to change by 2030, owing to national increases in reduced nitrogen deposition.
- Biodiversity-related critical loads for nitrogen indicates that Irish habitats are more sensitive to nitrogen deposition than the recommended empirical critical load ranges for European habitats. This means that current estimates of the extent of nitrogen impacted habitats are likely to be underestimated.

The scope of the SEA should specifically consider and address the risks posed to Irish habitats and ecosystems as a result of agricultural emissions to atmosphere, and how sustainable practices can contribute to preserving these ecosystems. In addition, consideration should also be given to supporting and contributing to mechanisms for the ongoing monitoring and evaluation of agricultural emissions on natural ecosystems.

Marine

While we acknowledge that the Scoping Report includes references to marine protected areas, we recommend also referring to the need to increase the extent of Marine Protected Areas, to meet the current international requirements of conservation of 10% of marine and coastal areas, with a greater target of 30% of all coastal/marine areas by 2030, under the EU Biodiversity Strategy.

We note that the Scoping Report acknowledges that the seafood industry has a big impact on fish stocks and the marine environment. As mentioned in our previous submission, with regard to commercial exploitation of natural marine kelp / microalgae forests, a precautionary approach needs to be taken, given the role these ecosystems play in terms of climate mitigation and adaptation and supporting marine biodiversity.

Water Quality

The Scoping Report clearly recognises the challenges facing the Agri-Food sector with regards protecting water quality from further decline. In preparing the SEA Environmental Report (ER), it will be important that the appropriate water quality mitigation measures are established, implemented and monitored to ensure water quality status is improved and the Strategy is implemented in an environmentally sustainable manner. These will need aligning with WFD obligations. The SEA should look to promote mitigation measures with multiple environmental co-benefits, where possible.

Section 3.5 Soil and Land Use

This section should be updated to reflect the latest available information from Teagasc, with regards current soil pH/fertility issues currently occurring in Ireland. These are well documented by Teagasc. See for example: <https://www.teagasc.ie/crops/soil--soil-fertility/soil-ph--liming/>

With reference to land, the scoping report should refer to the 26.8 Mt CO₂eq credits available to Ireland under the LULUCF Regulation (2018/841 (EU)).

In *Table 3.4: Emissions from the Agriculture sector*, the percentage value for NO_x should be updated to 33.4% for 2018. Additionally, the supporting text should also consider the adjusted



emission values which are used for compliance purposes. The following link provides more information on this.
<http://epa.ie/pubs/reports/air/airemissions/irelandsairpollutantemissions2018/>

The text below *Figure 3.4: Contribution to Ammonia Emissions in 2018* (EPA, 2020), should be updated to reflect the following report :
<http://epa.ie/pubs/reports/air/airemissions/irelandsairpollutantemissions2018/> and our data and Inventory Report submission which can be found at:<https://www.ceip.at/status-of-reporting-and-review-results/2020-submissions>

On page 35, the subsection on policy response should also refer to the DAFM [Draft National Climate and Air Roadmap for the Agriculture Sector to 2030](#) (“Ag-Climatise”).

In *Section 3.6 Water*, consider referring to the actual requirements of the WFD in terms of its key aims. The SEA (and Strategy) should refer specifically to the relevant objectives of the National River Basin Management Plan for Ireland. The baseline water quality information should take account of the most recent available water quality information and reports from the EPA. While the Strategy acknowledges the need for good status of quality under the Water Framework Directive (WFD), it should also highlight the equally important objectives for no deterioration, protection of high-status waters or protected areas objectives of the WFD also.

While the link with the Habitats Directive is addressed, the SEA should also consider to a greater extent the interlinkages on policy between biodiversity and the water quality under the WFD.

The SEA should include a reference to the Marine Strategy Framework Directive and the EU Biodiversity Strategy. Additionally, the SEA (and Strategy) should refer to the forthcoming CAP Reform and include a commitment to amend the Strategy, once the CAP Reform has completed to ensure that the Strategy aligns with our relevant European level commitments. This is particularly important, given that the CAP will probably be the most critical aspect underpinning the socio-economic and environmental considerations for the Strategy.

Additional water-specific comments are summarised in bullet format below:

- Page 17: Reference should be made to the new CAP, as a key Strategy that will influence the Strategy.
- Page 28: We note the reference to Groundwater abstractions as being a negligible component of primary abstraction, groundwaters account for about 20% of Public Water Supplies and should be recognised in this context.
- Page 28: We suggest including a reference to the River Basin Management Plan
- Page 28: we note the reference to a Teagasc document that indicates the EPA decided on the priority catchments that the ASSAP teams are working in (this is incorrect, the EPA facilitated the process, while decisions were actually made by public authority stakeholders, including elected representatives)
- Page 28: includes a reference to an EPA *pers comm* reference to agricultural intensification has caused localised water quality issues. The term ‘*localised*’ underplays the problems, and their widespread impact in places should be also referred to.
- Page 31: refers to a Dept/EPA report from 1999 indicating that groundwater is mainly impacted by point source agricultural sources. The context is misplaced

because significant groundwater impact e.g. to a water supply is going to come from the point sources (petrol tanks, silage leaks etc.), but diffuse pressures from land spreading or grazing animals are having an impact on surface water via diffuse groundwater pathways (and to a small number of Water Supplies).

- Page 30: Ammonium arising from drainage of organic soils for agriculture and/or forestry is also an issue of concern.
- Page 31: The indication that Ireland's marine waters are not showing signs of nutrient pollution is not correct. Marine waters include nearshore coastal waters and estuaries, many of which are showing signs of eutrophication. Reference could be made to the Water Quality issues mentioned in the MSFD Article 17 report. (<https://www.housing.gov.ie/water/water-quality/marine-strategy/marine-strategy-framework-directive-200856ec-article-17-update>)
- Page 32: while a number of policy response areas are included, more may arise once the overall analysis begins, and any significant ones should be included.
- Page 32 and Page 54: Despite measures being 'successfully implemented' under a range of policy responses, there are continuing declines in all the environmental indicators. In light of this, the robustness of implementation or suitability of the existing measures should be assessed. It will be an important consideration for the Strategy that there are robust and practical indicators developed early on, that directly link the measures to environmental outcomes, so that the Strategy can be quickly adapted if or when it is seen to be having a negative impact on the environment.
- Page 45: Should also include the following as a threat to water: *physical modifications to, and drainage of, water bodies such as rivers and lakes*
- Page 45: While reference is made to ammonium and phosphate being the nutrients of concern for water, should it refer instead to nitrates and phosphate.

With regards to flooding, the SEA should recognise and support options for natural flood risk management, which would provide additional environmental co-benefits, in terms of support for biodiversity for example. The benefits of maintaining wetlands or poorly drained areas, in terms of their biodiversity value and climate mitigation potential should be recognised and supported.

Forestry

The SEA should recognise that in relation to high status waters, sediment loss in upland catchments is the most important pressure impacting high status waters. The SEA should consider including a mitigation measure recommending a greater level of Forest Service oversight when/where forestry related operations are planned in high status catchments. Immediate remediation actions are also needed where forestry is currently causing water quality problems.

Air Quality / Climate Change

We acknowledge that the Scoping report clearly identifies the impact of the Agri-Food sector on climate change and air quality, with regards the levels of greenhouse gases and ammonia emissions. Reducing sectoral greenhouse gas and ammonia emissions will be a critical component for success of the Strategy.

Air quality and air pollutant parameters should be clearly defined. For example, emissions of the air pollutant ammonia into the atmosphere is not *per se* an air quality issue, but its contribution as a source of secondary particulate matter (PM) in the air we breathe is an issue.



Environmental Sustainability

Clear commitments are required regarding sustainable farming and land management practices, including promotion of organic farming practices, such as the use of protected urea etc.

In our previous submission (Appendix 3), we highlighted the need for outcome-focused metrics and activity-based metrics, both of which should be linked, to allow for accountability in land use and land management practices.

We also highlighted the need to consider sustainability related food labelling for national produce, showing carbon intensification/sustainability information. These aspects should be considered and promoted.

Emissions of ammonia from the intensive pig and poultry sector, currently stand at about 11% nationally. This is significantly lower than from cattle and for the most part, these are addressed within current IED licensing controls. It is worth noting however that there are large numbers of pigs and poultry activities operating below the IED threshold under LA planning.

Despite only contributing to 11% of national ammonia emissions, in the border region (County Cavan and County Monaghan) spatially, they are quite concentrated, with over 115 EPA licensed installations and an additional 24 new applications on hand in the pig and poultry sector, at an approx. ratio of 80:20 (Monaghan/Cavan). The cumulative impacts of ammonia from these and other installations/operations on nearby Natura 2000 sites needs to be better understood and considered, in preparing the Strategy. This is particularly important in the context of ensuring environmental sustainability.

Ammonia has especially detrimental effects on species and habitats that are sensitive to elevated levels of nitrogen input. The concentration of intensive agriculture sites, in-combination with other farming activities (e.g. dairy and beef), have the potential to impact on the critical level and critical loads for sensitive species at Natura sites in this region also.

We recommend that the SEA (and Strategy) include a reference to the relevant Best Available Techniques (BAT) Conclusions which are statutory requirement for existing Industrial Emission licenced activities from February 2021. The BAT Conclusions cover emissions such as ammonia, odour, noise, and the storage and management of organic fertiliser. They are applicable for new licensable activities, since their introduction in February 2017. Existing licensed activities have until February 2021, to implement all requirements. Information on these BAT conclusions is available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN> .

We refer you the EPA report [*Ireland's Transboundary Gas Emissions – 1990-2030*](#) (EPA, 2019) to take into account with regards transboundary emissions considerations.

Consider developing and encouraging:

- economically sustainable farm systems and practices for less intensive farms that focus on producing quality food for a premium price.
- promoting 'high nature value' farming and the wealth of environmental benefits to be gained from these initiatives
- developing and supporting agri-environmental schemes that provide payments for results-based, ecosystem services.

The current model of 'payments for costs incurred or income foregone' promotes a concept that farming with the environment is a burden or results in negative outcomes for the farmer which is not accurate or effective. A review of the existing national taxation and subsidy system is needed, to identify agri-food related relief schemes that are environmentally harmful and that are unsustainable and replace them with schemes that reward environmental sustainability.

Waste

In *Section 3.9 – Material Assets*, on page 38, on recycling targets, the SEA should reflect the most recent EPA publication on this <http://epa.ie/newsandevents/news/name.69297,en.html>

We acknowledge that the Scoping report includes references to the Food Waste Charter under the National Waste Prevention Programme and Smart Farming initiative. This section would benefit from also recognising the benefits of supporting the development of an all-of-value-chain National Food Waste Reduction Roadmap. This should include clear national and sectoral targets for 2025 and 2030, in order to meet the relevant national food waste prevention targets.

With reference to Food Waste, that may arise in implementing the Strategy, the SEA and Strategy should also look to support the following:

- The development & implementation of a National Food Waste Roadmap, building on the national stopfoodwaste.ie householder campaign and the business-focused Food Waste Charter.
- Implement a systematic programme to identify and reduce on-farm losses of food produced for human consumption, for reporting in national statistics.
- Strengthen the 'Origin Green' brand through the inclusion of food waste prevention action plans with robust reporting of carbon saving for processing, distribution and retail businesses.
- Promote public behaviours to prevent household food waste through high-profile DAFM agencies & activities - such as Bord Bia and the "Food Dudes Programme".

The Scoping report includes references to "*new and more efficient use of wastes, e.g. food waste*". The Strategy and SEA should acknowledge that food waste must be managed in accordance with the food waste hierarchy (see the figure below). Where prevention of food waste is prioritised, the emphasis can then focus on 'new and more efficient uses of wastes'.

With regard to hazardous wastes that may arise in implementing the Strategy, the SEA and Strategy should consider:

- Introducing measures to address the large amounts of hazardous waste generated through agricultural production. Producer Responsibility initiatives including take-back of surplus product; along with training on best practice to maximise efficiency in using farm chemicals are potentially strong prevention measures.
- Supporting the establishment of a national collection scheme for unavoidable farm hazardous waste, should be pursued as a matter of urgency. The EPA pilot scheme which operated from 2013-2017 demonstrated the feasibility and demand for such a service.

The pilot scheme identified the typical chemicals requiring disposal and estimated quantities stockpiled on farms and which are being generated annually.

- The SEA should specifically consider the risks posed to the environment and food with respect to hazardous waste management. The EPA farm hazardous waste collection pilot scheme collected nearly 1,000 tonnes of hazardous waste from farmers around the country. Of this waste, 68 tonnes were waste pesticides (some banned for use for decades) and 53 tonnes were waste veterinary products. The SEA should therefore consider risks related to storage of chemicals on farms, the need to properly manage prohibited substances and the development of a long-term mechanism to support the safe management and collection of farm hazardous waste to ensure that it does not enter the environment.
- The SEA should highlight the need for sustainable use of pesticides and their management as well as in the Strategy. The next review of the National Action Plan for the Sustainable Use of Pesticides should include specific and measurable reductions in the use of pesticides of concern² along with timeframes for the achievement of those reductions. This is in order to attain the reduction of 50% usage of hazardous pesticides by 2030 in accordance with the EU Farm to Fork initiative. The Strategy should, in particular, take this into account.
- Further research into development of biopesticides should be encouraged in the Strategy and the SEA.
- There is a need to increase enforcement of biocides regulations for waste pesticides storage. This is necessary to ensure that pesticides which can no longer be used are removed from circulation in an environmentally safe manner. This aspect should be reflected in the Strategy and the SEA.

Smarter Farming Practices

We recommend that the SEA and Strategy recognise, support and promote the need for greater uptake of sustainable farming practices across all agricultural sectors. This can be achieved through the establishment of case studies, networks, knowledge exchange, supports & tools. The farmer led [Smart Farming initiative](#) is an exemplar programme in this area, which has demonstrated reduced environmental impacts while delivering savings and efficiencies to participating farmers. This Smart Farming and other similar models should be reflected in the Strategy and SEA.

Municipal Sewage Sludge on Farmland

Studies have found municipal sludges, in addition to containing useful nutrients, also contain other man-made chemicals some of which are persistent and likely to accumulate in the soil. EPA research (Healy et al., 2017) has highlighted a number of concerns in relation to the use of 'biosolids' on agricultural land. The effects of many of these substances, e.g. nanomaterials, both individually and in combination with other chemicals, on both human health and the

² Report from the Commission to the European Parliament and the Council On the experience gained by Member States on the implementation of national targets established in their National Action Plans and on progress in the implementation of Directive 2009/128/EC on the sustainable use of pesticides (COM(2020) 204 final).

³ [Health and water quality impacts arising from land spreading of biosolids](#)

environment are not yet fully understood. As municipal sludge could be a source of food contamination for a range of hazardous substances, the SEA should consider the current use of municipal sludge on food producing soils, taking into consideration approaches to sludge management and reuse in other EU Member States. It is also very timely to review the reuse of sewage sludge on farmland given the recently commenced review process for the EU Directive on the use of sewage sludge in agriculture, see <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12328-Evaluation-of-the-Sewage-Sludge-Directive-86-278-EEC> .

Section 3.11 Landscape, on page 40, in the pressures' subsection, reference is made to 29 counties - this should be corrected to 26.

Section 3.13 Key Environmental and Sustainability Issues and Likely Future Trends

We acknowledge the review of the SOER Key Issues and Challenges and highlighting the ones most appropriate to the Strategy. Once the SOER for 2020 is published, we recommend including a reference to taking the updated identified issues and challenges into account, as relevant to the Strategy.

On page 45 of this section, reference is made to increasing NO_x and NMVOC emissions and compliance targets. Emissions of both of these pollutants are not included in compliance targets under the NECD as per Article 4 para 3(d).

Data Gaps

In *Section 3.14 – Information Gaps*, we suggest that the EPA SOER 2020, due to be published in November 2020, should be reviewed in the context of taking into account the most recent available information, in preparing and implementing the Strategy.

We welcome the various environmental maps provided in the Appendix of the Scoping Report. The EPA supported Environmental Sustainability Mapping Webtool (www.enviromap.ie) may also help in showing environmental baseline information across a range of environmental criteria. It has recently been used in preparing the SEA for the National Planning Framework and Regional Spatial and Economic Strategies.

Chapter 4 – SEA Framework

Table 4.1 SEA Objectives

The objectives should capture the contribution the Strategy can make to the specific topic objectives. For example, contribute to the protection of biodiversity and helping reverse the decline in nature, supporting the national effort to address climate change etc.

- Objective 6, the sub-objective could be reworded as follows “*Support achievement of the NECP objectives for ...*”
- Objective 11, the sub-objective could be reworded “*Preserve and enhance the ability of an area to provide services such as carbon sequestration and flood resilience, as well as supporting other ecosystem services*”

Assessment of Alternatives

In *Section 5 – Alternatives and Scope of the SEA*, we acknowledge that the EPA guidance document ‘*Developing and Assessing Alternatives in Strategic Environmental Assessment* (EPA, 2015)’ has assisted in the consideration of alternatives.



We also welcome the findings of the public survey / consultation responses on the 2030 Strategy, that indicated a strong support for environmental sustainability. We also note the alternatives considered for the Strategy. For *Alternative 4: Blended Approach* (mix of Environment Sustainability and Production/Value), this approach should look to maximise environmentally sustainable agriculture and land management practices over a need to continue to intensification / expansion of unsustainable elements of the sector.

In *subsection 5.3*, we note the identified potential significant effects of the Agri-Food Strategy. In relation to potential cumulative effects. We recommend that you consult our recent SEA good practice guidance note on [Cumulative effects assessment in Strategic Environmental Assessment](#) (EPA, 2020). This may be of use when considering and assessing potential for cumulative environmental effects.

5.4 Scope of the SEA

It is recognised that the assessment and selection of the preferred alternative(s) and selection of the relevant mitigation measures, should consider the economic and technical aspects to ensure that the measures are viable and implementable and that the alternatives are realistic.

In *Chapter 6 – Next Steps*, we suggest that you consider including a glossary of terms used in the Strategy and the SEA ER. In addition, consideration should be given to including a definition of environmental sustainability in the context of the Strategy as well as describing any commonly used acronyms in the SEA.

Monitoring Considerations

In Section 6.5 – Monitoring Implementation of the Programme, (the section title should be amended to reflect that it is a Strategy. The EPA publication [Guidance on Strategic Environmental Assessment \(SEA\) Statements and Monitoring](#) (EPA, 2020) may also assist you when looking at these stages of the SEA process for the Strategy.

We also suggest that you consider how the environmental monitoring will be used to determine how environmentally sustainability is being achieved over the lifetime of the Strategy.

Appendix 2 – Suggested high level plans to consider

We acknowledge the extensive list of plans, programmes and environmental protection objectives described in Appendix A of the Scoping Report.

We suggest that there is also merit in including a reference to the [National Wastewater Sludge Management Plan](#) (Irish Water) , in relation to land spreading aspects that may impact or be impacted on, in implementing the Strategy.

Additionally, the Pollution Reduction Programmes for Shellfish Waters should also be taken into account, as appropriate and where relevant. Information on these can be found at: <https://www.housing.gov.ie/water/water-quality/shellfish-waters/shellfish-waters-final-characterisation-reports-and-prps>

In relation to the description of the main objectives and requirements of the National Waste Prevention Programme and how it effects or is affected by the Strategy, we suggest a revision of the text in the interests of clarity, as shown below in blue in the table below.

Plan or Programme	Main Objectives and Requirements of the Plan or Programme	How it Affects, or is Affected by the Agri-Food Strategy to 2030 (AFS)
National Waste Prevention Programme	<p>The National Waste Prevention Programme (NWPP) is a Government of Ireland initiative, led by the EPA, which supports national-level, strategic programmes to prevent waste and drive the circular economy in Ireland.</p> <p>NWPP priority areas are food waste, construction & demolition, plastics, agriculture, resources & raw materials and local waste prevention.</p>	<p>The Food Waste Charter under the NWPP encourages and supports sustainability businesses along the food supply chain to reduce food waste in line with the principles of the food waste hierarchy, from farm to fork which complements the ambitions of the AFS.</p> <p>Likewise the Smart Farming initiative helps farmers manage resource use and reduce GHG emissions which will complement the AFS sustainability ambitions.</p> <p>The national food waste prevention consumer campaign, Stop Food Waste.ie, raises awareness and promotes behaviour change to reduce food waste.</p>

In Section 7 – References, (page 58), the text referring to “*EPA Catchments Unit (2019) Ireland’s Catchment Flood Risk Assessment and Management (CFRAM) Programme*” should be attributed to the OPW, rather than the EPA.



Appendix 3 -EPA Submission - *'Strategic priorities to 2030 for A Climate Smart, Environmentally Sustainable Agri-Food Sector'*

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20 July 2020

Re: Strategic priorities to 2030 for "A Climate Smart, Environmentally Sustainable Agri-Food Sector"

Dear Tom

The Environmental Protection Agency (EPA) has reviewed the draft chapter *A Climate Smart, Environmentally Sustainable Agri-Food Sector* of the proposed Agri-Food Strategy and welcomes the opportunity to submit its views on what the strategic priorities for future policy should include.

The draft chapter is a thorough, objective and well written assessment of the current environmental challenges associated with the agri-food sector in Ireland. As previously stated in the EPA submission on the Ag-Climatise roadmap, the period to 2030 will shape the future direction of agriculture and its response to environmental concerns and adaptation to climate change. It will also provide opportunities to realise the potential that exists to both produce goods and consume goods in an environmentally sustainable way. We recognise the need to achieve a balance between economic, social and environmental factors in developing a sustainable Agri-Food Strategy, and further recognise that the LULUCF sector is a key component in the national strategic long-term vision for a prosperous, modern, competitive and climate neutral economy by 2050.

In relation to international policy drivers for environmental protection in this sector, the national Agri-Food Strategy should detail in specific measurable terms how it will address the EU Farm to Fork strategy which sets targets to "transform the EU's food system", including: a 50% reduction in the use (and risk) of pesticides; a 20% reduction ("at least") in the use of fertilisers; a 50% reduction in sales of antimicrobials used for farm animals; and an ambition that 25% of agricultural land is to be "under organic farming" by 2030.

In addition, it is recognised that the national policy has to assure that Marine Protected Areas are expanded to meet the current international requirements of conservation of 10 percent of all coastal and marine areas, rising to 30 percent under the EU Biodiversity Strategy 2030.

Agricultural practices are identified in EPA reports as being one of the main pressures responsible for the decline in water quality nationally. Moreover, the sector is responsible for approximately one third of national greenhouse gas emissions, and over 99 percent of national ammonia emissions. It is recognised that on an individual farm, and farm-type, basis there can be evidence of exemplary and low impact practice, however taking the sector as a whole, the economic growth in recent years is happening at the expense of the environment as witnessed by the trends in water quality, emissions, and biodiversity all going in the wrong direction. It is clear from the evidence that agriculture and other land management practices are key drivers of these negative trends. Business as usual will not reverse these trends.

We recognise that there is a role for the 'right measure in the right place' including – as referenced above - appreciating exemplary practice where it exists, however these local variations must be underpinned by fundamental change across the food system to address the core challenges. The draft chapter rightly identifies the 'green' reputation Ireland holds in relation to food and this is leveraged by *Origin Green* and other labelling schemes. Such quality standards play a valuable role and do support efficiency ambitions, however it is clear from examination of the science that the environmental sustainability of the sector as a whole is largely not supported by the evidence. And the case is weakening year-on-year as polluting air emissions increase and water quality further deteriorates. In our view this is a serious reputational risk for the agri-food sector in Ireland. Pending evidence and implementation of effective solutions to ongoing unsustainable air and water emissions, any plans for further intensification/expansion of the dairy herd would be difficult to sustain.

Considering this framing and your request for input to the thematic priorities necessary to address the environmental challenges for the new strategy, we recommend consideration of the following:

Air & Water Quality

- Promote the use of protected urea in place of other less environmentally sustainable fertilisers. Teagasc research shows that protected urea nitrogen fertiliser offers the single largest emission reduction potential to Irish farmers as they seek to reduce greenhouse gas and ammonia emissions without impacting production.¹ Protected urea is reported by Teagasc as a cost effective option so it is a win-win for the industry. Its use is further supported by the Teagasc Marginal Abatement Cost Curve (MACC).
- Choose measures for nutrient management that have multiple environmental benefits. This will involve education and training in conjunction with the national Agricultural Sustainability Support and Advisory Programme (ASSAP). Soils at optimum fertility and soil pH status recycle nutrients more efficiently and should lead to a reduction in inputs for the same or increased levels of grass and crop production while also reducing nutrient loss. This has wide ranging positive outcomes for the environmental pressures identified and is a win-win solution from both an economic and environmental standpoint.
- In catchments with known nitrogen-pollution, it is essential that measures are implemented immediately, to halt, and reverse, the continuing increases in nitrogen emissions to water

(Figure 1). These measures must go beyond improving efficiencies and must be focussed on reducing the total emissions through breaking the link between animal numbers, fertiliser use and deteriorating water quality. The co-benefits to be gained from this including a reduction in greenhouse gases and ammonia (air quality) need to be promoted.

- Prevent the continuing losses of diffuse phosphorus in the catchments under known pressure (Figure 1). The focus should be on breaking the pathways between the critical source areas (or hot spots) and watercourses, e.g. through use of riparian zones, buffer strips, and attenuation solutions. The co-benefits that can be gained for biodiversity, reduced sediments in the water courses and pathogens such as VTEC need to be promoted.

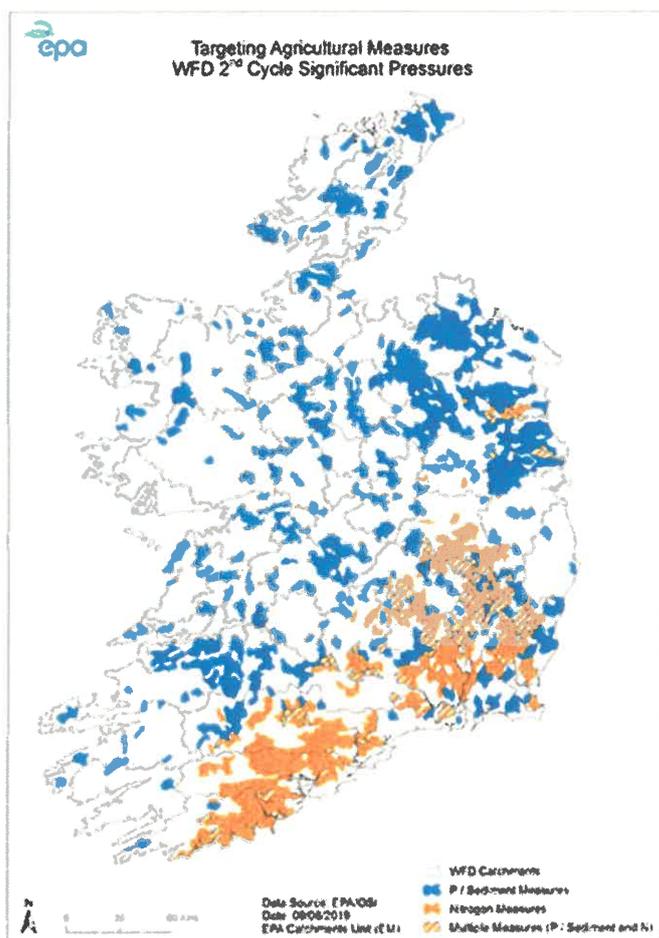


Figure 1: Targeting Agricultural Measures, WFD 2nd Cycle Significant Pressures

Climate & Sustainability

- Promote the use of 'high nature value' farming and the wealth of environmental benefits to be gained from the initiative, particularly in areas with high-status waterbodies, to support sustainable farming practices and local communities. Develop supporting agri-environmental schemes that provide payments for results-based, ecosystem services. The current model of 'payments for costs incurred or income foregone' promotes a concept that farming with the environment is a burden or results in negative outcomes for the farmer which is not accurate or effective.

- Further promote research and development into diversification of farming systems and practices with potential for environmental and economic sustainability for the agri-food sector. Such a programme of research should include methods for improving breeding, feed additives to reduce biogenic methane, agroforestry, paludiculture and nutrient management. A particular emphasis should be placed on developing economically sustainable farm systems for less intensive farms that focus on producing quality food for a premium price.
- Continued active engagement with, and support for, the OSI in progressing the completion of the detailed national land cover and land use maps that will be necessary to verify carbon emissions and offset opportunities (i.e. giving credit where it is due). These are needed in order to avail of the 26.8Mt land-use emissions removal allocation under the EU Effort Sharing Decision to 2030 in our national GHG inventory.
- To allow for accountability (measurement & demonstration) in land use practice there needs to be a move to including outcome focussed metrics, as well as activity metrics, and both need to be linked so there are opportunities for adaptive management.
- Develop and implement a food labelling system for national produce that provides consumers (national and international) with clear purchasing decision support information on carbon intensity (including the transport to market carbon intensity), and sustainability of the product.
- Research and assessment undertaken by CSO and ESRI (latter funded by EPA) identify that there exists within the national taxation and subsidy system a series of reliefs that are environmentally harmful, a number of which occur in the agri-food sector.² Such market failures need to be identified and removed from the taxation code and subsidy schema as they are incompatible with sustainability ambitions. For example, current land eligibility rules for the Basic Payment Scheme means that farmers receive no payment for land that is 'unworked', such as scrub and wetlands, which are naturally biodiverse habitats and often serve as buffer strips between the better farmland and watercourses. This incentivises the clearance of such habitats in direct opposition to the environmental incentives within CAP and GLAS.

Marine

- Emerging science suggests that natural marine kelp/macroalgae forests can play a vital role in climate mitigation and adaptation (e.g. carbon sequestration and sea level rise/storm surge wave energy dissipation) as well as in ecological stability.³ There has been limited research in Ireland into these valuable ecosystem services and accordingly, there is reasonable grounds to adopt a precautionary approach in relation to commercial exploitation. The regulatory system and associated environmental assessment processes for industrial mechanical harvesting of kelp needs a fit-for-purpose evaluation as regards its effectiveness through the life-cycle of a project, i.e. through the application evaluation stage, the consent stage, as well as the operational compliance and enforcement stage (including environmental monitoring and reporting).

Forestry

- The carbon sequestration value of forestry is recognised and is vitally important to national climate action ambitions. However, sediment losses from forestry operations in upland catchments is the most significant pressure impacting on our high status waters. It is essential to ensure full implementation and enforcement of the environmental requirements for afforestation. Immediate action should be taken in the catchments where forestry is causing water quality problems and the level of Forestry Service oversight should be increased when operations are planned in high status catchments.

Food Waste

- Bring stakeholders together to do an all-of-value-chain National Food Waste Reduction Roadmap. This should be developed and implemented with clear national and sectoral targets for 2025 & 2030 to support the achievement of a clearly articulated national food waste prevention target. This will build on the work of the EPA through the National Waste Prevention Programme and the assets, expertise and existing structures of the consumer focused stopfoodwaste.ie and business focused National Food Waste Charter, Retail Action Group and Food Waste Forum. Activities within the roadmap should include behavioural change and educational initiatives for consumers and businesses, technical support interventions, data gathering research, monitoring and evaluation.

There are a range of associated supporting measures as identified in the chapter under review and ongoing initiatives (sward management, run-off management, integrated catchment / land use management planning, farm and nutrient management plans, etc.,) all of which would be expected as a matter of good practice. The farming community are custodians of our landscape, including much of its biodiversity, and have a core role in all solutions. We need to promote land uses that are sustainable and right for our environment and our people. This can be progressed by establishing and implementing a new approach to land cover, land use and land management to help coordinate and monitor Ireland's response to significant environmental issues such as climate change mitigation and the decline in nature across multiple sectors and in a coherent manner. Such a new approach will also deliver a more sustainable economic future for national food production enterprises.

Yours sincerely



Laura Burke
Director General

¹ <https://www.teagasc.ie/publications/2020/protected-urea--why-now.php> , and

<https://www.teagasc.ie/media/website/crops/soil-and-soil-fertility/Q--A-Protected-Urea-April-2019.pdf>

² https://www.cso.ie/en/media/csoie/releasespublications/documents/rp/fossilfuelandsimilarsubsidies/Fossil_Fuel_and_Similar_Subsidies.pdf and, <https://www.epa.ie/researchandeducation/research/researchpublications/researchreports/research295.html> , and

<https://www.esri.ie/publications/the-environmental-impacts-of-fiscal-instruments>

³ for example: <https://royalsocietypublishing.org/doi/full/10.1098/rsbl.2018.0236>