



iCRAG, The SFI Research Centre for Applied Geosciences Response to the Public Consultation on the National Marine Planning Framework

Submitted to: Department of Housing, Planning and Local Government.

Submitted by: iCRAG, the SFI Research Centre for Applied Geosciences

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About iCRAG

iCRAG is the SFI Research Centre for Applied Geosciences. We are a team of researchers creating solutions for a sustainable society.

We develop innovative science and technologies to better understand the Earth's past, present, and future and how people are connected to it.

We drive research in areas that are critical to society and the economy, including:

- Sustainable discovery of energy resources and raw materials required for decarbonisation.
- Securing and protecting groundwater and marine resources.
- Protecting society from Earth's hazards such as floods and landslides.

iCRAG, the world leading SFI Research Centre in applied geosciences hosted by UCD, comprises 150 researchers across eight universities and institutions. iCRAG is supported by Science Foundation Ireland, the European Regional Development Fund, Geological Survey Ireland and industry partners.

www.icrag-centre.org

Introduction

iCRAG, the SFI Centre for Research in Applied Geosciences, funded by Science Foundation Ireland, the European Regional Development Fund, Geological Survey Ireland and industry partners welcomes the ambitious vision set out in the National Marine Planning Framework (NMPF) and strongly supports the Government's aims in managing Ireland's marine activities and ensuring sustainable use of marine resources to 2040. As Ireland's applied geoscience research centre, comprising more than 150 researchers across eight Irish universities and institutions, iCRAG is actively contributing to the government's goals of marine sustainability.

Hosted by University College Dublin, iCRAG's broad research community focuses on three interrelated Challenges—Earth System Change, Earth Resources, and Earth Science in Society. Established in 2015 iCRAG has established a network of over a hundred industry partners and has strong relationships with several government bodies and agencies.

Understanding the Earth system is an essential component in addressing the climate challenge. iCRAG's research findings on how and why the Earth system changes through time, the distribution and characteristics of Earth resources needed for clean energy technologies, and the interactions between people and the Earth system all support evidence-based policy options and decision making. Many of the UN Sustainable

Development Goals, such as SDG6 (clean water), SDG13 (climate action), SDG14 (life below water) and SDG15 (life on land) are reliant on the geosciences to understand, monitor and manage the actions needed to reach these goals. Furthermore, iCRAG's work on seabed characterisation is feeding into the Government of Ireland's Climate Action Plan, in areas such as offshore wind development (climate action 25) and emerging marine energy technologies (climate action 26).

iCRAG wishes for the final NMPF to be a robust plan decision-making tool for Government departments, State agencies, regulatory authorities and policy makers for decisions on marine activities. Furthermore, iCRAG wants to share its expertise particularly in the area of policies relating to renewable energy, marine monitoring, energy security and climate action.

- Our observations relate six sectors / activities set out in the draft framework, namely:
 - Overarching Marine Planning Policies (Environmental – Ocean Health)
 - Water Quality (p.47 – 50)
 - Sea-floor integrity (p.50 – 53)
 - Underwater Noise (p.56 – 58)
 - Climate Change (p.60 – 65)
 - Energy – Carbon Capture and Storage (p.101 – 103)
 - Energy – Petroleum (p.112 – 118)
 - Energy – Offshore Renewable Energy (p. 119 – 125)
 - Marine Aggregates and Mining (p. 138 – 140)

Comments and Observations

Water Quality

Current research at iCrag supports the key issues related with marine environment and coastal areas.

Given the critical importance of good water quality to many of Ireland's marine sectors, the objectives in this area of the NMPF should be as ambitious as possible. Ultimately, "Proposals that may have significant adverse impacts upon water quality, including upon habitats and species beneficial to water quality" should be rejected and only proposals that focus on "Delivering improvements to water quality, or enhancing habitats and species which can be of benefit to water quality" accepted.

With the Key References cited, we recognise that the information contained within those documents may have become outdated. For example, within Ireland's Marine Strategy Framework Directive (MSFD) references to marine acidification have been superseded by more recent studies (e.g. Beaufort *et al.*, 2011; Keul *et al.*, 2017; Ridgwell and Schmidt, 2010). Furthermore, elsewhere in the document, it is quoted that "Ocean acidity has increased significantly in sub-surface and deep offshore waters around Ireland between 1991 and 2010". We wish to emphasise the role of freshwater input and land ocean interactions as a driver and in some cases acceleration of coastal acidification processes, the pH fluctuation registered in the coast are larger than what was predicted for open ocean studies. The response of organisms to pH fluctuations are mainly laboratory-based studies, the real field conditions and the response of calcified organism in coastal seas could be significantly different.

Similarly, with regard to the issue of nutrient enrichment, there seems to be a lack of sufficient data on baseline nutrient status in Irish waters. Nutrient sampling is best carried out during winter months where phytoplankton depletion of nutrients is not a bias. However, this can be difficult during extreme weather conditions at sea.

It should be highlighted that under the OSPAR (2012) report it was found that, with regard to nitrogen, "direct inputs were higher in the Irish Sea compared to the Celtic Sea and

Atlantic with the highest proportion originating from sewage rather than industrial sources". In this regard, more needs to be done.

Current research at iCrag supports the key issues related with marine environment and coastal areas. There are projects focused on land-ocean interactions and the importance of freshwater input as a delivery of nutrients/chemical species and carbonate species to the coastal area. The coastal areas studies are increasing their importance also in relation with climate change issues and the weathering from land. Ireland geological features are diversified and the understanding of land-ocean interactions and managing coastal areas could be addressed by studying areas with different freshwater input typology. Other projects were focused on nutrients delivery to the coast, also in the groundwater spoke there are studies focused on nutrients delivery to the coast. Specifically, projects are focused on comparison of two contrasting study sites Kinvara Bay and Killary Harbour¹ as well as looking at the carbonate system in Dublin Bay². The complexity of coastal areas is due to the complex biogeochemical processes acting in a less predictable way than open ocean. Therefore, biogeochemical approaches to the coast could be key to understanding different interactions in order to define the ecological status of coastal areas. Furthermore, increasing the knowledge of coastal biogeochemistry could lead to more awareness in managing areas of economic interest and aquaculture.

Sea-floor Integrity

Providing baselines for assessing 'Good Environmental Status' (GES) offshore Ireland can form valuable datasets for forward planning.

With the potential level of future development outlined in this plan, in areas such as offshore renewable energy and marine aggregate extraction amongst others, maintaining sea-floor integrity becomes of critical importance. Equally, with the impact of future climate change, mitigating against adverse impacts on sea-floor integrity can form a key component of the NMPF. In point 3.106, the consultation draft rightly

¹ <https://www.icrag-centre.org/research/projectlist/contributionofsubmarinegroundwaterdischargesgdtothemarinecarbonatebi.html>
² <https://www.icrag-centre.org/people/danielkerr.html>

recognises the prominent role the INFOMAR programme plays in mapping the physical, chemical and biological features of Ireland’s seabed.

These datasets form a key input for ongoing research projects, notably under the ‘Safeguard the Geomarine Environment’ challenge at iCrag³. Under this challenge, iCrag aims to make Ireland’s offshore environment a test bed and natural science laboratory for innovative and novel technologies in the marine sector. Thus, providing baselines for assessing ‘Good Environmental Status’ (GES) offshore Ireland can form valuable datasets for forward planning and accompanying decision-making processes, as well as making a positive contribution towards the achievement of GES in relation to deep sea habitats.

Underwater Noise

The development of a “Noise Register” holds potential for evidence-based research.

With regard to Underwater Noise, we feel the objectives are realistic but not ambitious enough. Rather than focussing on the implementation of the Marine Strategy Framework Directive (MSFD) [Descriptor 11], a Noise Assessment Statement seems to have the potential for circumventing the MSFD’s requirement for mitigation. The biological context of the underwater noise section of the OMPPs is limited to ‘highly mobile species’ (presumably Cetaceans and Pinnipeds). It should encompass all marine fauna (both in the Draft NMPF and the Irish MSFD PoMs). Under Key Issues, section 3.132, avoiding “known sensitive geographic settings” should be added to the list.

A detail that could be improved in section 3.126 is continuous and ambient noise being considered the same thing. The definition included is correct for ambient noise, which is only partly anthropogenic. Continuous noise, e.g. from ships passage, can be considered as a distinguishable anthropogenic noise source. The description for continuous noise in the following sub-section (3.127) is both correct and informative.

An interesting proposed development is that of a “Noise Register”. This holds potential for evidence-based research, including input from iCrag, to feed into policy and permission/licence granting. For example (as found in the Irish MSFD PoMs summary report), by ‘facilitating improved data collection and collation in order to better inform the assessment process’. iCrag is well placed to address the draft NMPF section 3.129

³ <https://www.icrag-centre.org/research/research-challenges/safeguard-the-geomarine-environment/>

in its ability to target improving 'our knowledge of the current status of underwater noise and the data that underpins it' from 'poor' to appreciable, through academic and applied scientific research⁴.

Although further details of the proposed Noise Register are not easily found, it appears to be unnecessarily limited to impulsive noise. By including continuous noise too, it would leave open the potential to address this additional source of anthropogenic pollution (as described in the MSFD) and broaden the scope of the Noise Register.

Climate Change

the Marine Planning Framework should include an objective to develop and update the methods used to assess future climate impacts on coastal areas.

The draft (pg. 62) notes that the OPW has responsibilities in relation to coastal protection and coastal flooding and that their main roles include undertaking risk assessments. However, there is plentiful evidence that further research and methodological innovation is required to understand the scale of coastal climate risks in Ireland. For example, the Irish Coastal Protection Strategy Study (which provides the only national survey of erosion risks) does not fully account for the effects of climate change and its short term predictions for erosion have already been exceeded in many places despite its recent completion⁵. In addition, recent practical experience and survey work conducted by RPS Engineering Consultants in Portrane has demonstrated that erosion risk assessments need to take account of interactions between sea level rise and storm surges through joint probability analysis.⁶ Last, the forecast levels of sea level rise used by the OPW to conduct coastal erosion and flood risk assessments are not in line with international climate science⁷ and need to be updated. As such, the Marine Planning Framework should include an objective to develop and update the methods used to

⁴ <https://www.icrag-centre.org/research/projectlist/evaluatingcontrolsofacousticnoisepropagationacrossthecontinentalmargin.html>

⁵ <https://www.gov.ie/en/consultation/3f4534-draft-climate-change-adaptation-sectoral-pl/>

⁶ https://www.fingal.ie/sites/default/files/2019-07/appendix_a_erosion_and_climate_assessment_report_and.pdf

⁷ <https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level>

assess future climate impacts on coastal areas. iCRAG is ideally positioned to provide research support on these issues.

The draft (p.63) states that proposals should incorporate measures such as flood defences to make them resilient to the effects of climate change. However, a better practice approach would be to restrict development in areas at risk of coastal climate impacts. Specifically, there is a need to take account of interactions between onshore development planning and coastal protection. Otherwise new development in areas at risk of coastal erosion will lead to future demand for potentially unsustainable coastal protection measures. At present there is no national policy in relation to development planning in areas at risk of coastal erosion. As highlighted in a report published in 2017 by the City and County Managers Association, (“Local Authority Coastal Erosion Policy and Practice Audit”), there are differing practices between different local authorities regarding whether new development is restricted in areas at risk of coastal erosion. To address this deficit, the Marine Planning Framework should involve integration with onshore development planning and make provision for restrictions on development which is likely to require or create future demand for coastal protection. This could follow the model of Fingal County Council which has imposed a buffer zone along all coastlines deemed at risk of coastal erosion in its most recent Development Plan. Ongoing research by iCRAG on planning in the context of coastal climate hazards could also be used to inform the development of guidelines regarding the restriction of development in at-risk areas. iCRAG’s research in this area of coastal change can be directly related back the PREDICT project headed by PI Dr Brian Kelleher of Dublin City University. The PREDICT project involves coastal monitoring and integration of historic and self-generated data to produce prediction models of coastal transformation, specifically to Dublin Bay. Monitoring methods include remote sensors (e.g. satellites), ground-truthing observations, analysis of water properties and in-situ sensing. A highly multidisciplinary approach is required throughout this project which is a multi-institution collaboration.

Energy – Carbon Capture and Storage

The inclusion of both depleted gas reservoirs and saline aquifers would be helpful to the development of carbon capture and storage technology in Ireland.

The focus on carbon capture and storage in the draft framework is welcome, as there is potential to develop this technology in Ireland as part of the transition to low carbon

electricity generation. While the draft specifically mentions depleted gas reservoirs, a key omission in this section is saline aquifers. Such aquifers are potentially one of the most important stores for CO₂, as evidenced by the use of saline aquifers for CO₂ storage in Norway which since 1996 have stored 22 Mt CO₂. Updating the draft to include both depleted gas reservoirs and saline aquifers would be helpful to the development of this technology in Ireland.

Energy - Petroleum

Considerable technical and economic challenges for industry operating within an exclusively gas exploration regime.

The endorsement and support of ongoing and future of geoscience research on offshore basins is a critical determinant in achieving the two key objectives of the draft framework in relation to Energy – Petroleum: Objective 1 - Explore and develop Ireland’s indigenous petroleum resources in order to deliver significant and sustained benefits; and Objective 2 - Provide enhanced security of supply for Ireland in the short and medium term, in accordance with the Government White Paper on Energy, while Ireland transitions to more decarbonised sources of energy. These objectives will require energy security research focussing on de-risking exploration, with the development of models by multi-disciplinary research teams (e.g. geochemists, geophysicists, sedimentologists, structural geologists), incorporating the broad range of processes and scales (deep crustal, to reservoir scale, to pore scale) associated with offshore basins. Research at iCRAG investigating links between Irish offshore basins and the highly productive Newfoundland/Labrador basins will continue to be an important driver for recent exploration interest in offshore Ireland (e.g. the Porcupine basin).

Recognising the importance of the Climate Action Plan in securing Ireland’s energy requirements over the energy transition and the need to “*shift away from oil combustion*”, there are considerable technical and economic challenges for industry operating within an exclusively gas exploration regime: conditions which do not prevail in any other hydrocarbon-producing countries. Some clarification of the newly defined licencing terms will be required to ensure that industry commits to Ireland and Objectives 1 and 2 are achieved, providing the short to medium term security of supply of natural gas, as we transition away from fossil fuels. This is particularly important given the increasing reliance on supplies outside of the EU production and transport of which may

incur higher greenhouse gas emissions. The petroleum industry generates a lot of data, much of it acquired at great cost, and much of it important for the wider understanding of Ireland's extensive offshore area and seabed beyond petroleum exploration. It is important that as our use of fossil fuels decline, the data are effectively archived and made available for future research and applications (e.g. geothermal, gas storage, compressed air energy storage, carbon capture and storage). The coherence of the Marine Planning Framework will also benefit from regulatory practice including the management and understanding of producing reservoirs with a view to their future use for carbon capture and storage.

Energy - Offshore Renewable Energy

Engagement across the research and development sector is central to developing an evidence-based, data-driven approach to spatial designation.

The objectives set out are ambitious and critical to Ireland meeting its EU commitments for energy generation from renewable sources, as well as the reduction of greenhouse gas emissions. In particular, iCRAG is in full agreement that the successful development of offshore wind to meet these ambitions will "require fully coordinated support across government, from research and development, through supply chain development, to commercial deployment" (point 11.12).

In point 11.5 the paper rightly highlights the increasing cost-competitive nature of offshore wind across Europe. However, given the nascent nature of the sector in Ireland, it is unclear as to whether Ireland will see similar low-cost deployments of offshore renewable energy in the short-term. That is why we feel the ten policy actions and enablers set out in point 11.10 will be key to the long-term development of the industry. The IEA Renewable Energy Technology Deployment Technology Collaboration Programme (IEA RETD TCP) published a report in March 2017 on the "Comparative Analysis of International Offshore Wind Energy Development"⁸. In this report they identified six key pillars across which holistic support policies have catalysed growth and nurtured the development of a robust industry structure, namely:

- I. Market scale and visibility (driver);
- II. Site development (enabler);

⁸ <http://iea-retd.org/wp-content/uploads/2017/03/IEA-RETD-REWind-Offshore-report.pdf>

- III. Grid connection (enabler);
- IV. Incentive mechanisms (enabler);
- V. Supply chain development (supporting);
- VI. Innovation support (supporting).

In their analysis, IEA RETD noted that policies had evolved to enable best practice between different regimes to be adopted in response to local conditions. They noted that this evolution was highlighted by two main, emergent policy trends:

- 1. Competitive auctions, and;
- 2. Centralised development models.

With the development of the Renewable Electricity Support Scheme (RESS), Ireland is enacting the first. As for the second point, policy actions and enablers do propose to introduce a new planning and consent architecture for development in the marine area. Furthermore, it highlights the intention to introduce a new system of spatial designation of marine zones for specific activities including ORE, under the Marine Planning and Development Management Bill (point 11.14). iCRAG recognises this as a critical component to a long-term, sustainable development pipeline of ORE projects. We have seen already in the Netherlands the value that Government funded project site descriptions and front-end data can have on cost-reduction of offshore wind development⁹. It is also well demonstrated how early stage site evaluations can ultimately lead to critical “go/no-go” decisions, avoiding major fiscal implications¹⁰. In this regard we would strongly encourage the Government to engage across the research and development sector to help develop an evidence-based, data-driven approach to such a spatial designation. Such work is currently being undertaken at iCRAG whereby high-quality, spatial datasets available through Government agencies such as the Geological Survey of Ireland and Marine Institute are being analysed and interrogated in order to develop seabed condition studies for offshore infrastructure as well as constraint maps for potential geohazards and geotechnical constraints¹¹.

⁹ <https://offshorewind.rvo.nl/file/download/55039494>

¹⁰ <https://www.bbc.com/news/uk-wales-north-west-wales-28580683>

¹¹ <https://www.icrag-centre.org/research/projectlist/geotechnicalde-riskingoftheirishoffshoreenvironmentthroughgeologicalass.html>

Marine Aggregates and Mining

Marine aggregates and mining can form a key component of Ireland's future development, but key baseline data are needed.

The objectives in this section are realistic and set an ambitious tone. We concur with each statement listed. A mention towards a self-sufficient supply of raw materials (minerals/aggregates) from Ireland could be a positive addition.

The references are relevant. We would suggest consideration of the British Marine Aggregate Producers Association (BMAPA) document, which has some high impact statements of positive extraction and use of Marine Aggregates in the British Isles¹².

The key issues are clear, it is worth noting here that public outreach and impact of marine aggregate extraction in the public domain could be included. An emphasis on the positive sustainability of marine aggregate extraction versus its terrestrial counterpart might be a section worth noting.

At iCrag, the AggrePOP aims to quantify and qualify marine aggregates off the South coast of Ireland, augmenting known information via the addition of new data to the proposed unified database of identified aggregate resources¹³.

¹² <https://mineralproducts.org/documents/brochure.pdf>

¹³ <https://www.icrag-centre.org/people/evanmahony.html>

Summary and Recommendations

Based on the content presented in the NMPF consultation draft, iCrag has consulted across its research base and has set out on the preceding pages a number of comments, observations and inputs on the draft plan, which are summarised as follows according to heading:

- **Water Quality:** The NMPF recognises some of the key factors affecting water quality, but it is clear that key baseline data is missing regarding the impacts of freshwater input, land-ocean interaction and coastal acidification.
- **Underwater Noise:** A ‘noise assessment statement’, as defined in its present format, may not be fit-for-purpose for mitigation purposes. A robust ‘noise register’ can be developed, which could have a significant impact in terms of mitigation.
- **Sea-floor Integrity:** The area of sea-floor integrity requires long-term attention from a number of research and state bodies collaboratively, including iCrag, to fully assess Ireland’s GES.
- **Climate Change:** Existing predictions for coastal erosion levels are already outdated. New methods and tools in assessing impacts are required.
- **Carbon Capture and Storage:** Updating the draft to include both depleted gas reservoirs and saline aquifers would be helpful to the development of this technology in Ireland.
- **Petroleum:** Clarification with regard to licencing terms is critical to establish the long-term direction of the industry. Data held by this sector will also be critical in informing other areas within this plan (e.g. CCS, gas storage) and so a regulatory practice should oversee the archive and transfer of this data for alternative applications.
- **Offshore Renewable Energy:** To reach targets for ORE development as set out in the Climate Action Plan, there is an urgent need for a clear, streamlined consenting and planning process. To support this process, critical baseline and value-added datasets are required for any marine planning spatial designations and environmental impact assessments.
- **Marine Aggregates and Mining:** Marine aggregates and mining can form a key component of Ireland’s future development but, at present, requires key baseline data in order to be environmentally sustainable and economical.

Based on this summary, iCrag makes the following key recommendations:

1. Integration of data, scientific findings and other research outputs from iCRAG projects into future NMPF areas where relevant;
2. Co-ordination between iCRAG and other research and state bodies (such as MaREI, GSI, MI etc.) to address clear data gaps identified in the NMPF;
3. Invitation to iCRAG to join the NMPF Stakeholder Advisory Group Membership, as a societal leader in geoscience research.

Further information on the above points can be sought from Prof. Murray Hitzman, iCRAG Director, [REDACTED] or Dr Fergus McAuliffe, iCRAG Communications Manager, [REDACTED] or via [REDACTED]

28th February 2020

Draft NMPF Submissions,
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By email: msp@housing.gov.ie

A Chara,

Further to your invitation for submissions in respect of the draft MNPf, we would like to take this opportunity to briefly comment as outlined below, and in addition would be happy to make ourselves available to discuss any matters arising as the process evolves.

This submission provides comments on the areas which we currently understand will be of relevance to Bord Pleanála under the provisions of the Marine Planning and Development Management Bill, as follows:

- **ORE Policy 2** - An Bord Pleanála supports the proposed designation of zones for ORE and would welcome clarity in relation to the hierarchy of marine activities within these zones for the purposes of assessing individual development proposals.
- **ORE Policy 10** - The requirement for co-ordination and integration of designated zones with land-based plans and policies (particularly county development plans) should also be clear and unambiguous. This will be particularly important in terms of providing policy support for appropriate land-based infrastructure required to facilitate ORE. We would recommend that this policy be strengthened to achieve this objective.

- **Transmission Policy 4** – The comments above in relation to ORE Policy 10 apply.

Please do not hesitate to contact the Board should you wish to discuss any of the matters raised.

Yours faithfully,

GALWAY BAY AGAINST SALMON CAGES



NMPF Consultation
Marine Planning Section,
Department of Housing, Planning and Local Government. (DHPLG)

06/03/2020

DNMFP Submission on behalf of Galway Bay Against Salmon Cages

Galway Bay Against Salmon Cages first of all want to complain and protest about the so called Public Consultation process for the National Marine Planning Framework which took place in Galway on the 2nd December 2019 in the Connacht Hotel. This consultation meeting was a total sham as it had Teresa Morrissey of IFA Aquaculture on the panel which proved to GBASC and the public, yet again, that the whole NMPF process is totally geared to promoting, supporting and increasing the unsustainable, unregulated and environmentally damaging salmon farming industry in Irish waters. We note that all of the submissions from the public and concerned stakeholders, including ours, that were submitted as part of the public consultation NMPF Baseline Report were ignored, as only a small number of cosmetic changes were made to the NMPF Consultation Draft document. This is disgraceful and proves that the whole process is nothing but a sham.

In the Aquaculture section of National Marine Planning Framework Consultation Draft document a number of key words are again used regularly that DHPLG say will be addressed in the final plan, these words are Sustainable, Enforcement and Transparency. The word sustainable should never be used to describe finfish aquaculture and especially salmon farming for the following reasons.

Due to increased sea temperatures, uncontrollable sea lice infestations are now occurring more often on so called Irish organic salmon farms, resulting in huge damage to wild salmon and sea trout stocks in Irish rivers. This damage to our wild stocks by sea lice from salmon farms is unsustainable and if open sea cage salmon farming is not stopped soon it will further hasten the extinction of salmonids in Irish rivers resulting in major financial loss to the Irish economy.

We are constantly being told by IFA Aquaculture that we need more farmed salmon to feed the worlds increasing populations because the worlds wild capture-fisheries are being overfished. What a load of rubbish, as the salmon farmers are one of the main causes of this overfishing. It is estimated that 40% of the worlds wild capture-fish are going to make fishmeal to feed to farmed fish. It takes between 3 and 5 tonnes of wild fish to make 1 ton of salmon feed. The world's oceans and seas are being plundered and denuded of millions and millions of tonnes of wild fish every year to feed carnivorous artificial fish such as farmed salmon. This practice is not sustainable.

Hundreds of thousands of farmed salmon are dying every year in so called Irish organic salmon farms from disease, sea lice infestations, jellyfish attacks, toxic algal blooms, toxic pesticide overdoses and handling issues in relation to bath treatments for Amoebic Gill Disease. If similar animal welfare issues occurred on a terrestrial farm it would be closed down immediately and the farmer fined heavily or jailed. This is not sustainable.

Huge amounts of toxic pesticides are used to kill sea lice on Irish salmon farms every year. These toxic pesticides have been scientifically proven to also kill non target species such as Shrimp, Lobster, Crab and Sugar Kelp. If the National Marine Planning Framework is serious about achieving Good Environmental Status and halting Climate Breakdown then the use of these toxic pesticides in our bays, some of which are SACs, must be addressed.

According to very recent AIE documents, the Marine Institute do not hold any records of toxic pesticide use on so called Irish organic salmon farms and the DAFM have so far refused to release documents to GBASC on toxic pesticide and other harmful chemical use on Irish salmon farms. This leaves us and the public to believe that organic certification is a scam.

The use of toxic pesticides on salmon farms is unsustainable.

Farmed salmon escape most years from Salmon farms; FACT. These escapees have the potential to interbreed with our precious endangered wild salmon weakening them genetically, thus causing an extinction vortex in the wild stocks. This is not sustainable.

The word enforcement is a joke when it comes to salmon farming for the following reasons.

A number of salmon farmers have been setting up unauthorised pump and piping systems on coastal lakes and rivers since 2012 and maybe longer to abstract fresh water to use as bath treatments to treat their diseased fish. When GBASC reported them to DAFM and to Galway Co. Council no sanctions were imposed on them and they just moved the illegal pumps and piping systems to other rivers or lakes. Instead of punishing the salmon farmers that were illegally taking the fresh water from the rivers and lakes in summer drought conditions, the government through BIM went and leased for a number of them, Desalination Plants costing hundreds of thousands of euro to the Irish state.

The largest salmon farmer in Ireland, [REDACTED] was found to be overstocking at a number (3) of their salmon farming sites between 2014 and 2016. The sites in question were at Lough Alton (T12/93-3) smolt hatchery in Donegal (Dec. 2014).

[REDACTED] (T5/233) County Cork (June. 2015) and Deenish salmon farm Co. Kerry (T06/202). (December 2016)

No sanctions were taken against this company until April of this year (2019) when Minister Creed deemed the Kerry salmon farm licence as discontinued. We believe that this sanction was only taken because of publicity and pressure applied by NGOs over the last number of years highlighting the lack of enforcement by successive ministers and DAFM of salmon farm transgressions over the years.

Salmon farmers have been buying live wild Wrasse straight from fishermen for years with traps bought by BIM for the salmon farmers who then supplied them to the fishermen. The Marine Institute have approved the movement of these live wild Wrasse on to 12 salmon farm sites for a number of years. It now transpires that no salmon farmer has the required First Buyers Licence to purchase these live wild Wrasse from the fishermen and that they may have been doing so illegally. Its possible that tens of thousands of wild Wrasse have been taken out of the marine environment over the years without any records being kept which could lead to the possible extinction of wild Wrasse in Irish waters Were the Sea Fisheries Protection Authority asleep for the last number of years while this unsustainable and possibly illegal activity was going on, or did they just not bother to enforce the laws in relation to salmon farming as is usual with all other relevant government agencies.

The word Transparency is also a joke when used in relation to salmon farming for the following reasons.

Salmon farming is a highly secretive industry that is neither honest nor transparent when dealing with the public or NGOs. The salmon farming industry refuses to admit that they regularly use highly toxic

pesticides to kill sea lice on their stock, that they use antibiotics to keep their stock free from disease, that they use other toxic chemicals as antifoulants to keep their net pens and other equipment free from barnacles and algae.

Government agencies such as the DAFM that are tasked with monitoring the use of pesticides/antibiotics/chemicals on Irish salmon farms refuse to supply details under AIE/FOI about the type and amounts of pesticides and other chemicals that are used on salmon farms over the years. They also refuse to divulge the yearly amounts of high mortalities of farmed salmon and the diseases they died from. If the Department of Housing, Planning and Local Government are serious about making issues relating to the marine environment such as salmon farming, more transparent, then records on pesticide use, diseases, escapes and high mortalities must be made available to the public and NGOs on request, as the public have a right to know what methods are used to farm the salmon they may or may not chose to purchase.

In relation to the issuing of new or renewing of current salmon farm licences, a legally binding contract should be signed by the salmon farmer waving any rights to an appeal if the salmon farmer is caught breaking any of the conditions of his or her licence. At the moment it is nearly impossible to revoke a salmon farm licence or impose any punitive sanctions because of a lack of proper regulations.

If NO proper sanctions are imposed on salmon farmers that break the conditions of their licences then this will encourage them to continue with the old out dated method of open sea cage farming that is presently damaging our wild stocks of salmon, sea trout and shellfish and the marine environment.

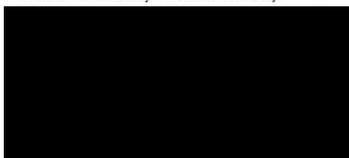
Salmon farmers applying for new or renewing current licences should only be issued with On Land Closed Containment licences if this government/DHPLG is serious about addressing Climate Breakdown and making sure that no further damage is caused by the unregulated and unsustainable salmon farming industry in Ireland.

As we cannot see into the future, it would be a mistake to permanently categorize certain bays as suitable for finfish farming as this may bestow on salmon farm operators a perception of a divine right to ownership of these bays.

As there are huge profits to be made from organic certification and as farmed salmon are neither tagged or stamped in any way, therefore no foolproof way of telling which salmon are organic and which are not. GBASC believe that all so called organic salmon should be micro-tagged before being transferred to open sea cages, to prevent unscrupulous salmon farm operators, in the future, smuggling into this country, non-organic salmon and rebranding them as organic. END

On behalf of GBASC

Billy Smyth
Chairman, GBASC,



From: CLIODHNA CAMPBELL [REDACTED]

Sent: 13 March 2020 15:34

To: MSP - Marine Spatial Planning <msp@housing.gov.ie>

Cc: [REDACTED]

Subject: RE: Stakeholder Notice on Draft NMPF public events

To : Tracey O'Connor

The Piers & Harbours team from Donegal County Council attended the draft NMPF public event at Killybegs on Monday 2nd March 2020.

The draft document seemed to be well received by most present. The session was informative.

In relation to the matter 2.52 International Boundary Issues (page 23 of the document), while it is welcomed that some meetings have taken place to resolve the jurisdictional issue at Lough Foyle (of particular relevance to Donegal) with a view to achieving a positive resolution as soon as possible, this unfortunately is insufficient to facilitate the progress for this Council on outstanding matters. If possible could the document (section 2.52) outline or refer to any interim joint approval processes that could be utilised (either through the Department (and which one) or the Loughs Agency/another body) in the meantime to enable progress to be made with sanctioning of approvals for various permissions to progress projects in or adjacent to Lough Foyle.

Regards

Clíodhna Campbell

Senior Engineer | Central Technical Services Division | Roads and Transportation Directorate

[REDACTED]
**Comhairle Contae Dhún na nGall | Aras an Chontae, Leifear, Co. Dhún na nGall, F93 Y622.
Donegal County Council | County House, Lifford, Co. Donegal, F93 Y622.**

-----Original Message-----

From: Cllr. Derek Mitchell MCC [REDACTED]

Sent: 06 January 20 [REDACTED]

Subject: RE: Submission to Consultation Process on Marine Planning & Development Bill with reference to Offshore Renewal Energy and marine leisure

Dear Robyn,

Please submit it to the Framework Consultation.

I wanted to raise it at the Public Consultation in Arklow on Thursday the 9th January as well.

Regards

Derek

Councillor Derek Mitchell, member of Wicklow County Council FG.

"Turning Vision into Reality"

[REDACTED]

-----Original Message-----

From: Cllr. Derek Mitchell MCC [REDACTED]

Sent: 06 January 2020 10:14

To: Marine Spatial Planning <msp@housing.gov.ie>

Subject: Submission to Consultation Process on Marine Planning & Development Bill with reference to Offshore Renewal Energy and marine leisure

Councillor Derek Mitchell (FG), Member Wicklow County Council, C/o Kiltoorish, Manor Avenue, Greystones, Co. Wicklow.

[REDACTED]

Submission to Consultation Process on Marine Planning & Development Bill with reference to Offshore Renewal Energy and marine leisure.

I represent the Greystones Municipal District and am concerned about the Visual Impact of proposed windfarms from the land. Particularly on large towns that face the sea and place

significant emphasis on maintaining an attractive vista from promenades and piers such as Greystones & Bray. These towns have made significant investments in the seafronts and vistas. Also from coastal walks such as Bray Head and Kilcoole.

The Consenting process needs to explicitly consider the scale of the Visual Impact from the land. It also needs to consider the combined visual impact of all seaward developments from these locations, not just the specific licence being applied for. This needs to be balanced against the National need for carbon free electricity and using the wind resources which we have.

The development of a large windfarm with a smaller visual effect, well out to sea, should take priority over a small one with a larger visual effect. There should be a limit to the visual effect permitted in such towns.

In 2005 the Codling windfarm obtained a windfarm licence for 220 turbines which are 15km from the coast at the nearest point, The plan had a 25 degree angle of view from Greystones and generated 1100 Mw, possibly the largest of any proposed in Ireland. There is talk of an extension to this.

The Dublin Array application seems similar to the Kish/Bray bank one which was for 145 turbines the nearest within 9 Km of the coast. The Visual Impact documents, which were on display in Garda stations, say it will have an angle of view of 62 degrees from Greystones. They describe the impact as 'adverse moderate' on Greystones and 'adverse major' on the view from the Cliff Walk. It must also have a significant impact on Bray. The visual impact of the combined schemes is described as 'significant' on Greystones.

The 25 degree angle of view is reasonable, the 62 degree is not, especially considering the combined effect which is probably 87 degrees.

None of the Documents on the Planning & Consenting framework seem to mention the Visual Impact and it must be a factor. This should especially reference seaside towns with a large population.

Local areas which have this visual intrusion forced on them should also receive a benefit. An industrial facility such as a power station may negatively affect an area but benefits, such as jobs, rates and trade come to the area. The same should apply to windfarms.

The local Municipal District should formally input their views to the Consenting process in a similar way to that prescribed for Strategic Housing Developments applying to Bord Pleanala. This specifies that a formal input from the Municipal District should be sent in following a presentation on the project.

There should be a time limit on any permission. It is not satisfactory that permits remain valid after 15 years of no progress.

Marine Leisure.

Marine leisure for the local population needs to be encouraged. Facilities such as public slipways, walks, marinas, dredging, mooring, boat storage for boats, canoes etc. Need to be provided. Where the population is expanding these facilities need to be expanded in a similar way to sports pitches

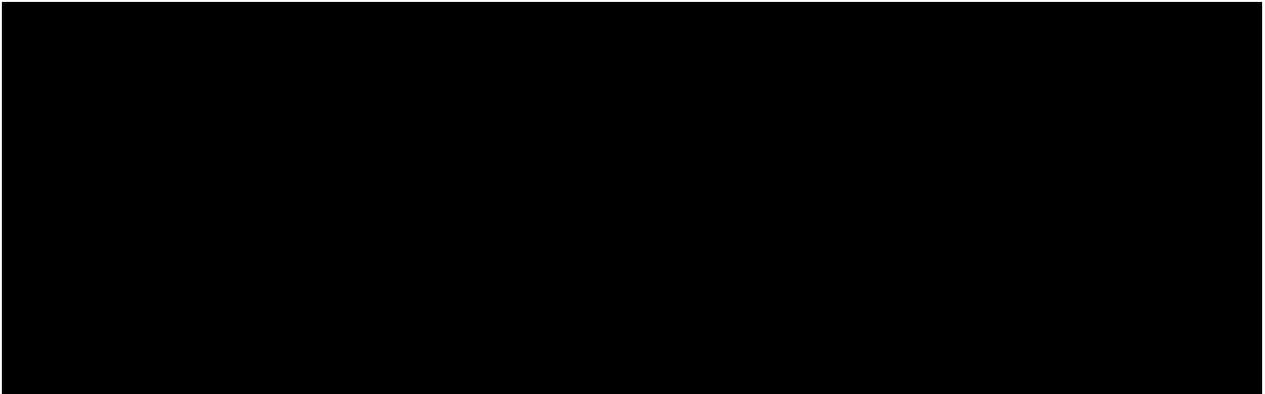
are provided on the land as a part of town planning. Much marine literature seems to prevent development, these types need to be encouraged.

Marine leisure is useful for tourism and is the largest provider of jobs in the marine environment.

Sincerely

Derek Mitchell

Councillor Derek Mitchell, member of Wicklow County Council FG.
"Turning Vision into Reality"



From: AIDEEN HETHERINGTON - [REDACTED]
Sent: 18 March 2020 14:57
To: MSP - Marine Spatial Planning <msp@housing.gov.ie>
[REDACTED]
Subject: Marine Planning Section

To whom this may concern,

Hi, my name is Aideen Hetherington. I am a GMIT Outdoor Education student. As I will be hopefully working in the waters and using them for personal use. I'm writing my views on what should be in place for water users like myself. This is enclosed in an attachment to this email.

Kind regards

Aideen Hetherington

Feedback on the National Marine Planning Framework Consultation Draft. To improve this framework from a recreational user there are a few areas that I feel could be improved. The first would be communication at the conference in Westport. The next would be spreading the word of these changes. Lastly would be the physical changes to the spaces in the water not addressed in this framework.

Firstly feedback starts on the ground with conferences and informing people about this change. A few students and I went to the conference of this plan in Westport. Whilst at this conference we contributed to the topic at hand. We suggested to notify water users more sufficiently as without the college none of us students who all use the water for either work or leisure. This attempt to input was dismissed and disregarded by the people giving the conference. To improve the plan for marines is to listen on the ground would bring to light different areas. The speakers were condescending to all groups when they had suggestions and questions asked at this conference by all parties not just the students.

An area that was dismissed that I would highly agree with is the communication with the public and how they spread the word to water users. The presenter told the group that twitter was their main form of communication with the public and by through different organisations spreading the word. Most young people don't use twitter as a form of communication and not informed by national governing bodies. To contact more people could be for organisations or national governing bodies to notify different clubs about these changes and inform them to

input their thoughts and ideas. National governing bodies should have a bigger involvement with spreading the word of these changes. This co-operation from governing bodies would allow the people on the ground using the water for work or leisure to be aware of these changes and possibly have greater involvement about the plan. This involvement strengthens the framework as these are people who know and use the water the most.

Within the National Marine Planning Framework Consultation Draft there are a few things I would like to touch upon. Firstly at the conference they spoke about Mayo's water treatment plants. Do they have anything in place to stop water contamination like what happened in Dublin in 2019 as this would affect everyone using the water. Due to the high levels of rainfall Mayo receives this could be an issue do they have a plan in place if such a thing were to happen? How would they notify everyone working in and with the water as this could be harmful to water users. Raw sewage is harmful to businesses working on the water such as surf schools and kayaking clubs. This is uncontrollable for clubs fast notification can prevent incident has happened in the water. This contamination has a ripple effect for workers an example is what happened in Dublin for two weeks water users couldn't work. Notify different clubs and water schools of areas with high risk of contamination before setting up can help with this issue. Also posting signs in areas where the waste water is released would help with staying clear of some issues.

Accessibility on most beaches can be useful for surf schools, kayak clubs and sailing schools. These schools bring money into the local area and help the local economy. More access to different beaches would higher the numbers of these schools bringing more tourists to the area and spreading the word of mayo's water activities. This accessibility include more slip ways and entrances to the actual beaches. When these schools start to grow more lifeguards will be needed so ripple effect of employment. Accessibility starts from the roads to the beaches to the areas to enter the beach such as steps or slopes also openings in sandbanks. At the water edge pavement slopes can help bring the equipment in and out of the water. For swimmers with limited mobility this can also benefit as these can also be used as entrances and exits from the water if a hand rail is provided.

Beach clean ups, bins and dog poop bags can help clean up the areas. It is important for these areas to be clean as it makes it less attractive to see waste products lying on the sand. This rubbish can damage water user equipment and has a harmful effect on wildlife in the area. Plastic harms every animal if eaten or getting caught up in it. Dog droppings can spread diseases to birds and water animals. Bins could be placed throughout different beaches such as

Old Head as it is a long beach with few bins. These bins in old head could be placed around by the rocks as this would not take away from the view. Dog bins with eco-friendly poo bags would give dog owners incentive to pick up after their animal.

Zonal areas should be put into place to benefit everyone. Farmer use the sea for their crops and livestock and people using the sea recreationally can clash due to no set boundaries. This can bring harm to their work without realising recreational users can interfere. This interference comes in forms of diseases of equipment and going to close to the crops unaware. This can be solved by mapping out for the public where they will be affecting farming. Also to reduce disturbance and diseases with the crops washing stations. These wash stations can reduce cross contaminations. These contaminations happen from equipment going from rivers and lakes water having different bacteria and bringing them into the sea or vice versa. To prevent this by washing stations this also helps with wild life reducing deaths and improve water standards.

From: Shane O'Reilly [REDACTED]
Sent: 20 March 2020 12:22
To: MSP - Marine Spatial Planning <msp@housing.gov.ie>
Subject: National Marine Planning Framework

Hello,

I am a recreational angler who spends a lot of time fishing in the sea. I have recently been made aware of the NMPF and have been looking through the associated documents. What has struck me is that very few (If any) of the federations/associations that represent anglers seem to have been consulted (they are not listed in your stakeholders contacts). These people are key users of the sea as a resource and should have a voice at this table. I know that you are looking for submissions regarding the NMPF before April 9th. The documentation for the NMPF is quite complicated and it is difficult for me to see how or what one should put in a submission. Can I ask what sort of submission you are expecting? Essentially, what I want is that anglers and their representative bodies have input into decisions made regarding the marine environment that may affect them. There are also plenty of developments that could be made that could enhance the use of the marine environment as a recreational angling resource (e.g. creating a plan/supports to enable the upgrading of the national charter boat fleet). How does one go about inputting this type of thing into the framework?

Regards,

Shane O'Reilly

In our review of the Public Consultation Documents on the Draft National Marine Planning Framework, we were again disappointed to see continued depictions of aquaculture in Ireland that are inaccurate and inappropriate. We have repeatedly made submissions that highlight the errors in your documentation. We have supported our assertions with clear references from the relevant peer reviewed literature and yet it is clear that these submissions have not shaped the draft NMPF, currently open for consultation.

As the Development Agency for Fisheries and Aquaculture in Ireland, we have engaged with all consultations relating to MSP and MSFD. We have further encouraged fishers and aquaculture operators to do the same, but this is becoming increasingly difficult when their sector is being portrayed in such a negative manner.

The areas where we have most concern are the repeated inaccurate statements relating to the transmission of diseases to wild stocks, eutrophication, negative impacts on beach tourism, impacts on the genetic integrity of native species and impacts on seabed integrity as a result of accumulations of waste. While all of these impacts are associated with poorly regulated aquaculture elsewhere in the world, they are not impacts that have ever been an issue in Ireland. This is due to the fact that Irish aquaculture is heavily regulated, we are a small producer in the global context and we principally produce an organic product which requires much lower stocking rates. It is important to note that Ireland has successfully defended multiple infraction cases associated with perceived impacts of salmon farming on wild stocks.

Link to one of our previous submissions - https://www.housing.gov.ie/sites/default/files/public-consultation/files/responses/150_bord_iascaigh_mhara.pdf

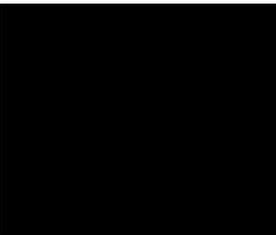
In the absence of any credible references being cited in your publications, we are unable to understand where these damaging statements are coming from, but they appear to be stock phrases repeatedly rolled out without giving due consideration to the unique nature of the Irish industry. We had assumed that future decisions in relation to marine planning will be based on the best scientific advice, but this belief is being undermined by the repeated inaccurate statements about Irish aquaculture contained in your consultation documentation.

We urgently request that you examine the peer reviewed literature relevant to aquaculture in Ireland concerning these issues and, would also ask that you would provide us with a list of the literature you are using to support your statements. We would welcome a meeting with you and your scientific advisors to address these concerns.

We are currently working on our submission to the current consultation, but we are wondering whether our responses are being given appropriate attention, given the apparent outcomes to-date. It is our view that having the consultation documentation 'tainted' by misinformation is not a good way to develop policy.

Donal Maguire
Director – Seafood Technical Services

26th March 2020



30/03/20.

Dear sir/madam,

I am writing to express my opinions on a number of topics raised in the National Marine Planning Framework.

Firstly, as someone who has grown up in Cork City, I can appreciate the marine archaeology and marine architecture of the area and their importance to our cultural heritage. It is for this reason that I would like to express my concerns about the prominent focus on economic benefits in section 15.0 (Ports, Harbours and Shipping). The objectives of this section focus on the benefits of maritime transport and encourage the growth of a competitive and effective market; however, the preservation of our cultural heritage is not a key objective. The only mention of protecting our coastal conservation sites is in section 6.0 (Defence and Security) where the Naval Service and Air Corps roles are listed. In my opinion, this policy needs to exclude trawling from areas of shipwrecks, national monuments and national inventory of architectural heritage. A greater effort and focus needs to be put on the protection of our coastal history.

Regarding section 17.0, Sport and Recreation, the objectives of this section are positive and if carried out, could have encouraging effects on our growing recreation industry. However, Planning Policy 2 highlights that there may be need for concern about possible interference with 'access to and along the shore, to the water [and] the use of the resource for recreation or tourism purposes' (p158). It begs the question, how is the importance of sport and recreation viewed from a government's perspective. If the sole focus, as was discussed above, is on economic benefits and competitive maritime transport markets, will the use of our coastal areas for recreation purposes be deemed less important? Overtime will we see a decrease in the access we have to our own coasts and waters? The social benefits of sports and recreation should be further highlighted so that their relevance to improving our country and our living standards is known.

In this section I do appreciate the mention of water safety being an issue that needs to be addressed and supported. Encouraging the use of lifejackets on slipways is constructive but these efforts could be better. In many areas along the coast water safety equipment is tampered with and while that is something that is difficult to monitor, often the sites of the equipment are not checked for months

and so in the case of an emergency, the sufficient equipment is not available. While section 17.0 highlights the positive work of Irish Water Safety, this planning framework could make help to support these efforts.

Finally, something that stood out to me in this section on sports and recreation was the issue that these activities could potentially have adverse impacts for the maritime environment. I understand the fear of disruption to flora and fauna, and the possibility of increased litter. However, if this is a concern when looking sports and recreation, it should then too be highlighted in sections looking at the storage of offshore gas or the negative impacts of aquaculture. It should be a concern when considering expanding our economic benefits through maritime transport and harvesting seaweed. Anything that brings people to our coast has the potential to damage the natural environment. All the listed activities produce some form of pollution. What is not considered is that people who engage in sports and recreation in our coastal areas are often the same people fighting to protect it. They have an appreciation for the environment and feel connected to the natural space. Possible education in proper coastal behaviours could be a way to ensure that the natural environment is protected and that recreational users are not receiving the majority of the blame.

Recreation users get the brunt of the blame when issues arise such as contamination in the waters from equipment. However, contamination can come from buying seed from other locations or during transport. Instead of pointing blame at recreation users, why not support them with simple solutions? Facilities to wash equipment at popular areas of recreation would reduce the environmental impact they may have and make sports and recreation less destructive. These washdown areas would benefit the environment but also reduce any conflict between aquaculture users and recreational users. By mending these relationships, less issues may arise between the two sectors and less need for government intervention may be required.

While the framework highlights issues, concerns and solutions in under many headings, these were the topics which I felt I had information on to give a response. I want to express my frustration that many others may have insightful opinions on this framework however no effort was made to highlight the publics opportunity to respond. As you said '75% of our population live in coastal counties' yet the number of people who are aware of this framework proposal are minimal. Greater efforts need to be made to involve the public.

Aisling Deasy

Rowan Quinn



**National Marine Planning Framework
Marine Spatial Plan 2040 Consultation Draft Submission**

I begin to write this submission with the hope that entries with the same intent will be acknowledged and valued. Firstly, I praise the department for the existence of this framework as it is, after all, your duty to have it in place. I applaud the extensive work that has gone into creating such a document. I acknowledge the ethos of this policy by placing the environment as a key decision-maker in future developments in the marine area of the Irish jurisdiction. Having it in place is one thing but standing by it is another and I remain optimistic that this will be stood by. Engaging with the public is a vital step in the construction of such a policy. The consultation process was something I was opportunistically involved in through a friend. It must be highlighted, as a marine user I was not made aware through any other platform. I know what you're thinking, "You've still been informed, and you are consulting". However, for my other marine user friends who were not made aware of this consultation opportunity, for my family who has lived by the sea for three generations, and those to come, Also, for other marine users who don't affiliate with an NGB of sport, How are they informed?

Word of mouth is a great thing, but it is your responsibility to let the public know this consultation exists. As policy goes, it will directly affect those who are growing up along with it. In this situation, the NMPF will be enforced for 20 years. A significant amount of time will have passed in my lifetime by then. I criticise the marketing of this consultation draft, how do government departments expect to have a civilly engaging youth society if they, the departments, don't engage with them? And provide the environment for those youth to have their say about their future? I believe the marketing for this consultation process was poorly advertised, especially to a younger demographic, those of whom are the future of our country and the successors of our work. And for that younger demographic, who may not be able to negotiate the linguistic complexity of legislative policy, a simplified version would be much appreciated.

I don't wish to condemn this entire policy or generalise all policies. I just wish to get that point across for departments to be as holistic as possible. As I become older, I have begun to be more educated on how modern society works in a capitalistic model. I begin to find myself frustrated on how governments who come into power make decisions to benefit themselves before the people, the citizens of a nation they say they represent.

I question the departments understanding of the term 'Sustainability'? It has been referred to multiple times in the document. A search found 'sustain' mentioned 162 times. Sustainability must not let economic growth overtake it. It must be where our natural environment is put at the forefront of every single decision that is made. We depend on this earth that we all live on, it's time to give back and stop demanding from it. It is a finite recourse, and modern practices have diminished it ever since the Industrial Revolution began. As a nation with the number of marine resources we have, this policy is a perfect opportunity to 'HOOW' that reduces the impact on the environment rather than depleting it. Our health is our wealth!

After reading through the consultation draft, please see my observations that are outlined below:

Section 2.0

2.50 Transboundary Co-operation

As a resident of the Carlingford Lough area, I have grown up with this beautiful natural resource on my doorstep. The confusion has always existed of the International boundary line that runs up the middle of the lough into Warrenpoint harbour. This shared channel of water brings much traffic to the lough. It also brings conflicts of interests between both jurisdictions. I wish to reference section 2.52 in the draft consultation. I would like to put pressure on the department to follow up and resolve the issue outlined of the International boundary. In achieving this, relevant and frequent cross-border consultation should take place to ensure public engagement is not just offered but valued and acted on. The recent CO₂ gas storage that has been granted had zero Habitats Regulation Assessment (HRA) done. Nature doesn't have any borders; these developments have an effect of different areas of the lough and failure to acknowledge and incorporate that into modern plans is unacceptable. Developments taking place on either side of the border must be up for negotiation with the relevant authorities that speak for nature, as nature doesn't have any voice, we as a human race have evolved with behaviours of dominance over it. The formation of a cross-border committee should be established to achieve social, economic and environmental benefits.

The decision not to include Carlingford Lough in the Marine Spatial Plan until after Brexit is worrying – particularly when the Department of Agriculture Environment and Rural Affairs (Northern Ireland) has already released an MSP covering the whole of Carlingford Lough. Moreover, the Department of Agriculture Environment and Rural Affairs have already begun to exercise their assumed legislative power in the Lough, most recently by allowing Warrenpoint Port to proceed with a proposal for a dredge disposal site in the Lough without an Environmental Impact Assessment. A local maritime business has informed me that the Department of Housing, Planning and Local Authority was contacted by agents of Warrenpoint Port concerning this matter and they failed to oppose the proposal – nor did they insist that the correct mechanisms were adhered to (such as an EIA) to protect Irish interests in the Lough that would be impacted negatively by the proposal.

2.55

I am happy to see the climate action commitment sees exploration and recovery of new offshore oil reserves being incompatible with the low carbon transition the government wishes to take. This is progress! However, the continuation of natural gas is questionable. I understand that it is seen as an acceptable transition fuel as it is less damaging to the environment than its counterparts. I wish for the discontinuation of exploring and removal of natural gas with Irish waters. I wish for the money used in this sector to be used in upgrading the renewable fleet in wind, wave and tidal. After all, Ireland is one of the best-placed countries in the world to build offshore wind according to Robert Howarth, one of the world's leading energy experts, who presented at the Joint Oireachtas Committee on Climate Action earlier this year (Cullen-Mouze, 2020).

Section 3.0 Overarching Marine Planning Policies

Water Quality

Concerning the planning policies proposal guidelines, I wish to express my concern surrounding the integrity of enforcement. Our water quality both inland and at sea is vital for life on earth to survive. Practices that have the potential for jeopardising the quality of our waters should not be considered fit for purpose.

Marine Litter

A colossal issue on our island. Evidence from much of this comes from the aquaculture industry. I call on the department to clamp down on the Aquaculture industry to improve their practice and take responsibility for their careless methods. Again, not to generalise, it is not every business that is causing harm. However, it is in each relevant business' best interests for the longevity of our oceans and population that responsibility is taken on this matter. I have seen first-hand on both east and west coasts the materials used from fishing and oyster farming. Initiatives have been taken for fisherman to 'fish for plastic' and to recover 'ghost nets' that are causing detrimental impacts to marine life. Initiatives where watermen are paid for the marine litter they recover.

We, the public are to blame also. Consumerism has increased and our throwaway society has brought us to this point. We can change that by changing our behaviours, it is changing, slowly. More rubbish disposing options at coastal areas are needed to keep litter from entering the sea. As well as this, they need to be emptied. Cooperation with local authorities to implement this service would be widely welcomed.

Climate Change

A huge reality of our time however we have the power to change it for the better. I would like the department to take a preventative approach to this matter. I wish for all available science to be valued and acted upon for the best interests of our people and planet. I wish for every planning policy across the entire framework to be critically assessed in terms of its environmental impacts. Absolute cohesion with authorities such as local councils and the OPW for the protection of our coastline.

Foresight to be given to all future development near coastlines that could cause harm to local marine habitats for biodiversity.

For the department to look further into the potential that kelp seaweed has for carbon sequestration. For this potential not to be undermined by mechanical harvesting, much of which is being allowed in the area of Bantry Bay. Kelp plays a vital role as a keystone species in the marine ecosystem. This variety of seaweed provides an array of ecological services that we as humans benefit from indirectly (Kelly, 2006).

Referring to **Section 8.4** Currently, the Irish government is supporting Shannon LNG and offshore exploration for fossil fuels. I call on Government to take energy security seriously, protect our marine and instead invest in indigenous renewable alternatives such as wave, tidal and offshore wind.

Economic – Thriving Maritime Economy

On this topic, may I bring up an issue concerning equality? Undoubtedly our Irish waters are thriving with resources that are worth a lot of money. Former governments have caused neglect to our local coastal fishing communities while allowing international fishing trawlers to swoop up anything they can in their passing. I urge this current framework to correct the mistakes of

the past, embracing a local circular economy system and managing our resources responsibly so that European states cannot overwhelm fish stocks. On top of this, bycatch that is collected causes colossal harm to marine ecosystems and must be managed appropriately, 'Red list' species being harmed in the process. A more stringent plan on monitoring overfishing and dredging as well as policing of illegal fishing vessels practising inhumane methods of fishing, for example, French vessels slaughtering dolphins in Irish waters.

Section 7.0

Energy Carbon Capture & Storage

I can see how the department sees this as a good idea for lowering the countries carbon emissions and look 'green'. However, I question the real benefits associated with it. Risks slightly outweighing the benefits from some quick research on this technology. I firmly believe that the immediate decarbonisation of electricity generation, co2 producing companies and energy-intensive industry to real green energy. This way there will be no need for this technology to exist. Risks that come with this is emissions that are created while implementing this technology and indirectly rising emissions rather than reducing them. Leakage of product into the marine ecosystem cause detrimental damage to our ocean's acidity levels, wildlife, fish stocks and habitats.

Section 15.0

Safety at Sea

My community have been impacted a handful of times of recent from tragedies at sea. I request the department to engage with local authorities to equip all access points to be assessed in terms of safety for public wellbeing. Piers around the country's harbours should all have railings on the inside sections. In relation to slipways, although they are public, access barriers I believe should be in place. A system where interested parties wish to use the slipway will be given access upon request. A locked swing or liftgate would be ideal here. This is to ensure maximum safety at our public access points and avoid any unprecedented fatalities.

Section 16.0

Seaweed Harvesting

The lack of Issues for sustainability in section 16.19 shown that the real threats to the ecosystem from mechanical harvesting has not been thoroughly investigated. I urge the department to utilise the science available to manage this recourse sustainably in a genuine manner. vigorous removal of these native species allows for invasive species to take over. Seaweed harvesting is acceptable in the traditional way it has been done for years as part of our deep Irish culture. This could also play as an opportunity for section 19.0 with marine tourism.

Section 20.0

Wastewater Treatment & Disposal

It is understood that Irish Water has plans in place to develop its raw sewage outlets around the country. A local raw sewerage outlet has been outputting 80+ wheelie bins a day worth of effluent into Carlingford Lough. This means that SAC's, wildlife, recreation activities, aquaculture and human health have been put at risk. I ask that the MSP strives to protect and allow the replenishment of these areas similarly effected in the 30+ other locations around the country. Giving the area a fully reserved chance to come back to life after being polluted for millennia.

17.0

Sport and Recreation

This sector is one I am quite involved in. My experiences have seen where this sector can have an impact on the physical environment. Much recreational traffic can play its part in coastal erosion. Infrastructure to prevent this would be welcomed such as means of sustaining recreational areas for that benefits socially, economically and environmentally.

I wish the department the very best in their implementation of this framework, I must put my trust in you all to deliver this in the most respectful way possible to our precious planet. I thank you for making this consultation possible and look forward to engaging with you in the future.

Sincerely,

Rowan Quinn



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Draft NMPF Submissions
Marine Planning Section
Department of Housing, Planning and Local Government
Newtown Road
Wexford
Y35 AP90

31st March 2020

Our Ref: SCP190405.2

Re. Draft National Marine Planning Framework and SEA Environmental Report

Dear Mr Dempsey,

We acknowledge your notice, dated 13th November 2019, in relation to the Draft National Marine Planning Framework (the 'NMPF') and associated SEA.

We welcome the opportunity to provide comments on the NMPF and associated SEA at this stage in the process. Our role, as one of five statutory SEA Environmental Authorities, focuses on promoting full integration of the findings of the SEA into the NMPF and advocating that the key environmental challenges for Ireland are addressed. It is not our function to either approve or enforce the NMPF or SEA. This submission is intended to strengthen the NMPF and support the integration of environmental considerations and related commitments into the NMPF.

We acknowledge that the NMPF sets out a vision for how an integrated marine planning system, with distinct forward planning, development management and enforcement components can be achieved. We also note that it will be supported by the *Marine Planning and Development Management Bill 2019*, once finalised. Given the importance of a clean, well-protected marine environment for our health, our wellbeing, our economy and our quality of life, it is vital that future marine-related planning and development must be carried out in an environmentally sustainable manner.

Overall Strategy for the NMPF

The Marine Spatial Planning Directive requires that Member States prepare a marine planning framework; and it is noted that the NMPF acknowledges this requirement. We recognise the need to achieve a balance between economic, social and environmental factors in preparing Ireland's first NMPF.

Effective implementation of the NMPF will be challenging considering the many sectors operating in the marine environment. It is evident that close coordination, communication and collaboration between those sectors will be needed to ensure that the NMPF can achieve its aims in an environmentally sustainable manner. We recommend that a cross organisation / departmental coordination group is established, including an environmental subgroup. This would help ensure the effective implementation of the NMPF is achieved and supported by relevant environmental monitoring and reporting mechanisms.

We note that the NMPF describes the various development / sectoral activity-related policies clearly. We recommend however, that the overarching marine planning policies are highlighted to a greater extent. The NMPF could also discuss in greater detail how conflicts or overlaps between different sectors and environmental constraints will be addressed.

Governance, Implementation, Monitoring, Reporting and Review

We recommend the preparation and publication of a NMPF Implementation Plan alongside the Framework, to set out a clear pathway for how the NMPF will be implemented and tracked over its lifetime.

The EPA, in our submission on the National Planning Framework (NPF), recommended establishing a High-Level Implementation Group, across the different government departments and Agencies involved in preparing the NPF, to support the delivery of the Implementation Plan. The EPA also recommended that individual focussed NPF sector-specific sub-groups could be established to oversee and review progress on implementation of relevant sector measures. The arrangements in place for the implementation of Food Wise 2025 (FW2025) and the Offshore Renewable Energy Development Plan (OREDPA) also provide examples of existing successful approaches to consider. For FW2025, a High-Level Implementation Committee overseeing the implementation of the actions is chaired at ministerial level and an Environmental Sustainability Committee addresses the actions dealing specifically with sustainability reporting to the High-Level Implementation Committee.

A similar model could also be applied when considering an implementation plan for implementing the NMPF. The NMPF implementation plan should clearly set out the actions, targets, timeframes and appropriate bodies responsible for implementing these. This will significantly strengthen the NMPF and reduce the risk of poor implementation. Given that many bodies are likely to be involved in implementing the NMPF, it will be important that the relevant bodies are consulted if an Implementation Plan is being considered.

The Implementation Plan should include provisions for annual reporting on implementation of the NPF commitments. The Implementation Plan should also link with the SEA-related monitoring obligations required under the SEA legislation. There is potential to link reporting on progress on

the NPF's environmental related objectives with the cyclical *Ireland's Environment* reporting and related periodic environmental topic reporting.

Relationship with other plans and programmes

The NMPF clearly identifies the need to integrate and coordinate marine planning with land use planning onshore, by highlighting the relationship with the National Planning Framework in particular.

Key Environmental Challenges

In our SEA Scoping submission earlier in the process, we highlighted the key environmental actions for Ireland currently, as described in Chapter 13 of *Ireland's Environment 2016*, which are also relevant to implementing the NMPF in an environmentally sustainable manner.

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

These actions are linked to several of the UN's Sustainable Development Goals (SDGs). We acknowledge that the NMPF forms part of the Government's efforts to progress these sustainability development goals, as relevant to the marine environment. Addressing and implementing these key SDG actions will be important to deliver environmental protection and promote sustainable development in Ireland in the years ahead.

Integration of SEA and AA into the NMPF

The NMPF is well placed to serve as a significant driver for addressing the environmental challenges facing Ireland, in partnership with other government departments and state agencies. The NMPF should however more clearly specify how it intends to protect environmentally sensitive areas in the marine and coastal environment.

One aspect in particular, that needs to be looked at relates to the level of which SEA and AA mitigation measures are reflected in the NMPF. We note that while the SEA and Natura Impact Statement (NIS) include numerous proposed mitigation measures, the NMPF appears to only implement or partly implement a very limited number of these. We recommend that the NMPF

provide greater clarity in terms of how the SEA and AA recommendations have been taken into account and integrated into the NMPF. This could be achieved by including an additional section that collates the relevant recommendations from the SEA and AA and indicating where they have been addressed in the NMPF. Information on the proposed mitigation and monitoring measures should also be referred to. These issues should be addressed prior to adopting the NMPF.

Additionally, while the NMPF includes an environmental protection hierarchy of “*avoidance – minimisation – mitigation – ‘statement of case’*”, what the ‘statement of case’ refers to, needs to be clarified further.

Where recommendations from the SEA or NIS are not implemented, reasons should also be provided as to why this is the case.

Future Amendments to the Draft NMPF

Where amendments to the NMPF are proposed, these should be screened for likely significant effects in accordance with the criteria as set out in Schedule 1 of the SEA Regulations and should be subject to the same method of assessment applied in the “environmental assessment” of the Draft NMPF.

SEA Statement – “Information on the Decision”

Following adoption of the NMPF, the DHPLG should prepare an SEA Statement that summarises:

- How environmental considerations have been integrated into the NMPF;
- How the Environmental Report, submissions, observations and consultations have been taken into account during the preparation of the NMPF;
- The reasons for choosing the NMPF 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 NMPF.

A copy of the SEA Statement, with the above information, should be sent to any environmental authority consulted during the SEA process.

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,



Dr Jonathan Derham
Head of Programme
Office of Evidence and Assessment

Appendix I – Specific Comments on the NMPF

Specific comments on aspects of the NMPF are provided below, these should also be considered in finalising and implementing the NMPF.

NMPF Title

We recommend that the NMPF title include the timeframe over which the NMPF will apply. This would help to further highlight how the marine planning framework is being aligned with *Project Ireland 2040: National Planning Framework*. A subtitle to reflect what the NMPF is seeking to achieve and provide more explanatory information could also be considered.

Overarching Marine Planning Policies

Marine Planning

Where the Marine Planning and Development Management Bill is discussed, the NMPF should also acknowledge that environmental assessments are conducted as part of the dumping at sea process, as well as the foreshore and planning regimes.

The draft NMPF refers to sub-national planning and developing a partnership approach to regional planning. The Regional Assemblies may provide an appropriate platform through which this work could be conducted.

Environment and Ocean Health

The draft NMPF states that it “*intends to help realise the opportunities Ireland has to continually improve its marine and coastal environment*”. The draft NMPF could refer to the valuing and protecting the marine environment as part of the existing environmental measures.

With regards to Descriptor 7 for Good Environmental Status (GES) and the requirement to ensure that permanent alteration of hydrogeophysical conditions do not adversely effect marine ecosystems, there may be merit in aligning this work with the marine elements of the work of the National Hydromorphology Working Group, established under the Water Framework Directive and led by the EPA Catchments Team.

Biodiversity

The EPA acknowledges that the draft NMPF includes measures for assessing how a proposal could affect coastal habitats. In addition to the measures listed in draft NMPF these assessments could also consider potential cumulative or in-combination effects of the development on the coastal habitats.

Water Quality

The draft NMPF could consider including the Dumping at Sea Act in the Key References section. This Act contains criteria for the characteristics and composition of material suitable for dumping at sea. These criterium would assist in achieving National Marine Strategy Framework Directive (NMSF) GES Descriptor 8 in ensuring that concentrations of contaminants are not at levels that could give rise to pollution effects.

Marine Litter

The key references in this section could also include the Dumping at Sea Act and the Urban Waste Water Treatment Directive, given that both of these pieces of legislation include authorisations which regulate the location and characterisation of materials entering the marine environment.

Key Sectoral/Activity Policies

We note the many different policy relationships included in the table on pages 88-89. It could be improved by also indicating what activities are to be prioritised or take precedence depending on specific factors.

The NMPF should also consider the following aspects in further detail:

- The need to prepare management plans for Marine Protected Areas that establish the nature and extent of permitted activities in those areas;
- Set out practices for 'sustainable fishing';
- Ensure that all relevant plans, projects and activities (including investigative and feasibility studies, e.g. for aquaculture and offshore renewable energy) are subject to the relevant environmental assessment.

Fisheries

Paragraph 12.19 refers to the Shellfish Waters Directive. This reference should be deleted as the Shellfish Waters Directive was repealed 13 years after the date of entry into force of the Water Framework Directive. Designated shellfish waters are afforded protection under Annex IV Protected Areas of the Water Framework Directive.

Ports, Harbours and Shipping

A port or harbour intending to carry out dredging and dump the dredged material at sea must obtain both a foreshore licence from the relevant foreshore authority and a dumping at sea permit from the EPA. The majority of dumping at sea permits have been, and are likely to continue to be, concerned with the disposal of dredged material from the maintenance dredging of ports, harbours and navigational channels.

The Dumping at Sea Act 1996 (as amended) recognises the potential beneficial uses of dredge material and permission to dump at sea is granted only if the EPA and the OSPAR requirements for re-use of materials are satisfied that there is no suitable alternative means of land-based disposal, treatment or reuse of the material. In addition, all dumping at sea permits contain conditions in relation to marine litter.

The Marine Institute *Guidelines for the Assessment of Dredge Material for Disposal in Irish Waters* (2006, addendum 2019) includes national sediment quality guidelines. The purpose of these guidelines is to establish a comprehensive national framework for assessing the quality of dredged material and its potential contaminants.

Waste Water Treatment and Disposal

The Waste Water Treatment and Disposal Policy 1 refers to achieving the objectives of the "*Marine Strategy Framework Directive 2012-2020*". There is no timeframe specified in the title of the Marine Strategy Framework Directive. Policy 1 should include proposals by Irish Water to contribute towards realising the Objectives of the Urban Waste Water Treatment Directive. While

many of the target dates in the Directive are now in the past, the overarching objectives of the Directive remain the same and are still valid.

Where the EPA Reports are used as a reference, the date of the reports should also be included, to ensure the most up to date information is being used.

As mentioned above, the 64 designated shellfish waters are afforded protection under the Annex IV Protected Areas of the Water Framework Directive.

Climate

The NMPF, should seek to maximise the many potential co-benefits of climate adaptation measures across human health, biodiversity, water quality, coastal flood risk management, terrestrial land use planning and other interrelated areas.

When discussing future climate impacts, the NMPF should refer to the climate data and projections used in developing the NMPF.

Regarding the planning policies and adaptation on page 60 of the draft NMPF, further information should be included on the decision-making framework as it relates to adaptation and the policies of the National Adaptation Framework, sectoral adaptation plans and local adaptation strategies.

Schedule A: Public Bodies with Marine Responsibilities

The functional activities of the EPA should also refer to licensing (Industrial Emissions, Waste, Waste Water Discharge Authorisations).

It should be noted that while the Department of Housing, Planning and Local Government is the responsible organisation for Dumping at Sea activities, the EPA is the organisation responsible for evaluating applications and enforcing dumping at sea permits, under the Dumping at Sea Act.

Appendix II – Comments on the SEA ER

We welcome that the scope of the NMPF and description of the various elements of the NMPF are clearly laid out. We also acknowledge the methodology and approach taken to developing and assessing the various alternatives considered.

The SEA Environmental Report refers to the European Environment Agency report 2015. It should be noted that the EEA recently published "[The European Environment - State and Outlook 2020](#)". The new report provides updated information and trends in relation to the quality of the European marine environment.

Scoping of the Environmental Report

The scope of the SEA is quite broad and would benefit from further refinement. For example, aspects such as air quality, land cover and terrestrial transport could perhaps be removed, or made more specific to a marine plan, to greater reflect the nature of the NMPF.

Data Gaps

With regards to the limited marine baseline data available, data gaps (where known) could perhaps be more clearly described.

The Marine Institute is currently undertaking a Seascape Charter Assessment which could be used as a reference for filling some data gaps relating to characteristics of the marine landscape and coastal landscape protection.

Significant data can be obtained from the monitoring carried out under environmental authorisations issued by the EPA. These include industrial emissions licences, waste licences, waste water discharge authorisations and dumping at sea permits. All of these authorisations include monitoring requirements that generates data in relation to water quality, discharges to water, emissions to air, turbidity assessments and sediment contamination. Annual reports for these authorisations are available on the EPA website.

Existing environmental baseline

We note that some sections of the SEA describing existing environmental pressures/problems focus on possible impacts from future development. The SEA would benefit from describing, where possible, areas where the marine environment is already known to be in poor or unfavourable condition.

Non-Technical Summary (NTS)

The NTS could be improved by considering use of a more 'plain-English' approach, where possible, to improve its read-ability as a non-technical summary.

Table 4 provides a summary of the current state of Irelands environment (2016). In relation to the Inland and Marine Waters theme, it should be noted that most of Irelands coastal water bodies are of good ecological status or better. 38% of transitional waters are of good ecological status, or better. The latest water quality assessment period should be updated to refer to 2013-2018.

Mitigation

It is not clear how the measures will provide mitigation for activities.

Monitoring

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

The current geographic scope of the monitoring may not be sufficient to assess plan activities, for example consideration should be given to what happens in unmonitored areas or biotopes.

If the monitoring identifies adverse impacts during the implementation of the NMPF, effective and appropriate remedial action should be taken.

State of the Environment Overview – Republic of Ireland

Table 6-2 Summary of the Current State of the Environment (2016) – this table should be updated as per the comments for Table 4.

Environmental Characteristics

In relation to Water Quality and Marine Litter, it should be noted that both the Water Framework Directive and the Marine Strategy Framework Directive require water quality assessments to be completed and can be used to inform the NMPF.

Section 6.4.4 Water should make reference to the requirements of the Water Framework Directive, in addition to referring to the requirements of the Marine Strategy Framework Directive. Section 6.4.4.3 Nutrient Enrichment refers to the current nutrient enrichment situation within Ireland's Assessment Area. This relates to Marine Strategy Framework Directive areas only, and not to the Water Framework Directive areas.

Section 6.4.6.11 relating to Wastewater Treatment and Disposal should include reference to nutrient sensitive areas.

Appropriate Assessment

We note that the main ecological impacts that could arise from the NMPF are set out in Natura Impact Statement (NIS). We also note that the impacts of the NMPF, including potential in-combination impacts are described.

We acknowledge that the NMPF consistently promotes a hierarchy of impact avoidance – minimisation – mitigation – statement of case for proceeding for various sectors. Further clarity however, should be provided to explain what the 'statement of case' must include, and how decisions will subsequently be made.

This could potentially allow activities/projects that have a significant impact on the integrity of European sites, where a 'statement of case' is made for them. The NIS should also describe situations where development may not be able to take place or may be constrained geographically/seasonally/sectorally in order to maintain the integrity of European sites.

Submission to Public Consultation on the draft National Marine Planning Framework

Name: Ciara Barry

Organisation: [Not Here, Not Anywhere](#)

Correspondence to: [REDACTED]

Below is the contribution of Not Here, Not Anywhere to the public consultation on the draft of the National Marine Planning Framework (NMPF). Not Here, Not Anywhere are a nationwide, grassroots, non-partisan group campaigning to end fossil fuel exploration and the development of new fossil fuel infrastructure in Ireland. We advocate for a just transition to renewable energy systems both in Ireland and around the world. In this submission, we will cover the aspects of the NMPF that relate to our campaigns, namely climate change, offshore drilling, Liquefied Fossil Gas (LNG) and the energy transition. This submission is structured according to the relevant chapters of the draft NMPF and we will give our comments on each. A summary of our key recommendations for the plan can be found at the end of the submission. We welcome the opportunity to submit to this consultation and do so in good faith that the input of civil society to the NMPF will be taken into account. We look forward to a transparent consultation process in which the outcomes of the public consultation are engaged with and published.

Chapter 3: Overarching Marine Planning Policies

In response to this chapter we would particularly like to address the climate change Overarching Marine Planning Policy (OMPP). We welcome the inclusion of this OMPP. As the draft NMPF notes, climate change will have a huge impact on our marine environment, with rising temperatures and ocean acidification threatening the basis of our marine ecosystem. However, given the huge implications of climate change for our oceans, we would like to see a more comprehensive consideration of climate change impacts in this OMPP.

In the draft plan, the Climate Change OMPP seeks to cover both how a planning project can mitigate climate change and how it can aid adaptation to climate change. In terms of mitigation, direct and indirect greenhouse gas emissions are considered. Direct emissions are the emissions caused by the project itself, while indirect emissions are those caused by changes in other activities as a result of the project. An example given for indirect emissions is that shipping traffic may have to circumnavigate a marine construction site, hence using more fuel and increasing GHG emissions. While it is important that these types of direct and indirect emissions are addressed, limiting the scope of the climate change OMPP to these rather negligible emissions would represent a failure of the NMPF to properly address climate change and the threat it poses to our marine environment.

Large sections of the NMPF are related to the development of fossil fuel infrastructure. Fossil fuel production and consumption makes up the largest share of anthropogenic climate emissions.¹ Radically reducing our fossil fuel use over the next 30 years is the principal

¹ Blanco et al (2014). Drivers, Trends and Mitigation. In Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental

means of avoiding run-away climate change. This year, the UN Environment Programme published their Emissions Gap Report, which recommended that Europe cease building new fossil fuel transmission infrastructure in order to meet global climate targets.² As several sections of the NMPF deal directly with the extraction and importing of fossil fuels, there is scope for the NMPF to take a more proactive role in forming climate policy. The Climate Change OMPP should address the whole scale of the climate change impact of any new energy infrastructure planned for marine areas, considering which projects are conducive to a renewable energy transition and which threaten to lock Ireland into further fossil fuel use.

In considering the overall climate impact of energy infrastructure, it is important to include methane in assessments of a project's compatibility with Ireland's climate goals. Methane is the principal component of fossil (natural) gas; as a greenhouse gas it has a warming effect 86 times stronger than that of carbon dioxide over a 20-year timeframe, and 34 times stronger over a 100-year timeframe.³ Methane leakages occur along the lifecycle of fossil gas production; from extraction to transmission to end use in homes or industry. For gas that has been extracted by fracking or liquefied as LNG, methane leakage is even higher than for conventionally extracted gas. This methane leakage means that gas cannot be considered as a 'green' fossil fuel; if methane leakage rates (which are chronically under-measured) exceed 3%, gas becomes just as damaging to the climate as coal.⁴ The climate impact of new energy projects cannot be assessed if this methane dimension is not taken into account.

Chapter 7: Carbon Capture and Storage

Chapter 7 of the NMPF refers several times to the promise of CCS technology in helping Ireland to reach its decarbonisation goal. However, while acknowledging that CCS is an emerging technology, the NMPF makes no mention of the concerns surrounding CCS. It is unproven whether CCS technology is replicable or efficient at the scale envisaged by the government. A large number of pilot CCS projects have been cancelled without seeing any success, while existing CCS infrastructure has capture rates of 30-60%, far below the 90% capture rate envisaged for such projects. In addition, the CCS process itself uses a lot of energy.⁵ The sequestration of carbon, often in offshore locations, risks leaking CO₂ into the atmosphere at a similar rate to other hydrocarbon activity. If CCS by Direct Air Capture is ever found to be technologically feasible, it would be incredibly costly. Renewable energies are more cost-effective, proven technologies that have the added benefit of reducing Ireland's dependence on imported and ultimately finite fossil fuels. While the NMPF must await the results of the review of CCS being undertaken by the Department of Climate Action, planning decisions relating to Ireland's marine environment should adequately

Panel on Climate Change. Available at https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter5.pdf

² UNEP Emissions Gap Report 2019. Available at <https://www.unenvironment.org/resources/emissions-gap-report-2019>

³ IPCC (2013) Fifth Assessment Report. Available at <https://www.ipcc.ch/assessment-report/ar5/>

⁴ IEA World Energy Outlook 2017. <https://www.iea.org/reports/world-energy-outlook-2017>

⁵ Institute for Energy Economics and Financial Analysis (2018). *The Holy Grail of Carbon Capture Continues to Elude Coal Industry*. Available at https://ieefa.org/wp-content/uploads/2018/11/Holy-Grail-of-Carbon-Capture-Continues-to-Elude-Coal-Industry_November-2018.pdf

consider the risks and uncertainties associated with CCS, and prioritise the development of proven renewables infrastructure.

Chapter 8: Energy - Offshore Gas Storage

Chapter 8 deals with the Shannon LNG project, a project that we, along with a coalition of local, national and international civil society groups, have opposed for many years. The LNG terminal gives much cause for concern for the local marine environment, such as;

- The increased shipping traffic caused by large LNG tankers would disrupt marine wildlife and the fishing industry.
- The area for which the terminal is planned is a Natura 2000 protected area for bottlenose dolphins and porpoises. Development should only be undertaken in this area if it is found to be in the “overriding public interest”.
- LNG has a high level of methane leakage. This invisible gas leaks from LNG tankers and terminals, negatively impacting air quality by increasing ozone levels. If inhaled, ozone can cause asthma and other respiratory problems.⁶
- Shannon LNG would use 100 million gallons of Estuary water every day, which would be pumped back into the Estuary at colder temperatures than the Estuary water, affecting micro-organisms and crustaceans which form an integral part of the food chain.

Some of these local concerns are referenced in the NMPF. However, there are broader concerns with LNG that should be detailed in the ‘Issues for Sustainability’ section of Chapter 8. These mainly relate to the climate impact of LNG. As outlined above, given the huge impact climate change will have on our marine environment, the Climate Change OMPP of the NMPF should address the total climate impact of any projects planned for Irish waters, particularly any new fossil fuel projects. In the case of Shannon LNG, the following issues must be assessed:

- Natural gas production leaks methane at every step of its life-cycle, from extraction to transportation to end use. Methane is an incredibly potent greenhouse gas, with a global warming potential 86 times greater than carbon dioxide over a 20 year period. As the LNG life-cycle contains many more steps than conventional gas transportation, the methane leakage rate is higher; methane is leaked during liquefaction, regasification and for every day the LNG is transported via tanker.⁷
- Where LNG is sourced from fracking, the methane leakage rate is even higher, as the fracking method also sees much greater methane leakage rates than conventional extraction. Through its owner New Fortress Energy, the Shannon LNG terminal is directly linked to LNG export terminals in the US looking to import fracked gas to Europe. As a result, the gas being imported to Shannon LNG would be more detrimental to the climate than coal.⁸

⁶ New York Times, 12 Dec 2019. ‘It’s a Vast, Invisible Climate Menace. We made it visible.’ Available at <https://www.nytimes.com/interactive/2019/12/12/climate/texas-methane-super-emitters.html>

⁷ Energy Watch Group (2019). *Natural Gas Study*. Available at http://energywatchgroup.org/wp-content/uploads/EWG_Natural_Gas_Study_September_2019.pdf

⁸ Energy Watch Group (2019). *Natural Gas Study*. Available at http://energywatchgroup.org/wp-content/uploads/EWG_Natural_Gas_Study_September_2019.pdf

- There is no room in the global carbon budget for continued gas exploration and extraction.⁹ The UNEP has advised that Europe cease constructing new fossil fuel infrastructure, including for fossil gas, in order to keep global warming within 1.5 degrees.¹⁰

Chapter 9: Energy - Transmission

Chapter 9 maintains that “gas or electricity transmission proposals that maintain or improve the security and diversity of Ireland’s energy supply, including interconnectors, should be supported”. However, Ireland’s security of energy supply does not require the construction of more gas transmission infrastructure. Historically, the UK has provided most of Ireland’s gas supply, and in the UK “there is ample import capacity over and above demand”.¹¹ Demand for gas in the UK has decreased by a fifth since 2004 and is expected to drop by a further 25% by 2025. Security of supply from the UK is further boosted by the completion of the second Scotland to Ireland Gas Interconnector in 2018. The European gas network is described by Gas Networks Ireland as “highly robust” and “could manage a large gas disruption”.¹² The European organisation of gas transmission system operators, ENTSO-G, found in its 2017 Security of Supply Review that Ireland’s gas supply is ensured in a variety of potential disruptions to Europe’s gas supply.¹³

The construction of further fossil gas infrastructure is not necessary for Ireland’s energy security.¹⁴ As outlined elsewhere in this submission, fossil gas is a major contributor to climate change, which poses such a threat to our marine environment. This negative impact of gas, and specifically of methane leakage, should be considered in the NMPF, making the support of gas transmission projects incompatible with the wider goals of the framework.

Chapter 10: Energy - Petroleum

In line with the government’s Policy Statement on Petroleum Exploration and Production Activities, no further licences for oil exploration and extraction will be granted in Irish waters. This is an important step in moving away from a fossil-fuel powered society, but does not go far enough, as exploration for and extraction of fossil gas is still permitted. Both the Policy Statement and the draft NMPF state that fossil gas is a transition fuel. For the reasons cited above (global warming potential of methane, methane leakage rates of gas, remaining global

⁹ Oil Change International (2016). *The Sky’s Limit*. Available at http://priceofoil.org/content/uploads/2016/09/OCl_the_skys_limit_2016_FINAL_2.pdf

¹⁰ UNEP Emissions Gap Report 2019. Available at <https://www.unenvironment.org/resources/emissions-gap-report-2019>

¹¹ Ervia. (2017). A Look at the Irish Gas Market. Available at <https://www.gasnetworks.ie/corporate/company/our-network/irish-gas-market-overview/The-Irish-Gas-Market-Overview.pdf>

¹² Ervia. (2017). A Look at the Irish Gas Market. Available at <https://www.gasnetworks.ie/corporate/company/our-network/irish-gas-market-overview/The-Irish-Gas-Market-Overview.pdf>

¹³ ENTSO-G (2017). *Security of Supply Review*. Available at <https://www.entsog.eu/security-of-supply-simulation>

¹⁴ McMullin, Price, Carton and Anderson (2018). *Is Natural Gas “Essential for Ireland’s Future Energy Security”?* Available at https://www.stopclimatechaos.ie/assets/files/pdf/is_natural_gas_essential_for_irelands_future_energy_security_scc_study_november_2018.pdf

carbon budget), gas cannot be considered a transition fuel and a pro-active phase-out of gas must be undertaken directly. A future-proof NMPF should not support the development of fossil gas production which will be a significant contributor to climate change.

In addition to the climate impacts of gas exploration and extraction, there are also many local environmental impacts to be considered. The process of offshore drilling is hugely harmful for marine life. When exploring for oil and gas, fossil fuel companies use a technique called sonic booming. Sonic booming is lethal to plankton, which provide food for larger fish.¹⁵ It also causes internal bleeding in large sea animals like whales and dolphins.¹⁶

The marine wildlife threatened by offshore drilling, as well as having its own intrinsic value, is hugely important for the fishing industry. The Irish fishing industry supports 11,000 jobs in mostly rural areas.¹⁷ Fishing communities have observed decreased fish stocks following offshore drilling. Further fossil fuel extraction will threaten Ireland's valuable seafood industry.

This chapter of the draft NMPF expresses concern at the increased level of import dependency for gas and other fossil fuels. While this concern is strangely at odds with the promotion of LNG imports in Chapter 9, it is also unfounded. Current import dependency levels do not pose a security of supply risk; as outlined above, Ireland's gas supply is resilient to a range of potential disruption scenarios. Nor does exploration for domestic gas sources promise reduced energy costs. Fossil fuel companies do not have to sell any gas they find to Irish consumers, nor do they have to sell it at a cheaper price than the oil and gas Ireland currently imports from other countries. In reality, fossil fuel exploration in Ireland has been costly and unproductive.¹⁸ Fossil fuel companies use offshore drilling as speculation to boost their share prices, even though the chances of actually finding oil or gas are slim. This speculation threatens marine life, our coastal landscapes and the fishing and tourism industries that rely on them.

Furthermore, offshore drilling will delay our energy transition towards community-owned, renewable energies. While Ireland still needs oil and gas in the short term, exploiting new fossil fuel resources is counterproductive in terms of the energy transition. Once the country becomes dependent on a particular energy source, it will be very difficult to switch to another. As long as Ireland bases its energy policy on the unlikely chance of finding gas in

¹⁵ Gibbens, S. (2017). Deafening Blasts Kill These Ocean Animals For Miles. National Geographic. 23 Jun 2017. Available at: <https://news.nationalgeographic.com/2017/06/seismic-survey-air-gun-oil-gas-exploration-zooplankton-spd/>

¹⁶ Millman, O. (2018) Obama's offshore drilling puts whales and dolphins in peril, groups warn. The Guardian. 24 Aug 2016. Available at <https://www.theguardian.com/environment/2016/aug/24/offshore-drilling-oil-obama-dolphins-whales-climate>

¹⁷ Department of Transport, Tourism and Sport (2018). "Overview of Tourism Industry". Available at: <http://www.dttas.ie/tourism.ie>

¹⁸ Brennan, J (2016). Is the future bright for Irish oil? Irish Times. 16 Dec 2016. Available at: <https://www.irishtimes.com/business/energy-and-resources/is-the-future-bright-for-irish-oil-1.2907520>

Irish waters, there will be limited incentive to invest in renewable energies. This phenomenon is referred to as “lock-in”. Once locked-in to the use of gas or any other fossil fuel, the cost of the energy transition is increased, as (if the government is indeed “committed to a process of decarbonisation and ending our use of fossil fuels”) newly developed gas infrastructure will have to be decommissioned before full returns on the investment are delivered. This will result in ‘stranded assets’. This risks that the costs of stranded assets are passed on to consumers; for example in Spain, maintenance costs for the overextended, underutilised gas network make up 40% of consumers’ energy bills.¹⁹ Ireland is already facing fines of €455 million for failing to meet the national emission reduction targets. Relying on unproven domestic gas supplies will hinder the country’s emission reduction plans even further. Instead the focus needs to be on a just(ice) transition towards a fossil free future.

Summary of Key Recommendations for the NMPF:

- Expand the climate change OMPP to consider the full impact of new fossil fuel infrastructure on Ireland’s greenhouse gas emissions.
- Include the short- and long-term climate impact of methane when measuring the impact of any new development on the climate.
- Carefully evaluate the costs and benefits of any future CCS projects, in light of the uncertainties associated with this technology and the greater cost-effectiveness of renewable energy.
- In view of the local and global environmental impacts of LNG and fracking, the NMPF should exclude and cease to promote LNG infrastructure.
- Remove references to the role of fossil gas in providing energy security and cease to support the construction of fossil gas transmission infrastructure.
- Exclude support for fossil gas extraction and exploration from the NMPF and put forward a moratorium on offshore drilling for gas.

¹⁹ El Diario, December 2018, ‘The excesses of a system that Spaniards pay for through their gas bills’ Available at https://especiales.eldiario.es/los_excesos_del_gas/index.html