



# National Marine Plan Consultation Draft RESPONDENT INFORMATION FORM

Please Note this form **must** be returned with your response to ensure that we handle your response appropriately

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/ Group/Organisation

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Please tick as appropriate  Yes  No

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Please tick ONE of the following boxes

Yes, make my response, name and address all available

or

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 Yes

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## **Response Planning Scotland's Seas Consultation 2013 – National Marine Plan**

**by the Scottish Environment LINK Marine  
Taskforce**

**Date: 15 NOVEMBER 2013**



### **Summary**

LINK members welcome the draft National Marine Plan (NMP) and believe it is a very important document to guide marine planning in Scotland. However, in its draft form we have fundamental concerns about many of the sectoral objectives and the compatibility of those objectives both with one another and with marine ecosystem and climate change objectives. LINK members also question how effective the NMP will be, both as a resource for planners and as a robust guide for sustainable development.

#### **Headline comments:**

- As currently drafted LINK members assert that the NMP will not support sustainable development, mitigation or adaptation to climate change, the delivery of Good Environmental Status, nor the protection or enhancement of Scotland's seas.
- LINK members have major concerns that the draft NMP is not underpinned by the ecosystem-based management principles and approaches that will be required to achieve the sustainable development, protection and possible enhancement of Scotland's marine resources.
- The draft NMP seriously misrepresents the concept of sustainable development. This must be corrected.
- The NMP presents many policies, but for planning purposes, its value is unclear. There are no guidelines for decision making, resolving conflicts and indeed for achieving the objectives of the NMP.
- National and international environmental objectives are explicitly adopted as the National Marine Plan's strategic objectives, but the sectoral objectives appear to be largely industry wish-lists, failing to reference each sector's potential to contribute to environmental protection and recovery.
- General policies on protection and enhancement of the health of our seas, biodiversity,

climate change and research and monitoring all need to be significantly tightened and additional policies added.

**LINK members recommend that:**

- The stated purpose of the NMP should be to protect and, where appropriate, enhance the health of Scotland's seas, ensure that they meet Good Environmental Status, mitigate and adapt to climate change, and to ensure sustainable development therein;
- That the purpose and structure of the final NMP closely follow the duties and requirements directed by the Marine (Scotland) Act 2010 and the Climate Change (Scotland) Act 2009. As it stands we are not convinced that those duties will be met;
- General Policies for, in particular, nature conservation, biodiversity and geodiversity; historic environment; landscape/seascape and climate change be strengthened to reflect existing legislative duties and policy commitments;
- New general policies highlighting the key issues of marine ecosystem enhancement, cumulative impacts, marine litter and invasive non-native species are included in the final NMP;
- A separate chapter be introduced in the final NMP to reflect the marine conservation objectives of the strategy to provide an explanation of how marine ecosystem structure and function will be valued, how the NMP affects the flow of services the sea provides us and how those good and services will be enhanced;
- Integrated terrestrial-marine planning should be a shared component of the forthcoming River Basin Management Plans (due 2015) and Regional Marine Plans.

## **Introduction**

Scottish Environment LINK (hereafter referred to as LINK) is the forum for Scotland's voluntary environment community, with over 30 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society.

Its member bodies represent a wide community of environmental interest, sharing the common goal of contributing to a more sustainable society. LINK provides a forum for these organisations, enabling informed debate, assisting co-operation within the voluntary sector, and acting as a strong voice for this community in communications with decision-makers in Government and its agencies, Parliaments, the civic sector, the media and with the public.

Acting at local, national and international levels, LINK aims to ensure that the environmental community participates in the development of policy and legislation affecting Scotland.

LINK works mainly through Taskforces – groups of members working together on topics of mutual interest, exploring the issues and developing advocacy to promote sustainable development, respecting environmental limits.

LINK's Marine Taskforce comprises a number of LINK members committed to working on marine issues. The LINK Marine taskforce's vision is of healthy, well-managed seas, where wildlife is flourishing, ecosystems are protected, connected and thriving, and coastal communities are sustained.

LINK members welcome the opportunity to comment on the Planning Scotland's Seas: 2013 - National Marine Plan consultation.

**This response was compiled on behalf of Scottish Environment LINK's marine taskforce and is supported by:**

Hebridean Whale and Dolphin Trust  
Marine Conservation Society  
National Trust for Scotland  
Ramblers Scotland  
RSPB Scotland  
Scottish Ornithologists' Club  
Scottish Wildlife Trust  
Whale and Dolphin Conservation  
WWF Scotland

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## General Comments

Marine Planning is an essential tool to achieve both the sustainable development of our seas and the protection and enhancement of Scotland's marine environment. Scotland's National Marine Plan (hereafter referred to as the 'NMP') could help to position Scotland as a world leader in the technically-challenging, but highly-effective discipline of marine spatial planning. LINK members strongly support the need for the NMP to ensure sustainable development of Scotland's seas and to effectively manage potentially conflicting human pressures.

Our overarching comments are highlighted in the following points:

### 1. Avoid conflict with existing duties

The Scottish Government has relevant duties under the Marine (Scotland) Act 2010, Marine and Coastal Access Act 2009, the Marine Strategy Framework Directive (MSFD), the Water Framework Directive (WFD), the EU Birds and Habitats Directives, the Climate Change (Scotland) Act 2009, the Nature Conservation (Scotland) Act 2004 and commitments in the UK Framework for Sustainable Development. In delivering Scotland's NMP, the Scottish Government must meet the requirements of existing international and national legislation.

Unfortunately in its current form, the draft NMP would not guide the management of human activities in such a way as to ensure these duties and commitments are met. Of particular concern are the objectives of many of the sectors (aquaculture, fisheries, oil and gas) the achievement of which could be incompatible with sustainable development, biodiversity enhancement and climate change mitigation duties. Chapter 4: General Policies begins with the statement, in bold, that the policies are:

*Designed to ensure that all future decisions lead to sustainable economic growth which is sensitive to the environment, other users and the long-term health of the seas.*

The first duty in the Marine (Scotland) Act 2010 is to:

*Sustainable development and protection and enhancement of the health of the Scottish marine area*

While these two may appear superficially similar, the goals are quite different. The goals of sustainable development are living within environmental limits and a just society,<sup>1</sup> **not** economic growth. It is sustainable development which the NMP should deliver.

The general duty listed second in the Marine (Scotland) Act is:

*Mitigation and adaptation to climate change.*

While listed second, it is not a prioritised list and this duty should receive the same priority as the first. We appreciate that there have been some attempts to embed this duty throughout the document, but feel that the results risk this duty not being met. An obvious symptom of the

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<sup>1</sup><http://sd.defra.gov.uk/what/principles/>

secondary importance apparently being given to the climate change duty in the whole NMP process is that while Question 5 of the NMP consultation asks...

*Are the objectives and policies in the NMP appropriate to ensure they further the achievement of sustainable development, including protection and, where appropriate, enhancement of the health of the sea?*

...there is no equivalent question on climate change mitigation and adaptation.

## **2. Embed ecosystem-based management**

The EU Marine Strategy Framework Directive specifies the use of ecosystem-based management approaches to achieve integrated marine management:

*General Provisions Article 1(3): Marine strategies shall apply an ecosystem-based approach to the management of human activities, ensuring that the collective pressure of such activities is kept within levels compatible with the achievement of good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while enabling the sustainable use of marine goods and services by present and future generations*

Broadly speaking, ecosystem-based management requires an **integrated approach to management that considers the entire ecosystem, linkages across systems and disciplines, and the cumulative impacts of different human sectors**. Its aim is to sustain ecosystems in a healthy, productive and resilient condition so that they can provide the functions, goods and services that enrich and sustain human well-being. As such, ecosystem-based management necessarily incorporates biological, physical and human components, including social and economic systems. Designing programmes to implement ecosystem-based management will include: involving stakeholders through participatory governance that accounts for both local commercial interests and those of the wider public; establishing long-term observing, monitoring and research programmes to collect relevant data; using flexible, adaptive approaches to learn from management actions while allowing for scientifically-based evaluation; and testing alternate approaches and readjusting as new information becomes available<sup>2</sup>. Few of the policies, general or sectoral, appear to comply with this approach.

In particular, the specific requirements of an ecosystem-based management approach for long-term observing, monitoring and research programmes and flexible adaptive approaches to management appear to be missing. Most conspicuously, the overall purpose of the NMP is fundamentally mis-framed (*"The Scottish marine planning system should promote development and activities that support sustainable economic growth"*); marine ecosystem and climate change objectives are not presented as fundamentally underpinning the sectoral objectives and; the General Policies are weak on recognising the value of marine ecosystem goods and services, fail to enshrine the ecological and legal imperative for their enhancement and fail to address cumulative impacts.

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<sup>2</sup><http://www.eoearth.org/view/article/152249/>

### **3. Adherence to sustainable development**

The draft NMP misrepresents the guiding principles of sustainable development as five guiding principles of equal status whereas, properly stated, the principles—as accepted by UK and Scottish Governments<sup>1</sup>—are:

*The goal of living within environmental limits and a just society will be achieved by means of a sustainable economy, good governance, and sound science.*

This makes it clear that two are goals and three the means of achieving those goals. To cite sustainable development as an “*important element of increasing sustainable economic growth*” is at best to misunderstand sustainable development, elevating the means into the goal. Sustainable development is about moving away from a society where progress is measured in purely economic terms to one with a much broader set of values<sup>3</sup>.

### **4. Guidance for managing interactions and conflicts**

The draft NMP sets out many policies: 19 general policies (hereafter referred to as GEN1, GEN2 and so on) and 65 sectoral policies (hereafter referred to as Transport 1, Transport 2 and so on). There is little, if any, integrated management considering the entire ecosystem, linkages across sectors or consideration of cumulative impacts. Inevitable conflicts need to be managed using an ecosystem-based approach. The NMP requires the addition of a section specifying how this is to be done.

### **5. Full acknowledgement of ecosystem goods and services**

We would welcome the addition of a new chapter, alongside the sectoral chapters, outlining objectives and policies for the enhancement of Scotland's marine ecosystem goods and services ('natural capital'). Our marine environment provides us with many goods and services which are difficult to value, but which underpin - and therefore support - economic activity and which if lost or degraded have significant negative impacts on both the economy and the wellbeing of people in Scotland.

The goals of sustainable development, to which the Scottish Government is committed, are:

*Living within environmental limits. Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations[.]*

and:

*Ensuring a strong, healthy & just society. Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all[.]*

with one of the means of achieving these goals being:

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<sup>3</sup> Scottish Environment LINK. The Environment and the Economy - Helping Scotland to Flourish. <http://www.scotlink.org/files/policy/PositionPapers/LINKHelpingScotlandFlourish.pdf>



*Achieving a sustainable economy. Building a strong and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (Polluter Pays), and efficient resource use is incentivised.*

For the planning system to achieve these goals we need new ways of measuring the health of our society (beyond Gross Domestic Product and existing measures of economic growth), valuing the environment and its goods and services, and costing out environmental damage. While these are still very much in their early stages, significant headway has been made already in a shift in Scotland's planning culture. The final NMP needs to include a dedicated section that provides an explanation of how marine ecosystem structure and function can and will be valued, and how the NMP affects the flow of services the sea provides and how this flow can be enhanced. This will improve the explanation to Scotland's key stakeholders and sectors on how ecosystems and socioeconomics are fundamentally inter-linked, and consequently how - and why - decisions and trade-offs are made that emerge from alternative uses of the marine environment.

The Scottish Government's strategy for the conservation and enhancement of biodiversity - "2020 Challenge for Scotland's Biodiversity" contains a chapter on Natural Capital, which should be considered as a starting point for the chapter we advocate here. In particular, reference should be made to the key step of encouraging wide acceptance and use of the Natural Capital Asset Index and the stated intention to produce comparable measures for the marine environment.

## **6. Joining up sectoral objectives**

The objectives listed in the sectoral chapters appear to be sectoral wish-lists. The process for setting these objectives has not been open. There seems to have been little or no wider stakeholder involvement, consideration of interactions and cumulative effects with other sectors or consideration of climate change. Astonishingly the oil and gas sector appears to consider the threats of climate change to its activities without considering the sector's own effect on the climate.

Stating sectoral aspirations without the context of how they interrelate, how they are underpinned by marine ecosystem objectives or how they can deliver climate change objectives, is a major weakness of the NMP and runs counter to the ecosystem-based management methods which should guide the development of a meaningful strategy.



## CONSULTATION QUESTIONS

Please identify the main area of interest you identify with :

- |                               |                                     |
|-------------------------------|-------------------------------------|
| Nature Conservation           | <input checked="" type="checkbox"/> |
| Fisheries                     | <input type="checkbox"/>            |
| Industry/Transport            | <input type="checkbox"/>            |
| Energy                        | <input type="checkbox"/>            |
| Aquaculture                   | <input type="checkbox"/>            |
| Recreation/tourism            | <input type="checkbox"/>            |
| Academic/scientific           | <input type="checkbox"/>            |
| Local authority               | <input type="checkbox"/>            |
| Community group               | <input type="checkbox"/>            |
| Public sector/Regulatory body | <input type="checkbox"/>            |
| Local Coastal Partnership     | <input type="checkbox"/>            |

Other (Please state)

Comments

### **Q1. Does the NMP appropriately guide management of Scotland's marine resources?**

No. The NMP, as currently drafted, fails to appropriately guide management of Scotland's marine resources and fails to implement the duties of the Marine (Scotland) Act 2010 or contribute to the achievement of relevant national and European legislation.

The draft NMP is undoubtedly an improvement on the pre-consultation draft. We welcome the improved referencing of sustainable development throughout the document, acknowledgement of the ecosystem approach and recognition of the importance of the marine natural environment in sustaining existing and future marine activities.

However, the draft NMP fails to embed these principles fully into an adaptive marine planning system and must provide more clarity and guidance on how to manage the marine environment in a manner which achieves sustainable development and the protection and enhancement of our seas.

### **Clarity of purpose and meeting duties**

The objectives and deliverables of the NMP must be clear.. The document should adhere to and fulfil the duties and requirements directed by the Marine (Scotland) Act 2010 together with other relevant Scottish, UK and European legislation (e.g. Marine and Coastal Access Act 2009, Climate Change (Scotland) Act 2009, The Nature Conservation (Scotland) Act 2004, MSFD).

The duties listed in the Marine (Scotland) Act are:

*Sustainable development and protection and enhancement of the health of the Scottish marine area: In exercising any function that affects the Scottish marine area under this Act – (a) the Scottish Ministers, and (b) public authorities must act in the way best calculated to further the achievement of sustainable development, including the protection and, where appropriate, enhancement of the health of that area, so far as is consistent with the proper exercise of that function.*

*Mitigation of and adaptation to climate change: In exercising any function that affects the Scottish marine area under this Act, the Climate Change (Scotland) Act 2009 (asp 12), or any other enactment— (a) the Scottish Ministers, and (b) public authorities, must act in the way best calculated to mitigate, and adapt to, climate change so far as is consistent with the purpose of the function concerned.*

The Scottish Parliament's recognition of the purpose of the Marine (Scotland) Act 2010 was recently confirmed by Richard Lochhead (Cabinet Secretary for Rural Affairs and the Environment) in addressing the Scottish Parliament's Rural Affairs, Climate Change and Environment Committee (RACCE) hearing on 8 May 2013:

*“the purpose of the Marine (Scotland) Act 2010 is to protect our marine environment, so the outcome has to be that we find a way in which we can allow economic activity at sea while protecting the marine environment, which has to be the number one priority.”*

Rob Gibson MSP (RACCE Committee Convenor) further qualified with the following statement:

*“Our Committee is supportive of Scottish Government plans to consult on the establishment of a national marine plan, on marine protected areas and on marine renewables planning. However, we must ensure that when there is lack of evidence on the impact of development that the over-riding priority is always our marine environment.”*

We feel that, as presented, the draft NMP fails to comply with these duties and the unambiguous spirit of the legislation, particularly owing to its frequent substitution of sustainable economic growth for sustainable development, and the failure to properly consider climate change mitigation and adaptation.

LINK members would welcome clarity on how the NMP delivers the marine protection and enhancement duties required by the Marine (Scotland) Act 2010.

### **Ecosystem based management**

The NMP requires a shift in focus, away from a compilation of individual sectoral

plans to an ecosystem-based approach, that protects and, where appropriate enhances the health of Scotland's seas, ensures they meet Good Environmental Status and to ensure sustainable development therein.

The EU Marine Strategy Framework Directive makes it clear that ecosystem-based management has to be the framework within which all other policies are delivered. Ecosystem-based management involves taking an integrated approach by considering the entire ecosystem, linkages across systems and disciplines, and the cumulative impacts of different human sectors. In the current draft NMP, there is too little integration of the objectives and policies across sectors, or consideration of their cumulative impacts.

### **Conflicting policy commitments**

LINK members are very concerned the draft NMP sets out to achieve a broad range of conflicting policy commitments and lacks integrated sustainable development and ecosystem-based management frameworks to resolve conflicts and ensure Scotland's people live within environmental limits.

As stated above, ecosystem-based management has to be the framework within which all other policies are delivered. There then needs to be framework for decision-making, but this context of ecosystem-based management cannot be compromised if we are to ensure the Scottish Planning Policy's principle of 'Living within Environmental Limits' can be achieved.

For example, the policy commitment to maximise oil and gas extraction in the short term is contradictory to policy commitments to mitigate climate change and to the climate change duty on the public sector set out in the Climate Change (Scotland) Act and the Marine (Scotland) Act 2010.

Specific comments on the setting of marine ecosystem objectives are provided in response to Question 5, and our comments pertaining to sector specific policies across Questions 11 – 36.

### **Risk of poor governance systems**

Sound governance systems will be vital to delivering good environmental management outcomes for Scotland's marine resources particularly as Scotland's marine sectors have historically been largely governed by their individual management planning domains and operating without the benefit of well-resourced administrative structures/procedures for integration. Revised and effective governance systems will be required to respond to the complexity of dynamic ecosystems and build an adaptive capacity for coping with change and uncertainty. The Sustainability Appraisal Report has attempted to cross-reference and appraise each sector-specific policy against the general policy objectives to assess potential impacts and conflicts, but the analysis presented is descriptive without evidence of a standardised methodology and risk-scoring matrix. The lack of such a systematic risk assessment of the present governance systems is a major concern (see Crowder *et al.*<sup>4</sup>, 2006, for a US example).

<sup>4</sup> Crowder, L. B., Osherenko, G., Young, O. R., Airame, S., Norse, E. A., Baron, N., Day, J. C., et al. (2006). Sustainability: resolving mismatches in US ocean governance. *Science* 313: 617–618.

LINK members recommend that a governance risk assessment should be applied to highlight those domains and sub-domains within sector governance systems that are most likely to influence good environmental outcomes at any particular scale, or those, if absent or dysfunctional, most likely to prevent effective environmental management (see for example Dale *et al.*, 2013<sup>5</sup>). Without such an approach, the final NMP and regional marine plans may not be implemented effectively, which will ultimately lead to poor environmental and socioeconomic outcomes, risking further decline in marine ecosystem health. When considering examples of good governance it will be important to appraise what is already working in Scotland. Shetland may provide an example of good governance where decisions are taken in accordance with the pilot Shetland Marine Spatial Plan and innovative spatial approaches to managing fisheries on an ecosystem basis have been developed.

Specific comments and recommendations to develop integration of governance domains for river basin and marine planning are provided for Question 2 below. Please also note this comment directly contributes to Question 40.

### **Long term public interest**

The NMP should operate in the long term public interest as, for example, is clearly set out in Scottish Planning Policy. Long term public interest can only be served when the NMP ensures that marine biodiversity and ecosystems are protected and enhanced, their resilience is maintained or increased, and additional pressures are avoided to enable the environment to shore up resilience to the current and predicted effects of climate change on the natural environment. This language must be reflected in the NMP rather than what is presented as a set of industry targets that simply supports increased development and which lacks any anticipatory guidance of what should happen when activities demonstrate cumulative impacts or conflicting pressures.

## **Q2. Does the NMP appropriately set out the requirement for integration between marine planning and land use planning systems?**

No, The NMP does not appropriately set out the requirement for integration of terrestrial and marine planning.

The NMP provides very little steer on how planning practitioners can and should integrate the two planning systems, other than reiterating the relevant legislative context. Policies GEN6 and GEN7 refer to the need to integrate and comply with existing plans, but this in itself does not constitute a framework that would help make decisions, for example, by offering guidance on what activity or objective may take priority in different scenarios. The NMP must contain more detail on how to handle differences or conflicting statements within the terrestrial and marine plans, or between different planning systems, and should clearly indicate which plan takes priority where the two systems overlap.

This lack of integration is also evident in the selection basis and management options papers for proposed inshore marine protected areas (MPAs) which also

<sup>5</sup>Dale, A.; Vella, K.; Pressey, R.L.; Brodie, J.; Yorkston, H. and Potts, R. (2013). A method for risk analysis across governance systems: a Great Barrier Reef case study. *Environ. Res. Lett.* 8. 16pp

pay limited attention to the importance of water quality and cross-system threats from adjoining terrestrial areas. It is noted that the management and regulatory framework to deliver Good Ecological Status for freshwater and coastal water (to 3nm) is currently directed by Scotland's River Basin Management Plans through SEPA.

Scotland's marine environment, particularly our lochs, estuaries, islands and inshore waters, is influenced by many activities on land, the natural flows occurring between realms, and cross-system threats which originate in one realm and affect another. These connections support many species and ecological processes. Integrated terrestrial and marine ecosystem-based planning is therefore of utmost importance.

In delivering an ecosystem-based approach it will be necessary to recognise and address the land-sea interface when managing activities and protecting wildlife and habitats. This has historically been a major gap by jurisdictions across the world in the planning and management of the marine environment. We would envisage a close relationship with the Marine Strategy Forum (MSF) and the National Advisory Group (NAG) at national level and River Basin Management Plans (RBMPs) and Marine Planning Partnerships (MPPs) at regional level, and encourage use of innovative tools to help underpin this integration (see for example Álvarez-Romero *et al.* 2011<sup>6</sup>).

LINK members suggest that:

- (1) integrated terrestrial-marine planning should be a shared component of the forthcoming River Basin Management Plans (due 2015) and Regional Marine Plans;
- (2) both marine and terrestrial planning domains should use a shared ecosystem-based management approach and operational framework (see for example Álvarez-Romero *et al.*, 2011);
- (3) progress could be jointly steered and evaluated by the River Basin Management Planning National Advisory Group and Marine Strategy Forum (facilitated by Marine Scotland and SEPA); and
- (4) Scottish Ministers and public authorities need to implement, long-term integrated monitoring programmes and protocols to measure and report on the outcomes.

**Q3. Does the NMP appropriately guide development of regional marine planning? What, if any, further guidance is required for regional marine planners in terms of implementation and how to interpret the NMP?**

No, the NMP does not appropriately guide development of regional marine planning. We recognise that some more detailed regional guidance will be

<sup>6</sup> Álvarez-Romero, J. G.; Pressey, R. L.; Ban, N. C.; Vance-Borland, K.; Willer, C.; Klein, C. J. and Gaines, S. D. (2011), Integrated Land-Sea Conservation Planning: The Missing Links. *Annual Review of Ecology, Evolution, and Systematics*: 42(1): 381-409.

delivered via Regional Marine Plans, but there is a fundamental lack of any prescriptive or explicit guidance provided within the NMP to inform the preparation of those regional marine plans. Further explanation of duties, commitments and obligations of Marine Planning Partnerships and marine users is required, particularly with due regard to nature conservation legislation and policy.

Overarching guiding principles of sustainable development, the ecosystem approach and the requirements of the nature conservation hierarchy of designations and of national and international environmental legislation is necessary (such as Strategic Environmental Assessment, Habitats Regulations Appraisal and project level Environmental Impact Assessment).

General principles for regional marine planning are provided throughout the document, but in reality marine planners will require a framework of science-policy decision guidelines, aided by multiple, geospatial decision support toolkits, for practitioners to work across multiple domains and sectors (refer Crist et al. 2013<sup>7</sup>).

The example below illustrates a hypothetical set of decision-rules based on ecosystem protection afforded the highest priority. The marine planner has to consider two proposals for a finfish aquaculture farm site development (adapted from Gilliland and Laffoley 2008<sup>8</sup>):

Primary high level objective: Protect and, where appropriate, enhance the marine environment.

- *Supporting objective:* Facilitate a network of marine protected areas.
- *Target for scenario:* Regional area to have minimum 20% area of rare/threatened/declining priority marine features designated within an ecologically coherent network of MPAs.
- *Policy:* rare/threatened/declining priority marine features afforded highest level of protection and management.

Secondary high level objective: Promote sustainable development

- *Supporting objectives:* Marine planning and decision making authorities will seek to encourage sustainable aquaculture growth in appropriate locations.
- *Target for scenario:* marine finfish to 210,000 tonnes and shellfish, especially mussels, to 13,000 tonnes by 2020.
- *Policy:* Ensuring shellfish farms are located so that they do not negatively affect the carrying capacity of the environment.

Conflict analysis

- Spatial analysis to identify distribution of priority marine features, and socioeconomic interactions between sector interests.
- Local non-destructive fisheries operate within the marine waters which are economically important. Significant scenic values. Recreational and tourism economically important to local communities

Decision outcomes

- MPAs designated with management decisions protecting priority marine features.
- One (of two) aquaculture site approved that met SNH siting and design guidelines, 0.2 nm outside MPA, and nutrient plan to mitigate impact to water quality (subject to regular monitoring and reporting).
- Monitoring program design and reporting schedule developed for measuring MPA conservation outcomes and environmental effects of aquaculture farm.

<sup>7</sup> Crist, P.J.; Madden, C.M.; Hittle, J.; Walker, D.; Allen, T.; Eslinger, D. (2013). Supporting cross-sector, cross-domain planning through interoperating toolkits. *Journal of Conservation Planning* 9:21–37

<sup>8</sup> Gilliland, P.M. and Laffoley, D. (2008). Key elements and steps in the process of developing ecosystem-based marine spatial planning. *Marine Policy* 32: 787– 796.



We recommend that the final NMP must contain more of such guidance for regional planners. This would be better delivered through companion documents which will set operational guidelines and describe interpolating toolkits to step marine planners through the decision making process.

**Q4. The Marine Regional Boundaries Consultation proposed that in addition to regional marine planning, further integrated management of key marine areas would be achieved by designating the Pentland Firth; the Minches and the mouth of the Clyde as Strategic Sea Areas.**

**Should the NMP set out specific marine planning policies for Strategic Sea Areas?**

Overarching planning policies that apply to the whole Scottish Marine Region (SMR), if robust, detailed and explicit in the setting out of environmental obligations and requirements, would be sufficient to achieve sustainable management of Scotland's seas, including key marine areas, both within and straddling Strategic Sea Areas (SSAs).

However, we do recognise that where there is sector-specific activity that merits trans-SMR (Scottish Marine Region) boundary planning and co-operation then it would be helpful to have topic-specific, cross-boundary arrangements that were additional to Regional Marine Plans, such as issue-specific planning guidance. The pilot Pentland Firth and Orkney Waters Marine Spatial Plan, driven by the development and trialling of new marine renewable devices, is one example, straddling proposed SMRs.

**Q5. Are the objectives and policies in the NMP appropriate to ensure they further the achievement of sustainable development, including protection and, where appropriate, enhancement of the health of the sea?**

No, LINK members do not consider the objectives and policies in the draft NMP are appropriate to ensure they achieve sustainable development. Presently they misrepresent the guiding principle of sustainable development, and do not deliver the general duties of the Marine Act, or on the requirements of the MSFD and WFD.

**General comments**

The key strategic objectives set out in Chapter 3 are underpinned by existing international and national policy and legislation. We strongly support the embedding of these objectives into the NMP as it ensures consistency from primary policy and legislation through to national and regional policy. The relevant text within the NMP could be refined further to highlight this.

**Sustainable development or sustainable economic growth**

There is an unequivocal statement at the start of Chapter 3 which states that the NMP must "set out policies for and in connection with the sustainable development



of the area to which the plan applies". "Sustainable development" is an internationally-recognised term and yet throughout the draft document there are frequent references (no less than 15) to the NMP's aim to achieve "sustainable economic growth." This creates regrettable confusion and for planning purposes serves only to hamstring its potential for meaningful guidance. The draft NMP attempts to support the two concepts as separate entities, whilst at the same time interchanging their use, suggesting they are considered to have the same meaning. This sets up a fundamental contradiction within the NMP, resulting in an unbalanced interpretation of sustainable development and an apparent support for increasing all activities of each sector, unchecked by the principle of sustainable development. This contradiction undermines a seminal opportunity for marine planning and this NMP to actively contribute to the aims of the Marine Strategy Framework Directive and Water Framework Directive or support the general duty of the Marine (Scotland) Act 2010. At present, LINK members cannot accept that the draft NMP supports the achievement of its own vision and objectives for reaching good ecological/environmental status of the marine environment.

LINK members strongly reject the use of the term 'sustainable economic growth' as it (1) has no recognised definition; (2) undermines the term 'sustainable development,' which requires the hierarchical delivery of the five guiding principles such that achieving a sustainable economy, promoting good governance and using sound science responsibly will deliver a strong healthy and just society that lives within environmental limits; and (3) we believe a more sustainable economy would be aided by the development of new measures of social and economic wellbeing to complement the traditional, but limited, measure of GDP. In this regard we agree with the recommendation from the Carnegie report<sup>9</sup> that there should be a shift in emphasis from measuring economic production to measuring people's wellbeing (see also Ecosystem Goods and Services below). Scottish Environment LINK's general concern about the high-level pursuit of economic growth is outlined in our recent submission to the Rural Affairs, Climate Change and Environment Committee on the Regulatory Reform Bill in May<sup>10</sup>.

Page 19 of the draft NMP sets out a definition of sustainable development. However, the definition does not follow that set out in, for example, the UK's shared framework for sustainable development and the Scottish Government's draft Scottish Planning Policy (SPP):

*The goal of living within environmental limits and a just society will be achieved by means of a sustainable economy, good governance, and sound science.*

This makes it clear that two of the principles—living within environmental limits and a just society—are goals, and three—sustainable economy, good governance and sound science—are the means of achieving those goals. To cite sustainable development as an "important element of increasing sustainable economic growth" is at best to misunderstand sustainable development, elevating one of the means into the goal. Sustainable development is about moving away from a society where progress is measured in purely economic terms to one with a much broader set of

<sup>9</sup> More than GDP: Measuring What Matters, Carnegie Trust and Sustainable Development Commission, 2011 <http://www.carnegieuktrust.org.uk/getattachment/ad9d0fe0-b76f-49b2-b2af-7455dd912b02/Shifting-the-Dial-in-Scotland.aspx>

<sup>10</sup> <http://www.scotlink.org/files/policy/ConsultationResponses/RACCEStage1EvidenceMay13.pdf>

values. The NMP should include the accepted definition of sustainable development, together with the Government schematic<sup>11</sup> making the relationship between the principles clear.

### **Science**

One of the five key principles of sustainable development is the responsible use of sound science. The key objectives from the NMP include:

*Our understanding of the marine environment continues to develop through new scientific and socio-economic research and data collection. (HLMO 19)*

*Sound evidence and monitoring underpins effective marine management and policy development. (HLMO 20)*

*The precautionary principle is applied consistently in accordance with the UK Government and Devolved Administrations' sustainable development policy. (HLMO 21)*

And yet the draft NMP policies do not include the word 'science', and the scientific community is mentioned just once as one among a list of sources of sound evidence for decision-making. Monitoring—in the key objectives as underpinning effective marine management and policy development—is mentioned twice in the policies. In GEN10 it appears to be beyond the scope or influence of the NMP “*Where monitoring, research and data collection brings to light new evidence*” and in GEN 16 ‘monitoring’ alone is a form of protection from noise.

The lack of scientific data has already hampered the MPA designation process, with a number of MPA Search Features not being represented in the network and with the most common conservation objective being ‘*conserve (feature condition uncertain)*’. The NMP needs policies which explicitly support scientific research and monitoring, this is fundamental to sustainable development and an ecosystem-based management approach and will benefit all marine interests.

### **Ecosystem-based management**

The requirement to adopt an ecosystem-based management approach has been discussed in our answer to Question 1 and our overall comments but is also relevant here. The objectives and policies need rebalancing to meet the requirements of an ecosystem-based approach, particularly with respect to linkages across systems, the cumulative impacts of different human sectors, establishing long-term monitoring and research programs, and using flexible, adaptive approaches to learn from management actions.

### **Strategy for Marine Nature Conservation In Scotland's seas (Three Pillar Approach)**

LINK members are concerned that the draft NMP makes limited reference to Scotland's 'three pillar approach' to marine conservation which forms the basis of the Strategy for Marine Nature Conservation in Scotland's Seas. The three pillars for marine conservation integrate (1) species conservation; (2) site protection and (3) wider seas policies and measures.

This is a particular concern given the context of ecological concern and

<sup>11</sup> <http://sd.defra.gov.uk/what/principles/>

deterioration highlighted in Scotland's Marine Atlas and elsewhere. It is worth reiterating LINK Marine Taskforce member concerns for context:

- It is highly likely no 'pristine' ecosystems are left on Scotland's continental shelf<sup>12</sup>
- Shallow and shelf subtidal sediments – the majority of Scotland's seabed – are facing some or many concerns.
- The health of virtually every habitat type in Scottish waters is either declining or a matter of concern.
- All of Scotland's 30 species of shark, skate and ray are on the OSPAR threatened and declining list.
- Kittiwake numbers have halved since the mid 1980s, while Arctic skuas declined by 71% between 1986 and 2008.
- Harbour seal numbers are dramatically declining – in some areas by as much as 83%.
- Despite having the highest diversity in Northern European waters, the population status of many of the 20 plus cetacean species (whale, dolphin and porpoise) found in Scottish waters is unknown.

The much-needed ecosystem-based approach discussed above was widely supported in responses to a public consultation and is enshrined as the first objective in the Strategy:

*Objective i: To deliver integrated conservation of biodiversity in Scotland's seas using a three pillar approach, and to ensure strong linkages and co-ordination between them.*

LINK members recommend that (1) a separate chapter (also including 'natural capital,' see below) be introduced in the final NMP to reflect the marine conservation objectives of the strategy (2) that the role of the NMP as a key 'wider seas measure' for delivering the Marine Nature Conservation Strategy objectives (including x. To assess the effectiveness of the Strategy in maintaining and, where practicable, promoting recovery of Scotland's marine environment) is affirmed and (3) that the 'three pillar approach' guides the balancing of current policies (Chapters 5 - 16) and informs assessment of cumulative impacts and progress toward Good Environmental Status and sustainable development (particularly 'living within environmental limits').

### **Ecosystem Goods and Services ( "Natural Capital" )**

LINK members are concerned that there is minimal reference and application of the

<sup>12</sup> Recovering Scotland's Marine Environment, David Hughes & Thom Nickell, Scottish Association for Marine Science Internal Report No. 262, 2009  
<http://www.scotlink.org/files/policy/PositionPapers/SAMSLINKmtfReportRecover09.pdf>

valuation of ecosystem goods and services (also known as “Natural Capital”), linking ecosystems to the socioeconomic benefits they provide to communities. Reference to ecosystem goods and services should be made within the general policies.

The marine environment provides a rich array of ecosystem goods and services from fish production, climate regulation, recreational enjoyment and inspiration of human communities. These benefits form the basis of our economic prosperity and well-being and we are in the infancy of attempting to quantify these. A report regarded as the best available approach to value transfer, given the very limited evidence and resources available, estimated the benefits arising from a theoretical marine protected area network in Scotland (González-Álvarez 2012<sup>13</sup>) as £6.3 billion - £10 billion. Whilst there are acknowledged difficulties in this piece of value-transfer work, the report highlights that the value provided by marine ecosystem services throughout Scotland's seas is likely to be considerable but needs more accurate quantifying in order to measure status and thereafter trends (whether deteriorating or, with appropriate marine management as we would hope, enhancement).

Recognition of ecosystem system goods and services is also a driving principle of the Strategy for Marine Nature Conservation in Scotland's Seas:

*Objective vii (page 20): To improve our systems for monitoring the status of habitats and species, achieve better join-up on surveys and increase our understanding of ecosystems and the services they provide to society*

*Page 21: Marine Scotland also wants to improve the dissemination of knowledge of Scotland's marine biodiversity and the information Scotland has on the economic benefits of our marine biodiversity e.g. ecosystem services, contributing to climate change resilience and the development of new industries such as marine wildlife tourism, bio- prospecting etc.*

There have already been significant national and international efforts outlining the value of ecosystem services, such as the UK's *National Ecosystem Assessment* and the United Nations *The Economics of Ecosystems and Biodiversity studies*. While valuing goods and services is a recent approach, these initiatives identified that failing to recognise the economic values derived from ecosystems leads to their overexploitation and inept decision-making for their management. Most recently, Potts et al. (2013) have published an article<sup>14</sup> that assigns valuation metrics to UK marine features and their benefit to production and function services.

LINK members recommend that the final NMP must include a dedicated chapter

<sup>13</sup> González-Álvarez, J. (2012). Valuing the benefits of designating a network of Scottish MPAs in territorial and offshore waters. A report to Scottish Environment LINK. Institute of Natural Resources & Spatial Planning at the University of Oviedo, Spain.

[http://www.scotlink.org/files/publication/LINKReports/Valuing\\_the\\_benefits\\_MPA\\_Network\\_Scotland\\_Report\\_\(final\).pdf](http://www.scotlink.org/files/publication/LINKReports/Valuing_the_benefits_MPA_Network_Scotland_Report_(final).pdf)

<sup>14</sup> Potts, T.; Burdon, D.; Jackson, E.; Atkins, J.; Saunders, J.; Hastings, E. and Langmead, O. (2013). Do marine protected areas deliver flows of ecosystem services to support human welfare? *Marine Policy*:

<http://dx.doi.org/10.1016/j.marpol.2013.08.011>

(also encompassing the marine conservation objectives of the Marine Nature Conservation Strategy as discussed above) that provides an explanation of how marine ecosystem structure and function can and will be valued, how it affects the flow of services it provides and how those goods and services can, where appropriate, be enhanced. This production and function approach, linked to services and economic benefits provided, is a central component of marine planning and was a component of Scotland's Marine Atlas project. The approach also provides a common basis for monitoring and reporting on the success of ecological, social and economic outcomes; and will ultimately improve the explanation to Scotland's key stakeholders and sectors on how ecological and socioeconomic based interactions are linked, and why decisions and trade-offs are then made that emerge from alternative uses of the marine environment.

### **Climate Change**

While Question 5 asks whether the objectives and policies in the draft NMP meet the first of the duties set out in the Marine (Scotland) Act 2010, there is no equivalent question about the other, equally important, duty for policies to contribute to the **mitigation and adaptation to climate change**. This is a serious oversight and the piecemeal and confused climate change mitigation and adaptation objectives and policies, both general and sectoral, are a major concern. Scotland's Marine Atlas<sup>15</sup> cites human activity contributing to climate change as one of two greatest impacts on Scotland's seas. At the same time the marine environment is a critical space in which activities could be pursued that either contribute to climate change or play an important role in mitigating climate change. Both the Climate Change (Scotland) Act 2009 and the Marine (Scotland) Act 2010 require Scottish Ministers and public bodies to act in a way best calculated to mitigate climate change. The draft NMP does not meet the requirements of these pieces of legislation and must be amended to remove the contradictions in climate policy it now contains.

The recent publication of the 5th Report by the Intergovernmental Panel on Climate Change<sup>16</sup> (IPCC) reinforces the already established scientific evidence regarding climate change, increasing the levels of confidence and providing more detailed understanding of climate change than previous reports. In particular:

- Scientists are now 95% to 100% certain that humans have caused the majority of climate change since the 1950's. This is an increase in certainty from 2007 (90% to 100%) and a significant increase since 2001 when scientists were at least 66% certain.
- Without an aggressive mitigation strategy that sees greenhouse gas emissions stabilize this century, global temperature looks set to significantly exceed 2°C warming above pre-industrial levels by 2100 – crossing a threshold into catastrophic warming with devastating global consequences.
- If we look at global warming in terms of decades, the three most recent decades have all been warmer than all preceding decades (since 1850).

<sup>15</sup> Baxter, J.m., Boyd, I.L., Donald, A.E., Malcolm, S.J., Miles, H., Miller, B., Moffat, C.F. 2011. Scotland's Marine Atlas, Information for the National Marine Plan. Marine Scotland, Edinburgh

<sup>16</sup> <https://ipcc.ch/>

- The period covering 1983 - 2012 was very likely the warmest 30-year period in 800 years and likely the warmest of the past 1400 years.
- Since 1950 both the atmosphere and the ocean have warmed, the extent and volume of snow and ice have diminished and sea levels have risen. Many of these changes are happening much more quickly than in the past.
- The melting of glaciers and ice sheets in the last decade has been several times faster than the melting during the 1990s.
- The area covered by Arctic sea ice has shrunk in every season and every decade since 1979. The climate models predict that with continuing high emissions, we can expect nearly ice-free Arctic summers by 2050.
- The oceans are acidifying and have been since the beginning of the industrial era, with devastating consequences for coral reefs and millions of people who rely on reef fish for protein.

The recently published State of the Oceans<sup>17</sup> report states that oceans are becoming more acidic at the fastest rate in 300 million years, due to carbon dioxide emissions from burning fossil fuels, and a mass extinction of key species may already be inevitable as a result.

Every aspect of the final NMP must be consistent with the requirements of the Marine and Climate Change Acts to mitigate and adapt to climate change if Scotland is to play its part in the global response to climate change.

There are a number of marine species and habitats already struggling to adapt to the warming climate, and many more will face similar problems in the near future. The NMP should therefore help to remove additional human induced pressures on these sensitive features, enabling them to build resilience and better adapt to the impacts of climate change. In addition, there is a particular need to properly protect, manage and where appropriate enhance habitats that act as critical natural carbon sinks (eg kelp forests, seagrass beds, saltmarshes and possibly biogenic 'living' reefs).. The objectives relating to the mitigation of, and adaptation to, climate change should reflect these issues.

**Q6. Chapter 3 sets out strategic objectives for the National Marine Plan and Chapters 6 – 16 sets out sector specific marine objectives.**

**Is this the best approach to setting economic, social and marine ecosystem objectives and objectives relating to the mitigation of and, adaptation to climate change?**

The approach of setting out strategic objectives and sector-specific marine objectives is reasonable in principle, but the effectiveness of this approach depends entirely on the content of those objectives, which we do not think currently is correct. As applied in the draft NMP, the approach fails to adequately consider, for example, linkages between sectors, cumulative effects of activities on the

<sup>17</sup> <http://www.stateoftheocean.org/research.cfm>



ecosystem, incompatibilities and conflicts between sectors and between sector-specific and strategic objectives.

We are unclear of the interaction between the UK High Level Marine Objectives (HLMOs) and MSFD descriptors on the one hand and the sector chapter objectives on the other. We are concerned that the sectoral objectives listed at the start of each sector chapter do not fulfil the policy intention of s.5(4)(a)(i) of the Marine (Scotland) Act 2010. A key outcome of marine planning must be a healthy, well-functioning marine environment and clear objectives relating to the health of marine species, habitats and ecosystems (marine ecosystem objectives) are key to meeting this outcome. Effective management of the marine area requires a clear set of objectives against which management actions can be identified, implemented and monitored via the development of indicators and targets. As currently drafted, we do not accept that the objectives against which the marine ecosystem objective logo has been put at the start of each chapter will achieve this. We would urge that the approach recommended in SNH report no 341, 'Scottish Marine Ecosystem Objectives: Scoping study'<sup>18</sup> and subsequently endorsed in 'Report on Social and Economic Objectives for a Scottish Marine Plan' (Mee *et al*, 2010) (<http://www.scotland.gov.uk/Resource/Doc/308369/0097119.pdf>), is adopted.

As discussed above, LINK members reiterate that ecosystem-based management principles for marine planning must be presented as the primary mechanism for achieving the strategic and sector-specific objectives in the draft NMP. The three pillar approach to marine conservation as set by the Strategy for Marine Nature Conservation in Scotland's Seas should also be integrated as a thread through both general and sector-specific policies.

Many of the objectives, both strategic and sectoral, have been passed down from other UK, European and International strategy documents. It would be useful if this could be summarised, perhaps with a diagram, showing how all the policy levels fit together and inform the NMP.

In setting out the strategic objectives of the NMP, the Scottish Government must place greater emphasis on the importance and value of Scotland's marine natural heritage and resource. The marine environment, and the ecosystem services that it provides, underpin the success of many of the sectors referred to within the NMP. These services and the NMP's vision for "clean, healthy, safe, productive and biologically diverse oceans and seas, managed to meet the long term needs of nature and people," must be fully integrated and reflected throughout the document. This is fundamental to ensuring the NMP supports the achievement of sustainable development within Scotland's marine area required by the Marine (Scotland) Act 2010), the objectives of the Marine Strategy Framework Directive; and a commitment under the UK's shared framework for sustainable development.

### **Marine Ecosystem Standards**

We strongly believe each sector plan should be linked to the marine ecosystem objectives in order to illustrate how the NMP will deliver them. In keeping with the overarching goals of sustainable development, including living within

<sup>18</sup> Saunders G., Scott M.M. (2010). Scottish marine ecosystem objectives: Scoping study. Scottish Natural Heritage Commissioned Report No. 341 [http://www.snh.org.uk/pdfs/publications/commissioned\\_reports/341.pdf](http://www.snh.org.uk/pdfs/publications/commissioned_reports/341.pdf)



environmental limits, we believe the marine ecosystem objectives should underpin the social and economic objectives. We are therefore disappointed that no reference has been made to SNH Commissioned Report 341 “Scottish Marine Ecosystem Objectives: Scoping Study”<sup>19</sup> or ‘Report on Social and Economic Objectives for a Scottish Marine Plan’ (Mee *et al*, 2010). The former recommended the development of a set of Marine Ecosystem Standards (MES):

*Marine Ecosystem Standards (MESs): These will be a ‘bottom line’ set of targets for Scotland’s seas, which will allow us to ensure that we are managing human activities in a way that is not damaging marine ecosystems and the environmental goods and services they provide for Scotland’s people, and are making progress in restoring past damage where this is necessary. These will be broadly analogous with the standards that the Scottish Government sets for the education and health services. As with these standards, they will be partly indicators of performance, but they will also contain an active management element, prompting action to fine-tune or amend management prescriptions if evidence shows that these MESs are not being achieved.*

Development of a set of MESs would provide all marine stakeholders much-needed clarity, as concrete objectives for the plan would enable planners to measure the collective success - or otherwise - of regional marine planning decisions. Such an approach would also help facilitate measurement of progress toward and therefore ultimate achievement of Good Environmental Status under the MSFD.

#### **Climate change approach**

LINK members recognise that climate change is a major challenge for Scotland’s environment and human population. The draft NMP references the challenge of climate change, but offers insufficient planning guidance to meet the duty under the Marine (Scotland) Act to “...act in the way best calculated to mitigate, and adapt to, climate change...”. It does not adequately address objectives, strategies and risks throughout the document in relation to the potential influence of climate change on both the marine environment and indeed the sustainability of the various marine sectors and their own respective mitigation responsibilities. We note an attempt has been made to embed climate change policies in the sector chapters, however, consistent detail of how each sector will act to mitigate or adapt to climate change is lacking for various sectors.

#### **Q7. Do you have any other comments on Chapters 1 – 3?**

LINK members recommend a major edit of Chapters 1, 2 and 3 to make clearer (1) that sustainable development, protection and enhancement of the marine environment and mitigation of and adaptation to climate change are core requirements of the NMP; (2) how the NMP complements and contributes to the implementation of the higher order UK and EU Directives; (3) how ecosystem-based management will provide the framework for the delivery of marine planning,

<sup>19</sup> Saunders G., Scott M.M. (2010). Scottish marine ecosystem objectives: Scoping study. Scottish Natural Heritage Commissioned Report No. 341 [http://www.snh.org.uk/pdfs/publications/commissioned\\_reports/341.pdf](http://www.snh.org.uk/pdfs/publications/commissioned_reports/341.pdf)

(4) how the 3 pillar approach will inform the setting of sector-specific policies, and (5) how decision-making and conflict resolution will be addressed. The Firth of Clyde Marine Spatial Plan (<http://www.clydeforum.com/SSMEI-MSP-2010.pdf>) provides a good example of clearly visualising policy hierarchies and introducing planning concepts.

### **Approaches to Marine Planning Policies**

As stated earlier, the wording introducing the Approach to Policies is fundamentally flawed. The Scottish marine planning system should promote **sustainable** development. Achieving a sustainable economy, promoting good governance and using sound science responsibly are essential to the creation and maintenance of a strong, healthy and just society capable of living within environmental limits. The NMP should strive to contribute positively and constructively towards application of the ecosystem approach by taking this opportunity to secure the long term sustainability of Scotland's marine environment. To achieve this, it is recommended that the NMP includes within the 'Approach to Policies' section:

- A statement on the important and valuable asset that is Scotland's marine natural resource and biodiversity;
- A statement on the importance of marine ecosystem services in underpinning the success of key sectors referred to within the NMP and indeed wider positive benefits that a healthy, biodiverse marine environment provides. In this regard the 'ecosystem approach' should be defined here as the common thread that integrates all elements of the Plan.
- The principles of the MPA network and the role this will play as one of the three pillars for the protection of the Scottish marine environment as set out in the Marine Nature Conservation Strategy for Scotland's seas . Furthermore, a coherent MPA network is a key climate change mitigation and adaptation measure that will increase the integrity of the marine environment making it more resilient to future changes in climate.
- A contextual paragraph explaining the global importance and value of Scotland's natural marine and coastal assets (e.g. seabirds, cetaceans, fish and habitats). This should then be put in context using a summary of the assessment of Scotland's Marine Atlas (Box A, Page 21 of the NMP), which sets out the main pressures facing the marine environment.

### **Monitoring and Research**

The NMP makes reference to 'The Future' on page 19, stating how marine planning will be improved by greater understanding. However, no reference is made to the efforts being taken by Marine Scotland and other statutory agencies in facilitating monitoring and research of Scotland's marine environment. This work is crucial to informing marine spatial planning and decision-making and the NMP must make reference to their programmes/ strategies, giving examples of how this information feeds into and informs the planning process. A commitment from the Scottish Government to support and facilitate environmental monitoring and research is required.

### **Cetaceans**

On page 22, Box A, LINK disagrees with the final bullet point under the section 'Healthy and Biologically Diverse.' There are specific concerns regarding cetaceans, as detailed for example in the Cetacean Strandings Investigation Programme (CSIP) Stranding reports<sup>20</sup>.

## **General Planning Policies**

**Q8. Are the general policies in Chapter 4 appropriate to ensure an approach of sustainable development and use of the marine area? Are there alternative policies that you think should be included? Are the policies on integration with other planning systems appropriate? A draft circular on the integration with terrestrial planning has also been published - would further guidance be useful?**

This section must be more explicit in stating that all text is planning policy. Policy text within the boxes will automatically be considered the more applicable text and thus potentially misguide users of the NMP.

### **Policies GEN 1, 2 & 3**

We welcome and support the inclusion and commitments made within the NMP to the principles of sustainable development. However, the first three general policies, GEN1-3, and supporting text must be reviewed and amended to reflect the five guiding principles of sustainable development as set out in the UK's shared framework for sustainable development. Relevant text within the NMP currently suggests support for activities that achieve economic and social objectives over environmental objectives. LINK members contend that the three objectives – if viewed in the long term - are inextricably linked. It also omits a vital reference to respecting the limits of the natural marine environment and any effort to work within environmental capacities. As a consequence, the current approach is contrary to achieving sustainable development and thus contravenes the duty of the Marine (Scotland) Act. We recommend reference is made to the current draft Scottish Planning Policy (SPP) document as it presents appropriate wording that could be used in this General Policy section (see paragraphs 24 and 25 on page 8 of the SPP). Furthermore, there is no parity between those policies that make provision for - and actively support - developments and activities that offer social and economic benefits (GEN 2 & 3) and those that merely seek assurance that environmental protection law will not be broken, such as that set out in GEN12. Marine natural resources are vital to our existence and the existence of those sectors in the NMP. We must therefore work within the limits of the environment otherwise we jeopardise its quality and the environmental services it provides. For a development proposal to be sustainable, it must respect all five principles, specifically (1) living within environmental limits; (2) ensuring a strong, healthy and just society; (3) achieving a sustainable economy; (4) promoting good governance; and (5) using sound science responsibly. For the NMP to be compliant with the duty of the Marine (Scotland) Act and support European legislation we recommend the inclusion of an additional policy that fully respects the need to live within environmental limits and actively supports the protection and most importantly, where appropriate, the enhancement of the marine environment. Suggested

<sup>20</sup> Cetacean Strandings Investigation Programme (CSIP) Stranding reports. <http://ukstrandings.org/csip-reports/>

wording for this additional policy is provided in answer to Q10.

**Policy GEN 4**

There is no directly equivalent policy in the draft Scottish Planning Policy, and LINK members contend that the detail of GEN4 would most naturally fit as part of GEN9 on Engagement. A requirement for effective engagement would enable the relevant planning authorities to present practical scenarios (with the cooperation of developers) to facilitate community understanding of the implications of a development. LINK members welcome the principle of scenario mapping to guide decision-making generally, and strongly contend that any such assessment of community-level impacts should capture the long-term socioeconomic consequences of any impacts the development might have on the marine environment.

**Policy GEN 5**

This policy should include consideration of development proposals within designated natural heritage sites. Co-location of multiple uses may be particularly relevant to marine renewables, fisheries grounds and areas established for nature conservation (MPAs, SACs, SPAs) and is important for ensuring compatible projects and activities are sited in the least environmentally-sensitive areas. Establishing clear guidance on which activities may be compatible with which designation will offer greater clarity and environmental protection. Guidance at the NMP level on this point will greatly help to inform the preparation of Regional Marine Plans.

**Policy GEN 6**

We support the efforts to integrate marine and terrestrial planning. However, this policy must include an additional criteria that explicitly makes a requirement for consideration of environmental impacts when facilitating appropriate access to the shore and sea.

The policy should require criteria for handling any differences or conflicting statements within the terrestrial and marine plans, or between different planning systems, and should clearly indicate which plan takes priority where the two systems overlap. Such criteria should be developed as a matter of urgency.

**Policy GEN 7**

We strongly support this policy. However, the example of River Basin Management Plans seems misplaced, particularly given the policies for water quality and resource in GEN18. Strategic Development Plans and Local Development Plans would be more appropriate documents to cite as examples here.

**Policy GEN 8**

LINK members support the spirit of this, but it is not a tangible policy. and more a laudable statement of intent. The text of GEN8 and the following paragraph would be better placed under Approach to Policies on Page 18 within the first paragraph.

**Policy GEN 9**

We strongly support this policy. Please also note our suggested addition in our comments on GEN4.

### **Policy GEN 10**

This policy should better reflect - and seek to embed - the precautionary principle within the decision-making process. The precautionary principle is set out well within the draft SPP paragraph 133. This states that authorities should apply the precautionary principle where the impacts of a proposed development on nationally or internationally significant landscape or natural heritage resources are uncertain. If there is any likelihood that damage could occur, modifications to the proposal which would eliminate the risk must be considered.

As mentioned previously, there is no reference here to the efforts being taken by Marine Scotland and other statutory agencies in facilitating monitoring and research of Scotland's marine environment. This work is crucial to informing marine spatial planning and decision making and the NMP must make reference to their programmes/ strategies, giving examples of how this information feeds into and informs the planning process. A commitment from the Scottish Government to support and facilitate environmental data collation, monitoring and research is required. In addition, the Scottish Government must better facilitate the dissemination of information to stakeholders. We suggest this would fit better in a separate policy.

### **Policy GEN 11**

We strongly support this policy as drafted in the box. However, the explanatory text should be clear that mitigation actions must be both proportionate and ecologically appropriate. Bad mitigation measures are no substitute for a deterioration in environmental status arising from inappropriate development, or even development of over-riding public interest. It is crucial that poor 'biodiversity offsetting' does not become entrenched, thus undermining proper environmental protection in the first instance. Examples of poor mitigation (which could be considered as early examples of ill-informed 'biodiversity offsetting') include the Cardiff Bay Barrage development.

### **Policy GEN 12**

LINK members would like to make the following three points in regard to this suggested General Policy:

1. Given the ministerial duty within the Marine (Scotland) Act 2010 to protect, and where appropriate enhance, the health of the marine environment, this General Policy must provide more clarity and robustness over the requirements of environmental nature conservation legislation and policy. Reference to these requirements will provide a clearer steer to marine planning practitioners and will also provide certainty to developers and users of the marine environment, thus reducing risks.

The draft SPP provides suitable description of the various designations and protected species which must be considered when proposing any new activity or development. This includes the Natura network and need for appropriate assessment of proposals, including regional plans and marine activities, where they are likely to have a significant effect on the network

and are not directly connected with or necessary to their conservation management (see paragraphs 136-151 of the draft SPP for a good reference). Newly proposed and designated MPAs under the Marine (Scotland) Act should be included in this hierarchy of nature conservation designations and protection for the marine area.

It is important to note that the network of marine protected areas is not yet complete and therefore contextual information is required to inform and guide planning practitioners. Natura sites for protection of harbour porpoises and bottlenose dolphins, as well as marine foraging areas for seabirds at sea, are forthcoming and LINK members consider further MPA designations are needed for protection of nationally important aggregations of cetaceans, seabirds, basking sharks, common skate, European spiny lobster and other nationally and internationally important species, as well as both nationally important (rare/threatened/declining/of regional significance) and representative habitats not sufficiently covered by current proposals. The fact that the network will be expanding – and management adapting to reflect a research programme on ecological connectivity between MPA sites - should be referred to within this section.

Reference is made to the national status of 'other habitats or population of species of conservation concern' (LINK members presume this refers to Priority Marine Features) and the need to take these into account when preparing regional plans and appraising proposals. However, the Marine Scotland guidance on safeguarding these features is not yet available. This paragraph should be strengthened to give a better steer, outlining examples of what measures or considerations will be required at the plan preparation and project appraisal stages, in addition to those measures already required under European Directives, for example to ensure strict protection of European Protected Species. Clarity is also required over which features this relates to and whether "other Priority Marine Features" refers to features already included in MPA, SAC and SPA designations.

2. The potential for cumulative environmental impacts from proposed development and use of the marine area must be stipulated as requiring consideration at the regional marine plan and project levels. It is unclear how the NMP will ensure that existing and future developments are within the carrying capacity of the environment.
3. The policy described in GEN 12 simply repeats the implicit duty of authorities not to break the law regarding protected areas and species, and not to sanction developments that will significantly adversely affect the conservation status of non-protected features of conservation concern. It is regrettable that the Scottish Government's proactive duty to enhance the marine area (Part 2 Section 3) is not addressed. The policy states that planners should ensure development "does not result in a significant adverse effect on the national conservation status" of species and habitats. This neglects the legislative duty to enhance Scotland's seas where Scotland's Marine Atlas indicates this is necessary. Refer also to comments on GEN 1,2,3 above.



We therefore suggest that the text for GEN 12 is re-worded as follows:

“Marine planning and decision-making authorities should ensure that development and use of the marine environment (a) complies with legal requirements for protected areas and protected species; (b) does not result in an adverse effect on the national conservation status of other habitats or populations of species of conservation concern and (c) protects, and where appropriate, enhances the health of marine biodiversity and the wider marine ecosystem.”

### **Policy GEN 13**

We are pleased to see that a General Policy on the Historic Environment has been included in the NMP and that this includes both designated and undesignated sites. We agree with the wording provided on Page 30:

*‘GEN13: Marine planning and decision making authorities should aim to protect and, where appropriate enhance, heritage assets in a manner proportionate to their significance when progressing development and use of the marine environment.’*

However we have concerns over aspects of the wording on page 31, in particular the wording for designated assets. The plan sets out that:

*‘Substantial loss or harm to designated assets should be exceptional and should only be permitted if this is necessary to deliver social, economic and environmental benefits that outweigh the harm or loss’.*

As stated in the Scottish Historic Environment Policy (SHEP) 3.63:

*‘Under section 96 of the 2010 Act, it is an offence to intentionally or recklessly carry out a prohibited act that significantly hinders or may significantly hinder the achievement of the stated preservation objectives for a Historic MPA. Prohibited acts are (a) works or activities which (or which are likely to) damage or interfere with a marine historic asset or have a significant impact on the protected area, (b) acts to remove, alter or disturb a marine historic asset.’*

Currently there are very few designated marine historic assets whether hMPAs, listed buildings or scheduled monuments in the marine environment and we believe that these should be afforded the utmost protection.

In addition to the few designated marine historic assets there are a great many undesignated historic assets in the marine environment. Where their preservation in-situ is not feasible and development is justified, marine decision making authorities must require a detailed archaeological investigation to be carried out – in line with 3.68 of SHEP. ‘Should’ require in this instance would not fulfil the terms of the 2010 Act.

With reference to the final paragraph on page 32. The Royal Commission on the Ancient and Historical Monuments of Scotland is to be merged with Historic Scotland in the near future. The document should refer to the newly-formed Historic Environment Scotland. In addition to the national repository, this information should also be archived with the adjacent Local Authority Archaeology



Service, not or the Local Authority Archaeology Service.

A very small proportion of the marine historic environment has been designated, whether as a listed building, scheduled monument or historic Marine Protected Area. A map indicating the sheer volume of undesignated heritage assets in the marine environment would provide a useful reminder about the true extent of the marine historic environment and what developers might be facing.

**Policy GEN 14**

See our comments under the specific landscape/seascape, Question 9 below.

**Policy GEN 15**

We support this general policy.

**Policy GEN 16**

Generally we support the inclusion of a policy that supports a sustainable approach to the impacts of noise pollution from marine activities. However, this policy must:

1. Include a requirement to consider the potential cumulative environmental impacts of noise;
2. Include the fact that whilst soft start mitigation method is a suitable, common sense measure for seismic or other sound sources that can be 'ramped up' with an appropriate increase in sound over an appropriate timescale, the measure has not yet been proven as effective for any industry source;
3. Include the word effective in front of the sentence that reads with "**effective** mitigation measures being adopted".
4. An acknowledgement that monitoring can only provide protection where the data and results are timeously fed into an adaptive management system.

**Policy GEN 17**

We support this general policy with the addition of text recognising that:

1. Natural or restored kelp forests and biogenic 'living' reefs (e.g. horse mussel beds and oyster beds) can also play an important role in sustainable coastal defence and;
2. Regional Marine Plans should also consider the scope of sublittoral habitat restoration e.g. biogenic 'living' reefs. This would need to be done sensitively and should not be confused with potentially inappropriate *artificial* reef construction.

**Policy GEN 18**

We support this policy although believe the wording should be strengthened as follows:

"Decision makers should *seek to mitigate against* impacts on the quality of designated bathing and shellfish waters from any proposed development"

### **Policy GEN 19**

This policy should be brought into line with the duties under the Scottish Climate Change and Marine Acts and should be amended to read:

“Developers and users of the marine environment should act in a way best calculated to mitigate, and adapt to, climate change.”

The current text is simply too weak as to provide any meaningful guidance to planners, decision makers and those seeking to use Scotland's marine environment. This section and policy should provide support and guidance to planners, decision makers and those responsible for Regional Marine Plan preparation on a topic that is one of the major challenges facing marine and terrestrial planning at Scottish and international levels. A robust and tangible framework must be established with examples or suggestions made to provide real support to the Marine Planning Partnerships. The NMP can act as a driver to ensure future management of the marine area addresses the challenges posed by climate change and plays its part in reducing greenhouse gas emissions. The would ideally encourage:

1. Preparation of near, medium and long-term climate and oceanographic projections that define the implications of longer-term coastal and marine change. Planners can use this reference point when establishing measures and policies to mitigate and adapt to climate change;
2. creation of vulnerability maps and mapping of transitional habitats or places that may act as refuges for marine flora and fauna. RSPB, for example, has prior experience with this for terrestrial birds and is using the results in its current work (Huntley, 2008<sup>21</sup>);
3. and scenario mapping or modelling changes to account for changes in habitat and species ranges.

In preparing the NMP, Scottish Government has a duty to act in a way best calculated to mitigate and adapt to, climate change. Policy GEN 19 should be explicit not just about mitigation but also about the measures for adaptation, specifically referring to the importance and role of designating and effectively managing an ecologically coherent network of MPAs will be a fundamental climate change adaptation measure that will see increased environmental resilience of the marine environment to future climatic changes. This is acknowledged by the NMP (on page 49: “a healthy benthic community may be able to support the recovery of impacted habitats in other areas of the sea and ecosystem resilience will be an important asset in the face of climate change”), but does not feature in policies or objectives.

### **Q9. Is the marine planning policy for landscape and seascape an appropriate approach?**

<sup>21</sup> B. Huntley, Y.C. Collingham, S.G. Willis & R.E. Green (2008). Potential impacts of climatic change on European breeding birds. PLoS ONE 3(1): e1439.

LINK members appreciate that a statutory process for planning and consents across the land-sea interface will be required. Please refer to our response to Q2 to integrate consideration of how planning and activities on land may affect processes that impact on the marine environment.

#### **Policy GEN 14**

We welcome inclusion of GEN14, highlighting the importance of land/seascapes in the NMP. However we do not believe that the current proposals on p34 will afford adequate protection for land/seascapes of national and local importance. The NMP highlights the many benefits that land/seascapes bring to society, especially coastal communities as well as the very significant contribution tourism based on Scotland's landscapes contributes to Scotland's economy each year - £420 million. We would therefore like to see GEN14 strengthened to read:

*'Marine planning and decision making authorities should protect and, where appropriate enhance valued seascapes and landscapes, when progressing development and use of the marine environment'*

In addition to National Scenic Areas and National Parks which the NMP affords additional protection, World Heritage Sites (WHS) should also be added to this list. WHS have been designated for their international significance and for St Kilda, for example, the archipelago's cultural landscape is one of the features for which it has been inscribed on the World Heritage List.

NSAs, NPs and WHSs are of national/international importance. However to many communities it is their local landscape that is significant, contributing to their quality of life, sense of place and livelihoods. We would like to see recognition of the importance of local landscapes in the NMP and guidance on how they should be protected in the development process.

Onshore infrastructure will also be a significant element of many marine developments and GEN14 should highlight the importance of siting this infrastructure in appropriate locations where they will not adversely impact on significant local or national landscapes.

A map showing designated landscapes would aid understanding.

Sustainable development is possible in the coastal and marine environment, but it should not come at the expense of Scotland's landscape character or visual amenity.

#### **Q10. Are there alternative general policies that you think should be included in Chapter 4?**

##### **Priorities**

The general policies section must include a description of the priorities both of nature conservation legislation, the hierarchy of protection and the mechanisms for

delivering conservation of biodiversity within the marine area.

The draft Scottish Planning Policy<sup>22</sup> (SPP) provides the right framework and general content that is required in the NMP (see Natural Resources section of the draft SPP). This information would provide explicit guidance for Marine Planning Partnerships in the preparation and delivery of Regional Marine Plans.

### **Additional policies**

LINK members believe that additional general policies are needed to ensure the NMP achieves its objectives, complies with the duties laid out in the Marine (Scotland) Act 2010, the Marine and Coastal Access Act 2009 and the Climate Change (Scotland) Act 2009 and meets the requirements of the MSFD and other legislation:

#### **1. Enhancement**

A policy of explicit support for activities which lead to the protection and enhancement of the health of our seas and biodiversity is required to sit alongside GEN 1-3. This is in addition to the required revision to GEN 12. Possible wording: **GEN X: Sustainable developments and marine activities which provide protection and enhancement of the health of the area and which further marine biodiversity are encouraged.**

This is required to make it clear that there is support for positive measures to assist biodiversity conservation and recovery, above removal of pressures. For example, environmentally sensitive and appropriate habitat restoration.

#### **2. Climate Change**

Similarly, GEN 19 is inadequate to meet the climate change duties within the Climate Change (Scotland) Act and Marine (Scotland) Act, calling only for developers and users to minimise emissions and increase resilience. GEN 19 must be revised to meet the duties and a further policy introduced to give climate change mitigation and adaptation outcomes explicit support:

**GEN Y: Sustainable developments and marine activities which provide mitigation of and adaptation to climate change are encouraged.**

#### **3. Research and Monitoring**

There should be an additional policy giving support to research and long-term monitoring, while acknowledging the work done in this area by Marine Scotland.

#### **4. Cumulative Impacts**

A new General Policy is needed to ensure that cumulative impacts of all planned activities are considered. The Clyde SSMEI provides a good example of looking at cross-cutting impacts: <http://www.clydeforum.com/SSMEI-MSP-2010.pdf>

#### **5. Marine Litter**

Marine Conservation Society Beachwatch data highlight the rising trend in marine

<sup>22</sup> <http://www.scotland.gov.uk/Publications/2010/02/03132605/0>

litter (levels have doubled from 1994 to 2012), and this growing problem needs to be addressed across all sectors. The NMP, and subsequent Regional Marine Plans, must therefore integrate with the developing Marine Litter Strategy

#### **6. Invasive Non-Native Species**

We are concerned about the growing impact of invasive non-native species (INNS) from ballast water, boat hulls and other equipment. In view of the potential socio-economic and environmental impacts of these INNS, this potentially growing pressure merits an additional General Policy.

### **Guide to Sector Chapters**

#### **Q11. Do you have any comments on Chapter 5?**

**Are there other sectors which you think should be covered by the National Marine Plan?**

1. **Ecosystem goods and services/natural capital:** the NMP can be progressive and be at the forefront of high quality, sustainable marine spatial planning. To this end, we recommend the inclusion of a new additional section that fully accounts for and actively seeks growth of the natural capital of Scotland's marine area. Capitalising on the virtues of the ecosystem approach and recognising the ecosystem's goods and services that support our marine activities, this new section would be well-placed and effectively mainstream the importance and value of strengthening Scotland's natural capital. Parallels can be drawn from the National Planning Framework, which recognises the importance of a high quality natural environment and actively encourages its protection and enhancement to build on nature's capital and support future sustainable development. Indeed, the Framework's Central Scotland Green Network national development is a prime example of the practical measures that can be implemented to support this concept.

This new section would directly support the key duties of the Marine (Scotland) Act 2010 and send a clear message about the Scottish Government's intent for future management of Scotland's seas.

2. **Transmissions sector:** the NMP must include an additional section on transmissions sector and cable laying, other than telecoms and other infrastructure projects. Large infrastructure projects such as these must be supported and guided by appropriate government policy.
3. **Seaweed:** Seaweed needs to be given its own sectoral chapter, to acknowledge both seaweed aquaculture and wild seaweed harvesting as distinct sub-sectors and their likely growth.

### **Sea Fisheries**

#### **Q12. Do you have any comments on Sea Fisheries, Chapter 6?**

## **Overall**

As currently drafted, this chapter does not appropriately guide management of sea fisheries in Scotland's seas. It must be redrafted to give clear guidance on the hierarchy of Scotland's fisheries policy (from the Marine Strategy Framework Directive and Birds and Habitats Directives down to the Common Fisheries Policy and Scotland's own objectives for sustainable fisheries) and how the Plan can help deliver the objectives of these overarching policies.

The NMP must also explain the different spatial boundaries which govern fisheries in Scottish waters: the 6 mile fishing limit (much of which is covered by the Inshore Fisheries Groups' Management Plans), inshore fisheries within the 12 nautical mile territorial water limits (which allow access for some other Member States' vessels based on historic fishing activity), offshore waters from 12nm to 200nm (shared with other EU Member States) and for waters beyond 200nm to the continental shelf limit.

Working within this existing framework, we believe the NMP, and the subsequent Regional Plans, can help steer decision making to deliver sustainable development of Scotland's fishing industry.

LINK members strongly welcome recognition that "spatial management in future years will become part of regional marine planning" and that 'inshore fisheries over the next few years will focus increasingly on ecosystem approaches to sustainable fisheries.

## **Objectives**

Many of the draft objectives - for example the objectives relating to tackling discards, ensuring harvest rates are consistent with MSY, and managing removals through Fully Documented Fisheries - are beyond the remit of the NMP. The objectives must be rewritten to clarify those objectives which can actually be delivered by the NMP. LINK members would prefer the following objectives for the NMP:

- Support Scotland's fisheries with fleet capacity aligned with fishing opportunities, offering priority access to vessels meeting set social and environmental criteria, including Marine Stewardship Council certification.
- Support achievement of Scotland's fish stocks fished at or below maximum sustainable yield.
- Support Scotland's sea fishery industry to optimise (rather than maximise) fishing opportunities, sustainable harvesting, and the value of its products along the supply chain.
- Help manage local fisheries on a regional level (based on Inshore Fishing Group areas), using the principles of ecosystem-based management: regional, participative management setting opportunities based on scientific

advice, using highly selective methods and multiannual plans, to rebuild and maintain stocks at sustainable levels, while eliminating discards, preventing damage to marine ecosystems and helping their recovery/enhancement where appropriate, to help meet Scotland's various legal environmental obligations.

We strongly support the objectives to help sustain coastal communities, to ensure that management is based on sound science, and to manage fisheries in line with international and national environmental priorities.

## **PART 2: Key issues for marine planning**

### ***Interactions with other users***

LINK members broadly support the categorisation of the range of interactions with other users. We would like it stated that 'designated areas may also act as nursery grounds for fish *and shellfish*' and welcome recognition that "*closed areas may benefit nursery grounds and protect environmental features*". In this regard we would like to draw attention to the possible fishery co-benefits of areas closed for biodiversity protection, and biodiversity co-benefits of areas closed for fisheries management purposes (see Potts *et al* (2013)<sup>23</sup>, Lester *et al* (2009)<sup>24</sup> and Howarth (2012)<sup>25</sup>).

A particularly relevant case is the Windssock Area Closure study (<http://www.scotland.gov.uk/Uploads/Documents/SISP0209.pdf>). Although the report acknowledged more time would be needed to fully assess scope for recovery of demersal fish species, it nonetheless concluded that "*Some commercial species, such as large cod and haddock, showed positive trends...*" and, most significantly for wider ecosystem protection and enhancement, that "*[T]he most evident effect of the closure was found for a non-commercial species, lesser spotted dogfish, which increased markedly in the Windssock area following the closure. Other elasmobranchs, although much less abundant in the study area, responded to the closure similarly to lesser spotted dogfish.*"

Whilst we recognise and support the policy that proposed MPAs will be managed on the principle of sustainable use, and therefore not creating *de facto* no-take zones, where higher levels of protection *are* merited, which is the case for parts of many of the MPAs particularly those for fragile benthic features, secondary benefits of increased fish and shellfish protection and production may flow, as results from Lamlash Bay and the Windssock closure show.

<sup>23</sup> Potts, T.; Burdon, D.; Jackson, E.; Atkins, J.; Saunders, J.; Hastings, E. and Langmead, O. (2013). Do marine protected areas deliver flows of ecosystem services to support human welfare? Marine Policy (in press)

<sup>24</sup> Lester, Sarah E., Benjamin S. Halpern, Kirsten Grorud-Colvert, Jane Lubchenco, Benjamin I. Ruttenberg, Steven D. Gaines, Satie Airamé, and Robert R. Warner. "Biological effects within no-take marine reserves: a global synthesis." Marine Ecology Progress Series 384 (2009): 33-46.

<sup>25</sup> Howarth, L.M, 2012 Exploring the fishery and ecological effects of Lamlash Bay No-Take Zone)



We would also expect that sustainable regional marine planning and ecosystem-based fishery management could also be reasonably expected to lead to the removal of benthic pressure in areas of seabed that lie outside nationally and internationally important sites, as part of the 'wider seas' pillar of the three-pillar approach to nature conservation. Regional marine planning could provide scope for protecting fragile seabed habitats that are below a threshold of national importance but that may be of regional importance. Ecosystem-based inshore fishery management could also use closed areas and seasons to protect nursery areas for commercial (e.g. scallop, langoustine, herring, cod, haddock etc) and recreational (e.g. lesser spotted catshark, tope, skates and rays etc) fish and shellfish.

Opportunities should therefore be taken to research the possible fishery co-benefits of ecologically required protection (and biodiversity benefits of fisheries closures) and lessons learned applied to wider sustainable fisheries management.

### ***Living within environmental limits***

This section must make clear that Scotland's Marine Atlas identified that fishing is one of only two significant pressures on the Scottish marine area which are widespread (the other being climate change) with significant impacts on the seabed and both target fish species and non-target species, including seabirds, sharks and cetaceans<sup>26</sup>.

Nonetheless, we welcome recognition in the draft NMP of the impact of fishing on marine productivity and biodiversity, other species (bycatch) and (with particular reference to scallop dredging and fishing using (other) mobile gear) on sea bed habitats.

There must also be explicit reference to, and maps showing, Scotland's emerging network of Marine Protected Areas (both international and national designations) and the legal requirements to ensure that fisheries do not have an adverse effect on designated species or habitats.

As currently presented, maps 7, 8 and 9 showing fisheries closed areas are impossible to interpret. These must be significantly improved.

### ***Climate Change***

We support the content of this paragraph on climate change (page 53). Focus is provided as to the measures that can be taken to adapt and mitigate, including additional specific research and reduction of emissions. However, it must be made clear that technical and fuel efficiency improvements to vessels can increase

<sup>26</sup> <http://www.scotland.gov.uk/Publications/2011/03/16182005/0>

fishing effort which, without appropriate safeguards, can have a negative effect on climate change mitigation and adaptation.

### **Fisheries Policies**

These policies must be rewritten based on what can be practically delivered by the NMP, rather than, for example, the CFP. LINK members would welcome policies in this chapter to:

1. Support the development of regional marine plans with spatial management measures which deliver sustainable inshore fisheries by:
  - Ensuring that fleet capacity – both the size and the nature of the fleet – matches available fishing resources and opportunities.
  - Protecting vulnerable stocks in particular juvenile and spawning stocks;
  - Protecting, and where appropriate recovering, benthic MPA protected features (for nationally and internationally important sites), important seabed nursery areas (for both commercial and non-commercial fish and shellfish species) and natural features/species which support wider ecosystem functions, from impacts of fishing gears;
  - Halting by-catch of non-target fish and other marine wildlife including seabirds;
  - Improving compliance with and enforcement of fisheries regulation;
  - Helping deliver Scotland's many international commitments including MSFD and EU environmental directives and sustainable development.
2. The Plan must also ensure participative fishery management that includes environmental and wider community stakeholders, not just fishing interests.
3. Inshore Fisheries Groups, with the support from Advisory Groups representing the full range of stakeholders from communities of place and interest, should have a central role in taking forward fisheries planning within the regional plans.

### **Fisheries 1**

This policy is meaningless in the context of the NMP and should be replaced by:  
*Support the development of regional marine plans with spatial management measures which deliver sustainable inshore fisheries by:*

- *Ensuring that fleet capacity – both the size and the nature of the fleet – matches available fishing resources and opportunities.*
- *Protecting vulnerable stocks in particular juvenile and spawning stocks;*
- *Protecting, and where appropriate recovering, benthic MPA protected*

*features (for nationally and internationally important sites), important seabed nursery areas (for both commercial and non-commercial fish and shellfish species) and natural features/species which support wider ecosystem functions, from impacts of fishing gears;*

- *Halting by-catch of non-target fish and other marine wildlife including seabirds;*
- *Improving compliance with and enforcement of fisheries regulation;*
- *Helping deliver Scotland's many international commitments including MSFD and EU environmental directives and sustainable development.*

### **Fisheries 2**

This policy specifically relates to consideration of the fishing sector, however any proposal will be required to consider all other existing activities and the potential interactions or impacts it may have. We recommend that this policy is removed from the fisheries chapter as such consideration of relevant stakeholders is already provided within policy GEN9. The Plan must also ensure participative management including environmental and wider community stakeholders, not just fishing interests.

### **Fisheries 3**

We strongly support this policy but there should be specific reference to managing fisheries within Scotland's emerging network of MPAs and to mitigate *and remove* impacts of fishing, allowing recovery of inappropriately damaged areas, where appropriate.

### **Fisheries 4**

We support this policy, but it should be rewritten to account for Scotland's commitments in the UK Framework for Sustainable Development, and the duty of the Marine (Scotland) Act 2010 to further the achievement of sustainable development within the Scottish marine area, including the protection and, where appropriate, enhancement of the health of that area.

### **Fisheries 5**

The first bullet point states assessment is required in both socio-economic and sustainability terms. Sustainable development encompasses socio-economic and environmental objectives, therefore the bullet can simply refer to a Sustainability Assessment.

The second bullet point is misleading and inappropriate as there are many different reasons why a fishermen would not be able to catch their fish quota.

### **Fisheries 6**

We support, but it must make clear that 'stakeholders' includes environmental and wider community stakeholders, not just fishing interests.

### **Fisheries 7**

We support, but it must make clear that 'users' includes environmental and wider community stakeholders (communities of interest and of place), not just marine industry and activity.

### **Fisheries 8**

This policy is too location-, time- and project- specific to be meaningful within the National Marine Plan and should instead be part of the regional plan for the Clyde area.

### **The Future**

As currently drafted, this section is of little practical assistance to planners and other decision makers. In addition to laying out the general principles of fisheries management, this section should list and explain tools for fisheries management which Inshore Fishing Groups and planning practitioners have at their disposal. This section should also specifically reference potential changes to inshore fisheries management as a result of the current Government social, economic and environmental review of Scottish scallop fisheries and into the management of fishing activity within Scotland's emerging network of MPAs. The latter should include reference to the current risk-based assessment of the impact of fishing within European Marine Sites (following a similar process in England) that was needed in order for the Scottish Government to be compliant with the Birds and Habitats Directives. Such a risk-based assessment should also extend to management options for fishing in national MPAs as they emerge from the Scottish MPA consultation. Research requirements to help the NMP deliver sustainable fisheries should be considered and detailed within this section. In particular, more focus is needed looking at the potential for enhancing ecosystem goods and services provided by ecosystem-based fisheries management in Scotland's seas. In a fisheries context, such work is critical when considering progress toward and ultimate attainment of Good Environmental Status Descriptors 1, 3, 4 and 6.

**Q13. Are there alternative planning policies that you think should be included in this Chapter?**

No comment

### **Aquaculture**

**Q14. Does Chapter 7 appropriately set out the relationship between terrestrial and marine planning for Aquaculture? Are there any planning changes which**

## **might be included to optimise the future sustainable development of aquaculture?**

The NMP does not appropriately set out the relationship between terrestrial and marine planning for aquaculture. There is no indication, for example, that planning permission for aquaculture is currently covered under the terrestrial planning regime (Town and Country Planning Act) rather than under marine licensing under the Marine (Scotland) Act. This must be explained in the final NMP. Furthermore, clear guidance must be provided to marine and terrestrial planners on how to ensure aquaculture planning is effectively integrated between the two planning systems. The draft planning circular forming part of the Planning Scotland's Seas consultation currently fails to achieve this.

### **Planning changes to optimise future sustainable development of aquaculture:**

1. There is potential to remove marine aquaculture from terrestrial planning altogether under s.63 of the Marine (Scotland) Act 2010. Fully integrating aquaculture into marine planning processes would enable the activity to be encompassed entirely within the remit of Marine Scotland. This would facilitate greater clarity and continuity between all marine activities, rather than the current situation where aquaculture is integrated into the terrestrial planning system. Full planning responsibility for aquaculture developments was given to local authorities in 2007 as a temporary stop-gap measure, and this arrangement will not facilitate a much-needed, strategic approach (eg to assess cumulative impacts of - and interactions with - different activities). It may be that Regional Marine Planning Partnerships can facilitate this level of coordination, but as highlighted in our answer to Question 3 there is insufficient detail in the NMP to be assured of this.
2. We acknowledge the advancement of the aquaculture sector and the potential for the industry to require further terrestrial development to support fish production activities. This example demonstrates the close relationship of the marine and terrestrial planning regimes and the need for their full integration. Integration will contribute towards the achievement of sustainable aquaculture development.

## **Q15. Do you have any comments on Aquaculture, Chapter 7?**

### **Objectives**

Before commenting on the proposed objectives, it is important to highlight that a fundamental objective for the Scottish aquaculture industry is currently absent from the list: namely to ensure that the industry farms fish and shellfish sustainably. The chapter currently focuses on the ambitious growth of the sector, without acknowledging the sector's prior responsibility to improve on its environmental record so that Scotland can achieve Good Ecological Status under both the Water Framework Directive and Marine Strategy Framework Directives. No reference is made to 'A Fresh Start – The Renewed Strategic Framework for Scottish Aquaculture', the principles and objectives of which are still relevant and should be

incorporated into the NMP objectives, specifically: "Farmed fish and shellfish industries should act as a good neighbour by minimising risks to biodiversity and impact on the environment and other aquatic activities. Growth should be within the carrying capacity of the environment."

Drawing on those conclusions, we recommend the inclusion of a specific, positive objective to guide policy that, if delivered, would help the industry prosper in the long-term and suggest the following objective:

"Develop a robust regulatory framework to ensure the aquaculture industry farms fish and shellfish sustainably as defined by the three principles of sustainable development, each with equal weighting and that sectoral growth remains within the carrying capacity of the environment."

### **Objective 1**

The suggested objective above could replace Objective 1.

### **Objective 2**

We strongly oppose the specific growth objectives set out on page 58, namely Objective 2. The potential environmental impacts of the industry achieving these growth targets have not been made subject to any environmental assessment. It remains to be understood whether these objectives can feasibly be achieved in Scottish waters, not least in a manner which supports the principles of sustainable development. Indeed, in Part 4 of Chapter 7, it is stated that Marine Scotland Science has yet to undertake a project to identify areas of opportunity and constraint for both finfish and shellfish sectors.

LINK members firmly contend that it is not appropriate for growth targets to be included in a NMP document, until the findings of this project have been concluded.

### **Objective 3**

Furthermore the sustainability of quality employment and sustainable economic activity in remote and rural communities" will not be secure until the overall environmental sustainability of the industry has been achieved. We suggest this objective is re-worded to: "Secure quality employment and long-term economic activity in remote and rural communities by ensuring the sustainable development of aquaculture."

### **Objectives 4 and 5**

There are multiple references to the growth of the sector. It is unclear whether the marine planning system itself has the capacity - or is an appropriate vehicle - to help achieve many of these objectives: such as the objective to "maximise benefits to Scotland from the Scottish aquaculture value chain".

### **Objective 6:**

No comment

### **Additional objectives:**

LINK members suggest the following two additional objectives:

1. The pre-consultation draft included an objective on a strategic approach to



sea lice research and the application of its findings to spatial planning. This is a highly regrettable omission. We believe a proactive objective on sealice research is necessary to establish the conditions for a sustainable industry. The results of Middlemas et al. (2013)<sup>27</sup> support a link between Atlantic salmon farms and sea lice burdens on sea trout in the west of Scotland, and therefore has important information and implications for marine spatial planning. Indeed it will be not be possible for the industry to demonstrate that it is operating within environmental limits until such results form part of the strategic planning process.

2. An objective on fish farm containment should be included. Norway's "Vision: Zero escapes" or NASCO's international goal for "100% of farmed fish to be retained in all production facilities" are useful reference points. Individual operators have 'zero escape' policies and a national objective would be a rational complement to recent legislative changes on containment.

### **PART 1: Background and context**

Some material information about the history and dynamics of the "value chain" of the aquaculture industry is missing from this section and this has the potential to mislead planners and users of the NMP. Aquaculture is mentioned as being an important contribution to food security, and referenced in the context of a limited or declining wild capture resource. For salmon farming to be a contributor to food security it has to provide a net fish protein gain; at present this is not the case. Farmed Atlantic salmon currently has a 'Fish in Fish Out Ratio' of between 2.2kg and 4.9kg depending on how it is calculated. It is clear, therefore, that if one of Scotland's most valuable food exports is to contribute to food security it has to reduce its dependence on wild capture fisheries. Non-marine feed alternatives must also be subject to principles of sustainability so that environmental costs are not externalised the supply chain.

### **PART 2: Key issues for marine planning**

Before commenting on the "key issues" outlined in this chapter, LINK members note that there is no section in this chapter entitled: "Interactions with other users," as in every other sectoral chapter. This section must be included in the NMP. More details on this point and suggestions for issues to include are stated in our "Further comments" section below.

#### ***Supporting economically productive activities***

LINK members are supportive of the use of wrasse as a biological control of sea lice as the current practice of sea lice control has escalated a chemical arms race that cannot be maintained without further risking unacceptable environmental impacts. However, we are concerned about the use of wild caught wrasse that are currently being heavily relied upon by the industry. LINK members contend that primarily farmed wrasse should be used for biological control and no wild wrasse should be used until there are fishery management measures in place to ensure that their removal does not have any adverse effects on population numbers. We

<sup>27</sup> Middlemas, S. J., Fryer, R. J., Tulett, D. and Armstrong, J. D. (2013), Relationship between sea lice levels on sea trout and fish farm activity in western Scotland. *Fisheries Management and Ecology*, 20: 68–74. doi: 10.1111/fme.12010

would also support post-harvest use of wrasse, either for fishmeal or for human consumption; in this way there could be an economic benefit of co-species farming.

As discussed, it is essential for aquaculture to contribute to food security and to operate within the carrying capacity of the marine and coastal environment, LINK members are therefore pleased to see that the diversification of the industry will be supported and would like clarification of how this support will be given.

### ***Living within environmental limits***

In relation to this section of the Key issues for marine planning, LINK members would like to make the following points:

1. The locational guidance for finfish production provides little if any justification for the support of future aquaculture developments to the west coast of Scotland. Whilst we support the presumption against further marine finfish farm developments on the north and east coasts (referred to in Map 10), it is unclear why migratory species such as Atlantic salmon and sea trout with origins in the rivers of the west coast or the western and northern isles are not afforded the same protection from potentially harmful marine finfish farms. The rationale for this clear East/North - West split in locational guidance must be explained for users of the NMP. Furthermore, the locational guidance makes no provision for other existing and future marine activities nor for the proposed MPAs and MPA search locations or existing and potential future Special Protection Areas or Special Areas of Conservation. These designations may be sensitive to aquaculture development.
2. The locational guidance must therefore be reviewed in light of the above noted omissions and consideration must be given to all potential receptors and impact pathways (not just nutrient enhancement and benthic habitat presented in the current guidance). The locational guidance and the objectives for growth of this industry will require assessment under statutory environmental assessment legislation, including Environmental Assessment (Scotland) Act 2005 and Conservation (Natural Habitats & c) Regulations 1994 (as amended).
3. We welcome the acknowledgement that growth is contingent on the sustainability of other species including the fisheries exploited to produce feed. However, it is unclear how planners will use this acknowledgement. We recommend that any high-level objective should be read as implying a presumption against any aquaculture development proposal that cannot prove that its supply chain uses only sustainably-sourced feeds.
4. While improvements have been made with reference to the numbers of seals shot since the introduction of Seal Licensing, LINK members want the ultimate target of seals shot by the Scottish aquaculture industry to be zero. We understand that lethal control is currently a last resort only after deterrent devices have failed but would like to see continued research and more importantly commercial trials of new deterrent devices, net materials

and innovative solutions to reach the target of zero seal shootings.

**Climate change**

This section provides no indication or guidance on what measures can be taken now, or explored in the future, to mitigate against climate change or reduce the carbon footprint of aquaculture. Consideration to mitigation should be made as a requirement of the Marine Act.

**PART 3: Planning policies**

**Aquaculture 1**

Compared to the specific objectives for aquaculture growth, this policy is more appropriately worded. However, 'sustainable' and 'appropriate' need some definition in this context. We recommend this is reworded to: "Marine Planning and decision making authorities will seek to encourage growth in sustainable aquaculture in appropriate locations."

**Aquaculture 2**

We support this policy. However it must make specific reference to the project Marine Scotland Science are undertaking to identify opportunities and constraints within the sector. The NMP should offer guidance in this respect and not simply state that planners can identify suitable sites in isolation. Also integration and partnership is key, so reference to terrestrial development plans and RMPs working in partnership to identify suitable areas for aquaculture and sensitive areas to avoid is recommended.

**Aquaculture 3**

This locational guidance requires further justification and reference to supporting scientific evidence as to the suitability of this approach. Please refer to comments in points 1 & 2 above.

**Aquaculture 4**

The Map 10 guidance document only considers nutrient enhancement and benthic habitats as stated. However, consideration must also be made to other potential activities, users and marine conservation designations. Notwithstanding the comments above, a statement to this effect should be included in this policy.

**Aquaculture 5**

This is supported only if the designated areas for expansion are subject to the necessary statutory environmental assessments, to ensure any potential environmental impacts lie within acceptable limits.

**Aquaculture 6**

We support this planning policy

**Aquaculture 7**

No comment.

**Aquaculture 8**

We support this planning policy.

**Aquaculture 9**

This policy requires strengthening to require emergency response plans for aquaculture developments.

**Aquaculture 10**

The purpose of pre-application consultation is not to seek and garner support; rather it is to inform and help identify and address the concerns of stakeholders. This policy should be reworded to that effect and avoid reference to aquaculture developers actively seeking or encouraging community support for their projects.

**Aquaculture 11**

We support this planning policy.

**Aquaculture 12**

This policy is too vague. Some biological controls may pose a significant risk to the environment, particularly if the controls involve non-native species or a change in the balance of the ecosystem in which the fish farm is situated. The encouragement of biological controls must be explicitly subject to precautionary environmental considerations and guidance should stipulate that introduced biological controls would form part of any development's Environmental Impact Assessment.

**Aquaculture 13**

Again, this policy is too vague. What are the other criteria that need to be satisfied? This policy should be altered to elaborate what criteria are required.

**PART 4: The future**

The key area to focus on for the development of integrated multitrophic aquaculture (ITMA) is the market for products. The technology and ability to operate IMTA systems is well developed but the practice has not been adopted due to lack of market for products. A market appraisal and development plan needs to be put in place before this development can be adopted.

If the industry is to move offshore it is essential that the Technical Standard for Equipment is reviewed and updated to reflect the requirements that operating in a higher energy environment brings. It is also essential that the modelling upon which the Scottish Environment Protection Agency relies to ascertain and mitigate any site environmental impacts, and any other relevant models, are recalibrated to reflect the different hydrological regimes in these offshore sites.

**Further comments**

As highlighted above there is no 'interactions with other users' section in "Part 2: Key Issues for Marine Planning" and we believe this is a serious oversight given the controversies surrounding finfish farming. Priority focus should be given to interactions with wild fisheries, one of the major issues being sea lice, but also the currently poorly understood impacts of escapees on the genetic stock of wild salmonids.

Reference should be made to the Managing Interactions Aquaculture Project (MIAP) funded by Marine Scotland and coordinated and delivered by River and Fishery Trusts of Scotland (RAFTS), partner fishery trusts and district salmon fishery boards. Other relevant interactions include impacts on recreational boating, coastal recreation, maritime navigation and landscape/seascape. Each should be given due consideration.

This chapter also refers to seaweed cultivation and harvesting. However the pace and scale of the likely future progression of the industry is not clear. Given the live consultation document for Scottish Government policy on this subject, there must be information available to better reflect the current situation and government's aims for this sector in the future, which should be included in the NMP.

**Q16. Are there alternative planning policies that you think should be included in this Chapter?**

There is no policy with regards to Farm Management Areas or agreements, which were given statutory basis by the Aquaculture & Fisheries (Scotland) Act 2013. Given their role in planning and synchronising production in order to reduce and manage risks posed by infectious agents and parasites which can be present in the environment, in wild and farmed fish, and in other naturally occurring biota these are a critical element of marine planning for fish farms.

**Wild Salmon and Migratory Fish**

**Q17. Do you have any comments on Wild Salmon and Migratory Fish, Chapter 8?**

It is not clear from the title or the content of this chapter whether its focus is the fish or the fisheries. The sustainability of the fisheries themselves is not considered in the policy statement. If considered as a 'sector,' the chapter would be better entitled 'Wild Salmonid Fisheries.'

**Objectives**

The first objective lacks detail and does not suggest what an appropriate management and regulatory framework should comprise of. Further detail is needed here to explain what is required to meet the objective.

**PART 1: Background & Context**

This section needs to provide background to the declines that have been experienced by wild salmon and migratory fish populations, clearly indicate what has caused these declines and highlight the relevance of these causal factors to future planning decisions. In particular the historical damage caused by the expansion of aquaculture needs to be acknowledged and indicated and needs to feed into the following policy section.

## **PART 2: Key issues for marine planning**

### ***Climate Change***

This section should explicitly state the measures that can be taken to 'building and supporting healthy, robust marine, coastal and terrestrial ecosystems' for these species and make reference to the fact that they are Priority Marine Features and protected through other legislation and therefore are afforded protection and consideration by development proposals.

### ***Living within environmental limits***

This section merely lists provisional catch statistics for 2012 and provides little to inform on living within environmental limits since it makes no reference whether current levels of exploitation are within environmental limits.

The predator control section is misguided and LINK members do not support it. Predators have not driven the declines in wild salmon and migratory fish populations. Culling can only be considered when all possible alternative threats to migratory fish population have been exhausted. We will not consider this activity until water quality has been improved, fishing pressures have been removed, pressures derived from aquaculture have been removed and yet populations have still not recovered.

### **Policy**

The single policy only considers the impact of development and use of the marine environment on migratory fish species and does not cover the impact of the salmonid fisheries sector itself on target species or the marine environment. This is inconsistent with other policies in sectoral chapters.

### **The Future**

LINK members support further research that will enable achievement of sustainable development.

**Q18. Are there alternative planning policies that you think should be included in this Chapter?**

No comment

## **Oil & Gas**

**Q19. Do you have any comments on Oil and Gas, Chapter 9?**

### **Objectives:**

#### **Objective 1**

The objective to 'maximise the recovery of oil and gas reserves' significantly contradicts the Scottish Government's ambition to create a low carbon economy. In addition this objective clearly contradicts the duty under the Climate Change (Scotland) Act that all public bodies are required to act in the way best calculated



to contribute to the delivery of the emissions targets in the Act and in a way that it considers most sustainable. There must be recognition in this objective that maximising extraction of oil and gas is incompatible with the need to bring down global carbon emissions, and that there is a need for a transition to a low carbon economy. This is not covered by the use of the term 'minimum environmental cost' which is more likely to be understood as referring to direct environmental impacts. It is not satisfactory to only mention the need to move to a low carbon economy in the background section.

Therefore, the first objective should be amended to read:

*“To support a planned and time-limited transition out of oil and gas extraction so that Scotland plays its part in ensuring the world does not exceed the carbon budget described by the IPCC and ensures it reduces its own exposure to the financial risk of stranded assets that will result from the continued pursuit of fossil fuels in a carbon constrained future.”*

For the first time, in its Fifth Assessment Report the IPCC presents an assessment of our remaining global 'carbon budget'. To have a two-thirds chance of staying below 2°C of global warming, we cannot – on a global basis - add more than one trillion tonnes of carbon to the atmosphere, relative to preindustrial levels. By 2011 we had already used up half of that budget. The report also warned that the budget may be smaller than we think. 'Known unknowns' in the climate system, like methane emissions from permafrost, may mean the budget is tighter. Current annual global human emissions are approximately 31 gigatonnes; on current projections of emissions levels, the world will exhaust this budget within 30 years.

By placing an objective to maximise fossil fuel extraction alongside the requirements of Scottish legislation to cut emissions, the current draft presents a missed opportunity to move towards a framework where decision makers are better able to balance social, environmental and economic considerations to make positive planning decisions. Instead it simply ignores that the contradiction exists and pulls decision makers in opposite directions.

Scottish Ministers must agree a mechanism to limit oil and gas extraction levels, guided by scientific evidence on what fossil fuel reserves are 'un-burnable' in order to keep within safe environmental limits, avoiding dangerous levels of climate change, and at the same time as robustly pursuing measures to decarbonise the economy. Oil and gas reserves are only a positive economic resource if extracted within those limits. If we extract resources beyond that limit, they represent an economic liability. This is a challenging, but inevitable task that Scottish Government must face up to.

These limitations will only increase over time as understanding of levels of un-burnable fossil fuels increases. Planning authorities and decision-makers need to receive guidance to give strong preference to low carbon activities.

### **Objective 2**

The objective should make clear there is a presumption to remove infrastructure from the seabed and water column.

### **Objective 3**

The 'not exceeding excessive cost' element of BATNEEC is no longer relevant within the terms of sustainable development obligations. These principles should simply refer to the use of Best Available Technique (BAT) to prevent and minimise emissions of substances and protection of human health as set out in the Pollution Prevention and Control (Scotland) Regulations 2012, in addition to the principles of Best Environmental Practice (BAP).

#### **Objective 4**

LINK members support this objective, which should also clearly recognise that the need to transfer skills from the fossil fuel industries is driven by the need to transition employment and economic benefits away from the fossil fuel industries into a lower carbon economy.

#### **PART 1: Background & Context**

This section, whilst recognising the tension that exists between maximising oil and gas extraction and moving away from fossil fuel based energy consumption, provides an unconvincing rationale for essentially dismissing the issue. The argument that oil and gas reserves are needed in an interim period whilst Scotland moves to a low carbon society is not an argument for maximising extraction. In fact, it is an argument for limiting extraction. As it stands, the planning framework provided essentially chooses to ignore the issue of what are safe environmental limits of fossil fuel extraction. This is further demonstrated by the lack of reference to climate change in the 'Living within environmental limits' or 'climate change' sections that follow.

#### **PART 2: Key Issues for Marine Planning**

##### ***Interactions with other users***

Wherever there is overlap in the footprint of renewable generation and fossil fuel extraction the balance of support should fall clearly in favour of renewables and the transition away from fossil fuel extraction.

##### ***Supporting economically productive activities***

There is a need to recognise the significant environmental risks posed by exploitation of 'hard-to-reach' oil from the North Sea and the need to reduce these risks by providing a clear steer to decision makers and planners using the NMP to prevent new exploration in new search areas presenting significantly challenging environments.

##### ***Living within environmental limits***

Chemical Pollution: There exists significant localised contamination risks associated with existing oil and gas extraction facilities in the North Sea. These are presenting issues at the decommissioning phases, where total removal of infrastructure could be hampered by re-suspension of chemical pollutants. Furthermore, a lack of evidence is not sufficient justification for suggesting there is no effect on the food chain.

##### ***Climate Change***

This section is inadequate in addressing the implications of further oil and gas extraction, as it mentions only the potential impacts of climate change on oil and gas extraction, not the impacts of oil and gas extraction on climate change. This

section should either be expanded to include description of the impacts of oil and gas extraction on climate change, or this should be added to the 'Living Within Environmental Limits' section and the 'Climate Change' section should be re-titled, e.g. to 'Future-Proofing for Climate Change' to clarify its scope. It is noted that the scope of this section is not consistent within other sectoral areas, for example CCS or renewables, which both describe the expected impacts of the technology on climate change.

**Oil & Gas Policies:**

**Oil & Gas 1**

See our comments on BATNEEC principles and on maximising oil and gas exploration noted above.

Policy can be strengthened to stipulate which legislative requirements must be met in considering key environmental risks, including environmental impact assessment, Strategic Environmental Assessment and Habitats Regulations Appraisal.

**Oil & Gas 2**

LINK members support this policy generally. However, the policy could specify which legislation is relevant for consideration during decommissioning to provide a steer to planning practitioners.

**Oil & Gas 3**

No comment.

**Oil & Gas 4**

No comment

**Oil & Gas 5**

LINK members support this policy, within the context of our position on new oil and gas exploration and extraction outlined in our comments on Objective 1 and the 'Background and Context' section above.

**Oil & Gas 6**

LINK members support this policy.

**The Future**

No comment.

**Q20. Are there alternative planning policies that you think should be included in this Chapter?**

No comment

**Carbon Capture & Storage (CCS)**

**Q21. Do you have any comments on Carbon Capture and Storage, Chapter 10?**

## **Objectives:**

### **Objective 1**

This objective should include the words 'sustainable' or 'environmentally sensitive' deployment of CCS, alongside safe, cost effective and timely.

### **Objective 2**

The second objective should also include the word sustainable in front of development.

### **Objective 3**

The fifth objective does not specify who shall initiate an environmental assessment of CCS, nor does it provide an indicative timeframe. Further detail is required here to provide an adequate steer. The objective should be to initiate and complete a robust environmental assessment in advance of any commercial deployment.

## **PART 1: Background and Context**

Scottish Government policy is that a minimum of 2.5 GW baseload capacity is required to meet our energy needs. We are not convinced this is the case. However, if there is to be this continued significant role for fossil fuels, it is crucial that CCS is rolled out quickly, in an environmentally sensitive way, in order to meet emissions reduction targets. However, under no circumstances should CCS demonstration be used to justify new coal power stations, or power stations that are only 'CCS ready.' This would risk 'lock-in' to high emissions infrastructure, and perpetuate other environmental impacts associated with fossil fuel extraction.

## **PART 2: Key Issues for Marine Planning**

A strong regulatory framework is needed to ensure that transport and storage of CO<sub>2</sub> is safe, environmentally benign, and does not lead to additional emissions through the use of CO<sub>2</sub> in Enhanced Oil Recovery (EOR), where captured carbon dioxide is used to assist in the extraction of oil from wells that would otherwise be uneconomic. This should be subject to strong independent scrutiny by an appropriate body.

Key elements of a regulatory framework must include robust storage site monitoring and aftercare, and mechanisms to manage liability for CO<sub>2</sub> leakage. A clear understanding is needed of how the development of CCS in Scotland might be linked to EOR. To reiterate the point above, LINK members would be very concerned if CCS development was linked to increased fossil fuel extraction which would drive further climate change (a highly perverse policy outcome). It is not credible to pursue CCS as a climate mitigation measure at the same time as pursuing opportunities for EOR to maximise fossil fuel extraction, without transparent information being available about the full life cycle emissions of CCS combined with EOR.

The ambition for rapid CCS deployment should not undermine a robust planning process ensuring adverse impacts on wildlife are avoided. We note that the current Grangemouth proposal has the potential to result in adverse effects on a European protected wildlife site, and Longannet and Cockenzie are also in close proximity to European wildlife sites. Any potential effects of CCS deployment on wildlife need to be fully assessed.

We agree that failure must be planned for, including risk of leakage of CO<sub>2</sub> into the marine environment from pipelines and storage facilities. We also agree that use of existing infrastructure should be prioritised where this is the most environmentally sensitive option.

### ***Climate Change***

The assumption that CCS will reduce emissions overall is overly simplistic. Whilst CCS, if successfully deployed, would reduce emissions at an individual project level, disregarding how the captured CO<sub>2</sub> is used, the assertion that 'CCS will reduce the levels of CO<sub>2</sub> release into the atmosphere and is therefore a mitigation measure to address climate change' is only true at a national level if:

1. Availability of CCS technology is not used to justify prolonged use of fossil fuels through lock-in to fossil fuel infrastructure, given it is not certain or proven that 100% capture can be delivered at a commercial scale and:
2. CCS is not used in combination with Enhanced Oil Recovery to extract additional oil from wells that would otherwise be uneconomic, resulting in a higher overall emissions scenario.

This section is also inconsistent with the equivalent climate change section on oil and gas, as it considers both the impacts of deployed CCS *on* climate change and the potential impacts of climate change on CCS deployment. The oil and gas section on climate change only discusses the latter. It is not credible to only describe the climate change impacts of development if they are considered to be positive.

### **Carbon Capture & Storage Policies:**

#### **Carbon Capture & Storage 1**

We suggest Carbon Capture & Storage 1 should read, "CCS demonstration projects or developments should be supported where they can be delivered environmentally sensitively and deliver genuine emissions reductions".

#### **Carbon Capture & Storage 2**

The point about re-use of existing infrastructure is already covered in Carbon Capture & Storage 2.

**Q22. Are there alternative planning policies that you think should be included in this Chapter?**

### **Offshore Renewable Energy**

**Q23. Should the NMP incorporate spatial information for Sectoral Marine Plans?**

Reference to the sectoral marine plans will help maintain the consistency of the policy and in due course there is merit in considering the incorporation of sectoral

plans within the NMP, not least the need to ensure the system is NMP-led. Had the NMP been in place earlier, then it would have been logical to include the offshore renewable sites within it.

## Q24. Do you have any comments on Offshore Renewable Energy, Chapter 11?

### Objectives:

#### Objective 1

LINK members support this policy.

#### Objective 2

We do not support the **second objective**. Sustainable economic growth does not have an internationally recognised meaning and places economic growth above social and environmental objectives and aspirations, thus acting to counteract the first objective. Furthermore, this objective increases the environment risks unnecessarily. This objective should be removed.

#### Objective 3

The **third objective** provides little or no guidance to marine or terrestrial planners. It should be strengthened to better guide the achievement of '*joined up marine planning and efficient licensing processes to facilitate sustainable offshore energy.*'

#### Objectives 4, 5 & 6

LINK members support these objectives

#### Objective 7

Seventh objective is supported. However, it should be strengthened, firstly by placing the word 'sustainable' ahead of development and by stipulating that test and demonstration projects will be facilitated where they meet the requirements of the general policies of the NMP (i.e. the appropriate environmental assessments are undertaken and unacceptable impacts are avoided).

### PART 2: Key Issues for Marine Planning

#### ***Supporting economically productive activities***

**Grid Provision:** Increased interconnection capacity could result in increased interest in, and applications for development in important areas for wildlife in Scotland, including national and international protected sites for birds, marine mammals, basking sharks, other vulnerable marine species and vulnerable coastal and marine habitats protected by Scottish and European law. If offshore grid projects, particularly those increasing interconnection capacity with the Western and North Isles, result in increased proposals in those areas (or expansions to existing developments), it will be crucial that the planning system responds appropriately. Increased interconnection capacity should not create undue pressure to consent damaging developments, or inappropriate expansions to existing sites. There will be a need to carefully assess proposals, including smaller scale proposals and their cumulative impacts, to ensure they do not harm the environment.



### ***Living within Environmental Limits***

The requirement of planning authorities and users/ developers to undertake robust and statutory environmental assessment of their proposals must be made explicit in this section, in order to ensure unacceptable harm to the natural environment is avoided.

Potential cumulative environmental risks posed by future offshore renewable development must be referenced here as a fundamental consideration of any new proposed activity. Furthermore, there should be guidance to help prioritise activity, which we would recommend includes the consideration of achieving greatest electricity capacity for least environmental impact.

**Collision Risk:** In addition to collision risk, effects of displacement/ barrier effects to marine species requires reference.

### ***Climate Change***

Reference should be made here of the necessity to deploy offshore renewables in as sustainable manner as possible. Whilst offshore energy generation will make an important contribution towards emissions reductions, it should be progressed with due regard to the potential environmental impacts. This includes the potential cumulative impacts on local, regional, national and international marine habitats and wildlife, as well as the impacts of associated onshore infrastructure on valued landscapes and seascapes and again the principle of achieving maximum energy capacity for least environmental impacts is required.

### **Renewables Policies:**

#### **Renewables 1**

This policy for presumption in favour of adopted Plan Options must be supported by the following criteria: proposals must be consistent with the policies within the NMP and where they meet the requirements of nature conservation legislation including national and international MPA designations.

#### **Renewables 2**

There exists the potential for significant adverse cumulative effects of offshore renewables on mobile marine species and habitats within the PFOW region. This policy must explicitly refer to the support for development being provided only to those projects that fully take account of and address their potential impacts, including cumulative impacts, to the high quality natural marine environment of the PFOWs.

#### **Renewables 3**

Same comment as for Renewables 2 above. Furthermore, the Saltire Prize must be taken forward to the most recent SEA of the sectoral marine plans. See comments to Question 40.

#### **Renewables 4**

We support this policy.

#### **Renewables 5**

This policy needs to clarify which species and habitats are most likely to require

consideration in terms of effects and impacts. Requirements to meet relevant nature conservation legislation (domestic legislation as well as European EIA, Habitats and Birds Directives) should be referred to. Cumulative impacts must also be specifically referred to here as a key consideration, with an explicit reference to avoiding and preventing impacts, not simply mitigating those impacts. Impacts on the marine historic environment and landscapes/seascapes should also be included in this policy.

**Renewables 6**

We support this policy

**Renewables 7**

We are unsure of the justification for this presumption. Explanation would be welcomed.

**Renewables 8**

This policy needs to be reworded to make it explicit as to the legal requirements of EIA and HRA. The purpose of these documents is to identify and address potential environmental impacts so that appropriate measures can be put in place to avoid, prevent and mitigate impacts to acceptable levels. Recognition of the environmental impacts of the associated development of ports and harbours to accommodate renewables projects should be explicitly included.

**Renewables 9**

This policy refers to existing users, however the word stakeholders would be more appropriate. Particularly as some stakeholders, who are not users, have a vested interest in proposed marine activities. This is particularly relevant to public communities and representatives of civil society, such as member-led conservation charities.

**Renewables 10**

LINK members support this policy.

**Renewable 11**

This policy should be supported by additional text that ensures the principles of sustainable development are adhered to. We support the expansion of offshore renewable energy that achieves greatest electrical output for least environmental impact. We therefore must avoid deployment that poses unacceptable impacts to the natural environment and Scotland's valued landscapes and seascapes or that limits the ecological recovery of Scotland's seas.

**PART 4: The Future**

This section makes assumptions that all renewables within Round 3 and Scottish Territorial Waters sites will be delivered. This is not appropriate as the applications will be determined on their own merit. This text should be omitted.

**Q25. Are there alternative planning policies that you think should be included in this Chapter?**

There is a recognition that coordinated national, regional and project specific

environmental monitoring is required to better inform marine spatial planning and decision making. An additional objective encouraging industry-wide monitoring packages that are standardised where appropriate and integrate and coordinate government, industry and project level programmes would provide a driver and focus to prioritise and deliver much needed monitoring.

This monitoring data will ultimately contribute to the sustainable development of the offshore renewables industry by informing decision makers, increasing certainty and reducing risk.

## **Recreation and Tourism**

### **Q26. Do you have any comments on Recreation and Tourism, Chapter 12?**

Overall, the NMP has greatly benefited from the lengthy pre-consultation input from the recreation sector and we are pleased to see the due recognition of the importance of recreation to the Scottish economy (as well as the indirect benefits recreation brings to our health and wellbeing, opportunities for physical activity and income for coastal communities). While the Scottish Marine Atlas only shows the economic contribution from a proportion of marine recreational activities, nevertheless these figures compare well with the income derived from the various fisheries around Scotland and reflect the need to give proportionate weight to the recreation sector in decision making processes. We would be pleased to see the Scottish Government undertake more research to gather data on marine recreation participation and its economic and environmental impacts and benefits where there are gaps in the data.

For recreation it is extremely important to recognise that there are communities of place and communities of interest which both need to be involved in planning consultations; that is both local communities and those who travel from across Scotland (or from further afield) to enjoy marine recreation activities in Scotland. The best way to gain their views is by involving national-level recreation organisations or sports governing bodies.

#### **Objectives:**

##### **Objective 1**

The NMP must explicitly acknowledge that because Scotland is a world-class and - in most cases, sustainable - tourism and marine recreation destination, we need to protect the environment to ensure that future development takes place sympathetically and in a sustainable way. Perhaps the following text from Living within Environmental Limits could be included as part of Objective 1.:“The quality of the recreational experience relies on having a healthy, safe and high quality environment, making it important to ensure these qualities are maintained and enhanced when considering the impact of developments and activities.”

##### **Objective 2**

We would welcome the inclusion of the phrase: ‘and [encourage] an appreciation of the marine environment’ into Objective 2.

##### **Objective 3**

The third objective should include the word sustainably, so that the second sentence reads '*Ensure continued and improved access to marine and coastal resources for leisure activities and recreational use. The improvement of existing facilities and development of new facilities, should be carried out sustainably...*'

#### **Objective 4**

We support this Objective.

#### **Objective 5**

We support this objective with the addition of the word 'sustainable' before 'long term planning'

#### **Suggested Objective:**

We suggest a further objective is crucial and recommend the inclusion of the following objective:

"To improve education and understanding of the marine environment for recreational users, including how to enjoy it responsibly in accordance with the Marine Wildlife Watching Code and the Scottish Outdoor Access Code"

### **PART 2: Key Issues for marine planning:**

#### ***Supporting economically productive activities***

In addition to reference 102, it would be beneficial to include reference to work on the value of Moray Firth bottlenose dolphins to the economy, (Davies *et al*, 2010)<sup>28</sup> Values are only placed on sailing and cruising activities. Values for other marine and coastal tourism sectors such as wildlife tourism also exist. They should be included (see Scotland's Marine Atlas) and LINK members would support further effort to gather such data.

**Wildlife watching:** LINK members believe that quality interpretation and education to ensure a responsible and sustainable industry is more important than "Access to harbour facilities/quaysides will be beneficial" and should be added.

**Personal watercraft:** Again, quality interpretation and education to ensure responsible and sustainable industry is important, Personal water craft can cause disturbance to marine wildlife where done without care or consideration. A positive statement about the potential for this activity to be enjoyed in a responsible, environmentally-sensitive and sustainable way should be included.

#### ***Living within environmental limits***

No solutions are offered in this section; only potential issues. Some commitment is required here to monitor, understand and mitigate any impacts of the recreation where these may occur.

**Disturbance/noise:** reference could be made here to raise awareness of the MCS Seashore code<sup>29</sup>

<sup>28</sup> The Value of Tourism Expenditure related to the East of Scotland Bottlenose Dolphin Population 2010 <http://www.morayfirthpartnership.org/assets/files/Microsoft%20Word%20%20The%20Value%20of%20Tourism%20Expenditure%20related%20to%20the%20East%20of%20Scotland%20.pdf>

**Litter:** this is a major omission from this section and needs to be added in. The latest Marine Conservation Society results<sup>30</sup> indicate that 40.4% of all beach litter recorded during the September 2012 Beachwatch Big Weekend was from the public. Concerted effort is needed to educate the public of the aesthetic, economic and environmental damage from marine litter.

**Recreation and Tourism Policies:**

**Recreation & Tourism 1**

This policy should include, in the fourth bullet point, a reference to recognised and effective mitigation measures, not simply recognised measures. Furthermore, the reference to achieving these mitigation measures at 'no significant cost' is not considered appropriate as this may lead to decisions that see development consented, without the need for the costly environmental mitigation that is necessary to avoid or minimise the impacts.

**Recreation & Tourism 2**

The word sustainable should be inserted before the second sentence, to read: 'proposals supporting sustainable tourism....'.

**Recreation & Tourism 3**

We welcome this policy. LINK members are aware of many cases of access to the shore being blocked by housing or golf developments along the shoreline, which can mean long detours for people informally accessing the coast.

**Recreation & Tourism 4**

This policy is weak and the word 'unacceptably' should be removed.

**PART 4: The Future**

We would strike a note of caution regarding artificial dive sites. Although we are not against artificial reefs in principle, provided that they are subject to strict Environmental Impact Assessments and appropriately sited, we would like to take the opportunity to make clear that the ecological enhancement case often put forward for artificial reefs is flawed. Such structures, if inappropriately sited, can impact upon ecologically more important although recreationally 'less interesting' habitat and also act as an aggregator of fish (a 'sink'), not a generator of fish (not a 'source'), making those fish easier to catch and theoretically less plentiful. Any case for artificial dive sites can only be made on socio-economic grounds and must be subject to EIA.

**Q27. Are there alternative planning policies that you think should be included in this Chapter?**

Comments

<sup>29</sup> [http://www.mcsuk.org/downloads/mcs/MCS\\_seashore\\_safari\\_guide.pdf](http://www.mcsuk.org/downloads/mcs/MCS_seashore_safari_guide.pdf)

<sup>30</sup> [http://www.mcsuk.org/what\\_we\\_do/Clean+seas+and+beaches/Campaigns+and+policy/Beachwatch+results+2012](http://www.mcsuk.org/what_we_do/Clean+seas+and+beaches/Campaigns+and+policy/Beachwatch+results+2012)

## **Transport (Shipping, Ports, Harbours & Ferries)**

### **Q28. Should the NMP specifically designate national significant ports/harbours as described in Chapter 13: Marine Planning Policy Transport 2?**

The NMP should concur with the designations identified in the National Planning Framework, particularly given ports and harbours fall mainly within terrestrial planning. This issue highlights the need for there to be better integration of terrestrial and marine planning that works in both directions.

### **Q29. Do you have any comments on Transport, Chapter 13?**

#### **Objectives**

This section contains no ecosystem objectives at all. It should consider inappropriate port, harbour and marina development, for example: 'To ensure that new sustainable port, harbour, marina and other transport infrastructure developments do not impact individually or cumulatively on vulnerable and important species and habitats. Where enhancement or restoration action is required, these should be ecologically appropriate.'

#### **Objectives 1 & 2**

The second and third objectives should include the word sustainable, so that sustainable growth and development are supported.

#### **Objective 4**

LINK members strongly support the objective 'to safeguard essential maritime transport links to island and remote mainland communities.'

#### **Objective 6**

This climate change mitigation and adaptation objective is supported.

### **PART 2: Key Issues for marine planning**

#### **Supporting economically productive activities**

**Renewable energy:** This section should include consideration of environmental sensitivities including designated sites and protected species, when identifying suitable port and harbour sites under NRIP.

#### ***Living within Environmental Limits***

Disturbance to mobile marine species including birds and marine mammals should be considered in this section. Potential significant impacts exist with regard increasing ship movements across Scotland's ports and harbours to support marine activities. Furthermore the potential cumulative impacts of this increased activity should also be a consideration for any proposal for port or harbour extension or alteration.

Dredging can also cause re-suspension and re-distribution of sediment which can have impacts on water quality and neighbouring habitats and the species that rely on them. This ought to be listed as an impact



**Transport Policies:**

**Transport 4**

The word sustainable should be included at the beginning of this policy.

**Transport 5**

Opportunities should be taken to encourage sustainable flood prevention through managed realignment and/or the environmentally appropriate enhancement of natural flood defences such as mudflats, salt marshes, kelp forests and biogenic 'living' reefs, before seeking hard engineering solutions that may have unacceptable environmental impacts.

**Q30. Are there alternative planning policies that you think should be included in this Chapter?**

A big gap here is the omission of reference to Marine Environment High Risk Areas (MEHRAs), which need to have their own Marine Planning Policy.

**Suggested Transport 9:**

**MEHRAs:** When planning future transport infrastructure, Marine Environment High Risk Areas (MEHRAs) should be re-assessed and any new recommendations arising applied.

**Telecommunication Cables**

**Q31. Do you have any comments on telecommunications, Chapter 14?**

**Objectives**

**Objective 2**

We support the objective to reduce risks to the marine environment. Any new telecommunications cables should avoid sensitive seabed features such as, but not limited to, coldwater coral reefs, coldwater coral gardens and deep sea sponge aggregations.

**Q32. Are there alternative planning policies that you think should be included in this Chapter?**

Comments

**Defence**

**Q33. Do you have any comments on Defence, Chapter 15?**

**PART 2: Key issues for marine planning**

***Living within environmental Limits***

Whilst the Ministry of Defence (MOD) is committed to the protection of the marine environment, in its long history of use of Scottish waters it has not conducted a full Strategic Environmental Assessment of its considerable and routine marine exercise activities. Given the range of potential impacts, individually and cumulatively, on a variety of species and habitats, there is a requirement for such assessment to be undertaken.

Articulation of the MOD environmental responsibilities should be made available and referenced.

**Q34. Are there alternative planning policies that you think should be include in this Chapter?**

Comments

**Aggregates**

**Q35. Do you have any comments on Aggregates, Chapter 16?**

Although aggregate extraction is not as big an activity in Scotland as for example the English Channel and other English waters, there needs to be reference to Ecosystem Objectives at the start of this chapter.

The policy section must state:

1. Ensure that existing and future licensed marine aggregate extraction sites are subject to all the necessary environmental safeguards, including that nationally and internationally important sites for coastal and marine species and habitats are protected
2. Ensure that sediment removal will not significantly adversely interfere with coastal processes and therefore not alter local rates of coastal erosion

We welcome the recognition that aggregate extraction activity can alter hydrodynamic and coastal processes and lead to the loss of seabed habitat and heritage assets. However, the chapter as a whole is very sparse compared to other chapters and further elaboration is needed in all Parts 1-4.

**Q36. Are there alternative planning policies that you think should be included in this Chapter?**

Comments

**Business and Regulatory**

**Q37. Please tell us about any potential economic or regulatory impacts, either positive or negative, that you think any or all of the proposals in this consultation may have.**

As noted in our general comments in response to Question 5, the marine environment provides a rich array of ecosystem goods and services – such as fish production, climate regulation, recreational enjoyment and so on, which collectively underpin our economic prosperity. Putting a value on these is an evolving discipline, but González-Álvarez 2012<sup>31</sup> estimated the benefits arising from a theoretical marine protected area network in Scotland to be £6.3 billion - £10 billion. Notwithstanding the theoretical nature of this value-transfer work, the report highlights that the value provided by marine ecosystem services throughout Scotland's seas is likely to be considerable but needs more accurate quantifying in order to measure status and thereafter trends (whether deteriorating or, with appropriate marine management as we would hope, enhancement). Furthermore, Kenter *et al.* (2013<sup>32</sup>) demonstrate the potential socio-economic value of marine biodiversity protection to divers and anglers. It is very important that these benefits are properly considered in the setting of objectives and policies in the NMP.

Conversely, the dangers of failing to protect and enhance these ecosystem benefits are material to the Business and Regulatory Impact Assessment (BRIA), as unsustainable development of the marine environment risks the loss of many of these fundamental ecosystems goods and services. The impacts of the loss of ecosystem goods and services has simply not been factored into the costs outlined in either Option 1 or Option 2 of the Business and Regulatory Impact Assessment of the draft NMP ('Do nothing' or 'Development and adoption of a Scottish National Marine Plan' respectively). As currently drafted, LINK members contend that the Option 2 ('Development and adoption of a Scottish National Marine Plan') risks many of the ecosystems goods and services upon which many businesses and communities rely and therefore should be explicitly acknowledged as a potential cost of the NMP. If the guidance, policy and objectives of the draft NMP is improved as per LINK members' recommendations, it would then be important to state the benefits flowing from Option 2 in the BRIA.

## Equality

**Q38. Do you believe that the creation of a Scottish National Marine Plan discriminates disproportionately between persons defined by age, disability, sexual orientation, gender, race and religion and belief?**

Yes  No

<sup>31</sup>González-Álvarez, J. (2012). Valuing the benefits of designating a network of Scottish MPAs in territorial and offshore waters. A report to Scottish Environment LINK. Institute of Natural Resources & Spatial Planning at the University of Oviedo, Spain.  
[http://www.scotlink.org/files/publication/LINKReports/Valuing\\_the\\_benefits\\_MPA\\_Network\\_Scotland\\_Report\\_\(final\).pdf](http://www.scotlink.org/files/publication/LINKReports/Valuing_the_benefits_MPA_Network_Scotland_Report_(final).pdf)

<sup>32</sup> Kenter, J.O., Bryce, R., Davies, A., Jobstvogt, N., Watson, V., Ranger, S., Solandt, J.L., Duncan, C., Christie, M., Crump, H., Irvine, K.N., Pinard, M., Reed, M.S. (2013). The value of potential marine protected areas in the UK to divers and sea anglers. UNEP-WCMC, Cambridge, UK. <http://uknea.unep-wcmc.org/LinkClick.aspx?fileticket=Mb8nUAphh%2BY%3D&tabid=82>

**Q39. If you answered yes to question 23 in what way do you believe that the creation of a Scottish National Marine Plan is discriminatory?**

Comments

**Sustainability Appraisal**

**Q40. Do have any views/comments on the Sustainability Appraisal carried out for the NMP?**

The general duties of the Marine (Scotland) Act 2010 require the achievement of sustainable development, including the protection and, where appropriate, enhancement of the health of that area. In this context the Sustainability Appraisal (SA) fails to adequately identify, acknowledge and, where necessary, address the enhancement element of this duty, when assessing the NMP. The SA must 'identify, describe and evaluate the likely significant effects on the environment of implementing the plan' (Section 14 (2)a of the Environmental Assessment (Scotland) Act 2005) and account for the significant effects of a plan or programme, which includes both positive and adverse effects. We recommend that the significant positive impacts of an effectively-implemented enhancement duty as set out in the draft NMP and addressed in the revised NMP are addressed in the SA/ SEA. In doing so, this would effectively provide adequate justification for the changes we have requested to GEN 12 and inclusion of additional policies as set out in answers to Question 8 of this consultation.

The methodology for undertaking the SA is clear in that three alternative approaches were assessed. The first ('do nothing') was rightly dismissed as a non-viable policy option. LINK also supports the second decision to develop a 'high-level strategic plan' instead of a 'high-level spatial plan,' noting that the latter would be best undertaken by Regional Marine Planning Partnerships. The next decision – whether the plan should be economy-, environment-, or sustainable development-focussed – is the most significant. LINK members support in principle the decision to develop a NMP that focuses on 'sustainable development,' but note that the SA states:

*The benefits of an environmentally focused plan are clearly reflected in the preferred option which largely recognises that sustainable economic development is also reliant on good environmental quality, but does not involve environmental controls which are unnecessarily restrictive to economic activity.*

We welcome the acknowledgement that the economy is reliant on good environmental quality, but have some reservations. The views of LINK members on sustainable development are covered in detail in our response to Question 5 of this consultation (in the section entitled 'Sustainable development or sustainable economic growth'). Unfortunately, the crucial concept of 'sustainable development' is confused once more by another contradictory reference in this Sustainability

Appraisal, in this case to 'sustainable economic development.' LINK members contend that the principle of 'sustainable development' (as properly-interpreted) is a prerequisite for the delivery of the NMP's objectives and an appropriate guide for sectoral policies. We therefore contest the decision to develop a NMP which focuses on 'sustainable economic development' and argue that this approach attempts to grow all sectors, but risks pleasing none by inadequately resolving conflict between the development aspirations for different sectors and failing to deliver positive environmental benefits that would be experienced by all sectors.

The positive ecosystem services benefits that could flow from the robust implementation of the Marine (Scotland) Act would in fact be threatened by any poorly-coordinated development flowing from the NMP as it is currently drafted. If the recommended amendments to the draft NMP outlined in this consultation response are not implemented, then LINK members would continue to have serious concerns about the future direction of the Scottish Government's commitment to the sustainable development of Scotland's inshore and offshore waters. In that regrettable scenario, LINK members would contend that the Sustainability Appraisal should then state the risk of significant adverse impacts to ecosystem services, caused by the inadequately-directed development of the marine environment. By the same token, LINK members contend that a fully assessed recognition of the benefits to be lost by unsustainable development would necessitate a revised approach to the NMP and this scenario would therefore not come to pass.

Furthermore, the SA does not consider the environmentally relevant requirements of the Marine Act that relate to the mitigation and adaptation to climate change. Particularly relevant is the wholesale contradiction of the objectives and policies set out within the Oil and Gas chapter, that support maximum recovery of oil and gas reserves in the North Sea and west of Scotland, which are set alongside the duties of the Marine Act and the requirements to reduce emissions as set out in the Climate Change (Scotland) Act 2009. Climate change is a major cause of environmental pressure as stated in Scotland's Marine Atlas and in this regard the absurdity of this contradiction is stark. We recommend this is addressed both within the NMP as stated above and in the SEA/SA.

As mentioned above, there has been no assessment to establish whether the specific, quantified targets to increase finfish production set out in the Aquaculture section would be within the carrying capacity of Scotland's marine environment and therefore should be removed from the NMP altogether.

LINK members firmly contend that it is not appropriate for growth targets to be included in a NMP document, until the findings of a project to identify areas of opportunity and constraint for both finfish and shellfish sectors has been concluded and for full SEA to be carried out on subsequent expansion plans.