

Planning Scotland's Seas: Sectoral Marine Plans for Offshore Wind, Wave and Tidal Energy in Scottish Waters

Analysis of Consultation Responses

**PLANNING SCOTLAND'S SEAS:
SECTORAL MARINE PLANS FOR OFFSHORE WIND,
WAVE AND TIDAL ENERGY IN SCOTTISH WATERS**

ANALYSIS OF CONSULTATION RESPONSES

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The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.

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1 EXECUTIVE SUMMARY

Background

- 1.1 In 2013, the Scottish Government consulted on a range of marine issues under the Planning Scotland's Seas consultations. Individual consultations looked at:
- A draft National Marine Plan;
 - Draft plan options for Offshore Renewable Energy;
 - Priority Marine Features;
 - Integration between Marine and Terrestrial Planning; and
 - Marine Protected Areas network.
- 1.2 This report presents the findings from the responses to the consultation 'Sectoral Marine Plans for Offshore Wind, Wave and Tidal Energy in Scottish Waters Consultation Draft', which outlined Scottish Ministers' proposed spatial policy at the national and regional level for the development of commercial scale offshore renewable energy in Scottish Waters. The draft Plans contained 10 proposed options for offshore wind energy, 10 for tidal energy and 8 for wave energy.
- 1.3 The Draft Plans Options were subject to Sustainability Appraisal, comprising Strategic Environmental Assessment (SEA), Habitats Regulations Appraisal (HRA) and Socio-economic Assessment and the outcomes of these informed the development of the draft. The assessments identified strategic issues relating to shipping, fishing, grid provision and environmental impact that apply in all offshore renewable energy regions around Scotland. There are also significant environmental and cultural issues in certain regions, such as the potential for visual impact and the effects this may have on tourism.
- 1.4 The Draft Plans, Sustainability Appraisal Report, SEA Environmental Report and Socio-economics Report were published for consultation in July 2013. The consultation response form comprised 18 questions under four key chapter headings relating to Plan Development, Draft Plan Options, Plan Implementation and Review and Strategic Environmental Assessment. Respondents were also invited to make any additional comments regarding the Plans or related assessments.

Overview of respondents

- 1.5 The consultation attracted 630 responses, 550 from individuals and 80 from organisations, made up of 187 'standard' consultation responses and 443 'campaign' responses. The terms 'standard' and 'campaign' are used throughout this report; 'standard' refers to responses that addressed some or all of the consultation questions using the respondent's own text and 'campaign' refers to responses where multiple respondents submitted a shared view using the same text.
- 1.6 The 443 campaign responses were submitted by 434 individuals and 9 organisations and all related to the South West region, predominantly opposing

the inclusion of the Inner Solway Firth site (OWSW2) as an area for wind-farm development:

- Three hundred and ninety-seven campaign respondents, 390 individuals and seven organisations, submitted a single standard text opposing the inclusion of the Inner Solway Firth site (OWSW2) as an area for wind-farm development. A vast majority of the individual respondents who included postcode information with this campaign text were responding from or 'care of' an address in the Dumfries and Galloway postcode area (282 individuals, representing 73% of the 385 that submitted the text and included their postcode with their response).
- A further 46 respondents, 44 individuals and two organisations, submitted the same text opposing the inclusion of the Inner Solway Firth site (OWSW2) as an area for wind-farm development as well as a second campaign text indicating they were not in favour of developing the Solway Firth at OWSW1/TSW1. Thirty-two of these individual respondents who included postcode information were responding from or 'care of' an address in the Dumfries and Galloway postcode area (representing 89% of the 36 that submitted the text and included their postcode with their response).

1.7 The 187 standard responses were submitted by 115 individuals and 72 organisations. Of these:

- 29 of the 187 submitted answers to an additional question circulated by Struan Stevenson MEP¹, alongside their own views. This question asked "Do you support the development of commercial scale offshore renewable energy at a national and regional level?" and requested a 'Yes' or 'No' answer as well as providing space for additional comments;
- 18 of the 187 included text from the campaign opposing the inclusion of the Inner Solway Firth site (OWSW2) as an area for wind-farm development, alongside their own views;
- Four of the 187 included the campaign text indicating they were not in favour of developing the Solway Firth at OWSW1/TSW, alongside their own views.

Overview of responses

1.8 At question 1 there were generally favourable comments regarding the information and process that was used in developing the Plans. Many more respondents indicated that they agreed than disagreed with the approach used to develop the Plans for Offshore Wind, Wave and Tidal Energy.

1.9 In addition, at question 7, more respondents believed than disputed that an appropriate balance between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts, had been achieved in the Draft Plans.

1.10 At question 2, there was fairly broad support that the Sustainability Appraisal

¹http://www.struanstevenson.com/media/news-release/have_your_say_on_the_scottish_governments_plans_for_offshore_wind_energy_in
The consultation is now closed and this link is no longer active.

Report (SAR) covered all the main social, economic and environmental effects at a high level or in summary form. Nevertheless, respondents recognised gaps in information that had been acknowledged in the SAR, as well as identifying additional issues that should be taken into account in preparing the Final Draft Plans.

- 1.11 The limitations of existing information and the need for ongoing research and monitoring resulted in many respondents finding it hard to take a clear view on mitigation measures identified in the SEA environmental report or on the impacts on sea users identified in the Socio-economics Report (questions 3 and 4).
- 1.12 The limitations of available information also resulted in many respondents finding it hard to comment with confidence on the scale and pace of development that could be sustainably accommodated in Scottish waters or the balance achieved in the Draft Plans (question 5).
- 1.13 A recurring theme was the continuing need for an iterative process as has already been adopted and for ongoing research and monitoring to contribute to regular updates and reviews (question 6).
- 1.14 At questions 8-10, comments relating to individual Draft Plan options were very specific, although a small number of relatively common themes emerged.
 - There were concerns expressed relating to a number of Draft Plan options regarding potential overlap between developments and existing or potential MPAs or other conservation sites.
 - There were concerns expressed relating to several Draft Plan options about potential impacts on navigational routes, commercial and recreational.
 - There were also concerns relating to several Draft Plan options regarding potential impact on migration routes, most commonly for salmon.
- 1.15 In addition to the high volume of campaign responses asking for OWSW2 to be removed from the Plan, 19 standard responses specifically stated at question 11 that one or more Draft Plan options should be removed from the Draft Plans. The main theme from those who commented in standard responses was that caution should be taken, particularly pending further evaluations, research and monitoring.
- 1.16 There were mixed opinions at question 12 on the optimum frequency of reviewing the Plans once implemented, although more respondents suggested a two yearly review cycle than any other pre-determined frequency.
- 1.17 Some respondents identified a need for flexibility in the frequency of review and emphasised the importance of reviewing the Plans as new research or information became available.
- 1.18 A key theme relating to the composition of the Plans Review Steering Group was that a mix of stakeholders should be included.
- 1.19 At questions 13 and 14, there was praise for the comprehensive nature of the

Environmental Report and more respondents expressed broad agreement with the predicted environmental effects than expressed disagreement.

1.20 At question 15, a key theme, once again, relating to the recommendations and proposals for mitigation of environmental effects was that more research and monitoring is required.

1.21 At questions 16 and 17, respondents suggested a number of additional information sources that they felt might be helpful.

2 INTRODUCTION

Background

- 2.1 In 2013, the Scottish Government consulted on a range of marine issues under the Planning Scotland's Seas consultations. Individual consultations looked at:
- A draft National Marine Plan;
 - Draft plan options for Offshore Renewable Energy;
 - Priority Marine Features;
 - Integration between Marine and Terrestrial Planning; and
 - Marine Protected Areas network.
- 2.2 This report focuses on the consultation paper 'Sectoral Marine Plans for Offshore Wind, Wave and Tidal Energy in Scottish Waters Consultation Draft', which was published on 25th July 2013. It outlined Scottish Ministers' proposed spatial policy at the national and regional level for the development of commercial scale offshore renewable energy in Scottish Waters. The draft Plans contained ten proposed options for offshore wind energy, ten for tidal energy and eight for wave energy.
- 2.3 The Draft Plans Options were subject to Sustainability Appraisal, comprising Strategic Environmental Assessment (SEA), Habitats Regulations Appraisal (HRA) and Socio-economic Assessment, and the outcomes of this informed the development of the draft. The assessments identified both strategic issues that applied in all offshore renewable energy regions around Scotland and issues specific only to certain regions.
- 2.4 The Draft Plans, Sustainability Appraisal Report, SEA Environmental Report and Socio-economics Report were published for consultation in July 2013 and responses were requested by 13th November 2013. The consultation response form comprised 18 questions under four key chapter headings relating to Plan Development, Draft Plan Options, Plan Implementation and Review and Strategic Environmental Assessment. Respondents were also invited to make any additional comments regarding the Plans or related assessments.
- 2.5 In addition to the invitation to respond to this consultation, interested parties also had the opportunity to participate through associated events. Reports from events are provided on the Scottish Government website.

Overview of responses

- 2.6 Responses were submitted by email or in hard copy. The consultation attracted 630 responses, 550 from individuals and 80 from organisations, made up of 187 standard consultation responses and 443 campaign responses.
- 2.7 The 187 standard responses, 115 from individuals and 72 from organisations, addressed some or all the consultation questions and submitted their own comments in addition to any campaign text they might have included. With the exception of Chapter 4, the remainder of this report focuses on analysis of these 187 standard responses.

2.8 For analysis purposes, responses from the 72 organisations were assigned to sub-groups. This enabled analysis of whether differences, or commonalities, appeared across the various different types of organisations that responded. The following table shows the numbers of responses in each group.

Table 2.1 Organisations (Base: 72)

	Number
Local Authorities	12
Local Groups	11
Fisheries	10
Energy	9
Public Sector	9
Recreation/Tourism	7
Environment/Conservation	6
Historic/Heritage	2
Industry/Transport	2
Academic/Scientific	1
Aquaculture	1
Other	2

2.9 The standard responses from 115 individuals were analysed by postcode area where this information was provided. There were some particular concentrations of responses; 35 individual responses were submitted from or 'care of' addresses in the Dumfries and Galloway postcode area, 14 from or 'care of' addresses in the PA (Paisley) postcode area, which includes Islay and Mull, and 7 from the KA (Kilmarnock) postcode area.

2.10 The 443 campaign responses, 434 from individuals and nine from organisations, were also analysed by grouping and postcode area.

2.11 Three hundred and ninety-seven respondents submitted a single campaign text opposing the inclusion of the Inner Solway Firth site (OWSW2) as an area for wind-farm development. These respondents comprised 390 individuals, three local groups, two tourism / recreation organisations and two other organisations. A vast majority (282) of the individual respondents who included postcode information with this campaign text were responding from or 'care of' an address in the Dumfries and Galloway postcode area.

2.12 Forty-six respondents submitted a campaign text opposing the inclusion of the Inner Solway Firth site (OWSW2) as an area for wind-farm development as well as a second campaign text indicating they were not in favour of developing the Solway Firth at OWSW1/TSW1. These respondents comprised 44 individuals and two tourism / recreation organisations. Thirty-two of the individual respondents who included postcode information with these campaign texts were responding from or 'care of' an address in the Dumfries and Galloway postcode area.

2.13 A list of all those organisations who submitted a response to the consultation is included in Appendix 1.

Analysis and reporting

- 2.14 Comments given at each open question were examined and main themes, similar issues raised or comments made in a number of responses, were identified. In addition, sub-themes were identified, such as reasons for opinions, specific examples or explanations, alternative suggestions or other related comments. A copy of all the consultation questions is appended to this report and each question is reproduced and highlighted in the relevant section of this report.
- 2.15 Two questions contained yes/no tick box options to allow respondents to indicate whether or not they agreed with a particular point. Results from these tick box questions are presented in table format at each relevant question. Wherever relevant, an additional column has been added to show where respondents agreed but added qualifications to their response ('Yes Qualified' or 'No Qualified'). The 'Other' column is used to show any respondents who commented on an issue but did not give a definitive agree or disagree. Respondents counted in the 'No Response' column did not address the question. This protocol is followed for all tables throughout this report.
- 2.16 Where respondents did not use the questionnaire format for their response but indicated within their text that they agreed or disagreed with a point, these have been included in the yes/no counts.
- 2.17 The main themes were looked at in relation to respondent groups to ascertain whether any particular theme was specific to one particular group, or whether it appeared in responses across groups.
- 2.18 While the consultation gave all those who wished to comment an opportunity to do so, given the self-selecting nature of this type of exercise, any figures quoted here cannot be extrapolated to a wider population outwith the respondent sample.
- 2.19 The following chapters document the substance of the analysis and present the main views expressed in responses. These chapters follow the ordering of the sections in the consultation document.
- 2.20 Opinions and comments are sometimes attributed to named respondent organisations who gave permission for their responses to be made public, to provide extra detail for some specific points.

3 PLAN DEVELOPMENT

3.1 This section of the report focuses on the first seven questions included in the consultation questionnaire. These questions aim to explore the information and process used in developing the Plans and the Draft Plan Options. The responses to each of the questions are explored in turn.

In summary:

- Many more respondents explicitly agreed (35) than disagreed (9) with the approach used to develop the Plans.
- There was fairly broad support that the Sustainability Appraisal Report (SAR) covers all main social, economic and environmental effects at a high level or in summary form. Nevertheless, respondents recognised gaps in information already acknowledged in the SAR as well as identifying additional issues that should be taken into account in preparing the Final Draft Plans.
- The limitations of existing information and the need for ongoing research and monitoring resulted in many respondents finding it hard to take a clear view on mitigation measures identified in the SEA environmental report or on the impacts on sea users identified in the Socio-economics Report.
- The limitations of available information also resulted in many respondents finding it hard to comment with confidence on the scale and pace of development that could be sustainably accommodated in Scottish Waters or the balance achieved in the Draft Plans.
- A recurring theme was the need for a continuation of the iterative process and for ongoing research and monitoring to contribute to regular updates and reviews.
- Slightly more respondents agreed (18) than disagreed (11) that an appropriate balance, between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts had been achieved in the Draft Plans.

Question 1: Do you agree with the approach (outlined in Section 3 of the Sectoral Marine Plans) used to develop the Plans?

3.2 As the table overleaf shows, many more respondents explicitly agreed (35) than disagreed (8) with the approach used to develop the Plans. Only small numbers of individual respondents and some respondents in the fisheries grouping expressed explicit disagreement; opinions were divided within both these respondent groupings.

Table 3.1 Proportions of those answering the question that agree with the approach (outlined in Section 3 of the Sectoral Marine Plans) used to develop the Plans

Respondent group	Yes	Yes Qualified	No	Other
Individuals (9*)	4 (44%)	-	5 (56%)	1 (11%)
Local Authorities (9)	8 (89%)	-	-	1 (11%)
Fisheries (6)	3 (50%)	-	3 (50%)	-
Energy (5)	5 (100%)	-	-	-
Local Groups (2)	2 (100%)	-	-	-
Public Sector (6)	3 (50%)	1 (17%)	-	2 (33%)
Recreation/Tourism (3)	3 (100%)	-	-	-
Environment/Conservation (4)	4 (100%)	-	-	-
Historic/Heritage (1)	1 (100%)	-	-	-
Academic/Scientific (1)	1 (100%)	-	-	-
Aquaculture (1)	1 (100%)	-	-	-
Other (1)	-	1 (100%)	-	-
Total responding to question (48)	35 (73%)	2 (4%)	8 (17%)	4 (4%)

*An individual answered both yes and no; individuals' responses therefore add to 10 (111%)

- 3.3 Thirty-seven of the 48 respondents who responded to this question provided comments. Many of these, most notably those who had answered 'yes', reiterated their general or broad agreement with the approach used.
- 3.4 Specific areas of praise, each noted by only one or two respondents and collectively identified by a variety of respondent groupings, related to:
- The provision for those being consulted to be properly informed at each stage;
 - The consistency of approach;
 - The use of a regionalised approach that allows for customisation;
 - The overall systematic approach and in particular the systematic approach to developing the Draft Plan Options;
 - The aim of directing commercial development to low areas of constraint;
 - The use of a sustainable approach;
 - The quality of the process chart;
 - The sound nature of the SAR;
 - The fairness and transparency of approach.
- 3.5 The next most common theme, predominantly from those who disagreed with the approach and within that subset from fisheries organisations specifically, related to belief that development of offshore installations is being given preference over existing fishing activity. In addition, the Scottish Fishermen's Federation and other fisheries organisations questioned the extent to which the content of the Marine Policy Statement (MPS) had been observed.
- 3.6 Individual respondents who did not agree with the approach variously commented that the (National) Marine Plan must be agreed before the allocation of sites and that insufficient research had been undertaken in specific aspects of tide activity.

- 3.7 Orkney Islands Council commented that Section 3 of the Sectoral Marine Plans should make clear the relationship between the Sectoral Plans and the National Marine Plan (NMP) and ‘particularly, that the NMP Policy Renewables 1 states a presumption in favour of adopted Plan Options identified through the sectoral planning process’.
- 3.8 There were no other recurring themes regarding the approach to development of the Plans, although a variety of comments was each made by one or two respondents from across groupings. Some of these related to lack of available information, data or knowledge to inform the Plans and a need to address this in the future:
- RYA Scotland commented that whilst they felt the approach used to develop the Plans was good, they felt it disappointing that small and demonstrator schemes that might be sited close to the Areas of Search were not included;
 - The Association of Salmon Fishery Boards commented on a lack of existing knowledge of marine migration routes of Atlantic salmon and the marine feeding areas for sea trout;
 - Galloway Fisheries Trust also commented that lack of knowledge on migration routes and feeding grounds for certain species meant that the planned approach does not cover all environmental and biodiversity aspects in the Strategic Environmental Assessment.
- 3.9 Dumfries and Galloway Council commented more broadly that there was inadequate explanation as to how the proposals had been reached or to enable comparison of the relative Draft Plan Options.
- 3.10 EDPR UK felt that an explanation should be given as to why areas of search had been removed from the draft regional plan or why boundaries had been changed.
- 3.11 The Crown Estate and Highland Council commented on the volume of material spread across different documents and suggested that greater cross-referencing would be helpful.
- 3.12 Scottish Enterprise and the Crown Estate commented on the need for clarification of timings and a variety of other issues going forward. For example, further refinement of areas in order to reduce uncertainty for users of the sea. SEPA questioned how the Plans will fit with other sectors when it comes to spatial planning decisions.
- 3.13 Other comments included;
- A view that pre-statutory consultation could have been more directed to involve local stakeholder groups;
 - A question from an individual respondent regarding the skills and experience of local authorities to deal with the planning process and objectors;
 - A local authority requested improvements to the layout and readability of the Draft Plans.
 - A concern from another individual respondent regarding lack of explicit detail

and discussion around safety, related to installation and operation as well as all others users of the environment concerned.

Question 2: Do you have any views on the findings of the Sustainability Appraisal Report? Do you think that all the social, economic and environmental effects (positive and negative) have been identified? Are there other issues that should be taken into account in the preparation of the Final Draft Plans?

- 3.14 Forty respondents, six individuals and 34 organisations, commented at this question.
- 3.15 More than a third of the organisations that commented noted broad support for the issues covered and information provided in the SAR, albeit some of these respondents also commented that this was at a high level or provided only summary information. A few respondents included comments of appreciation that issues relating to their sphere of interest had been taken into account, including:
- The Institute for Archaeologists welcomed recognition of the need to identify effects on archaeological remains;
 - The National Trust for Scotland was appreciative that the importance of seascape and landscape and visual impacts on the setting of historic assets had been considered.
- 3.16 Association of Salmon Fishery Boards (ASFB) commented that they had contributed to the steering group for the process and that their views had been taken into account.

New or Emerging Data

- 3.17 A small number of respondents noted that the SAR acknowledged that there are gaps in evidence. The Joint Nature Conservation Committee (JNCC) acknowledged that there were proposed projects and monitoring to fill those gaps and supported this, whilst others commented on the need for clarity regarding removal or refinement of draft plan options on the basis of emerging information.
- 3.18 An academic / scientific respondent commented that some data for Shetland is incomplete or inaccurate, for example relating to sea kayaking. They added that available local data relating to Shetland and provided to Marine Scotland had not been included in the Plans [sic] and that this affected the quality of conclusions drawn from the assessment and site selection.
- 3.19 The Crown Estate commented they would support the refinement or removal of any draft plan options that may not be suitable for development in the light of new information that might emerge from the consultation, as opposed to new information simply being made available to inform project level assessment.

Onshore Impacts

- 3.20 Whilst a disparate range of social, economic and environmental effects was identified as requiring further attention and consideration in preparation of the Final Draft Plans, a number of these related to onshore impacts.
- 3.21 National Trust for Scotland and Argyll and Bute Council commented specifically on the need to consider the grid infrastructure and its possible effects on the landscape and communities. Respondents noted that it would have been preferable for the grid proposals to have been incorporated into the current Draft Plans.
- 3.22 National Trust for Scotland also commented that whilst the assessment had taken into account most environmental effects they would welcome stronger recommendations for Seascape, Landscape and Visual Impact Assessment to be included as part of the EIA at the project stage.
- 3.23 Pentland Firth Yachting Club felt that impacts on local facilities and infrastructure were not fully taken into account. As an example they cited displacement of recreational users from harbours. An individual respondent felt the SAR did not take into account of the cumulative impact of offshore and onshore windfarms on either residents or the tourism sector, particularly in the South West.

Impacts of Displacement

- 3.24 Several respondents raised concerns regarding lack of detailed attention to the impacts of displacement, most notably displacement of commercial fishing. Their comments related to potential social, economic and environmental effects.
- Orkney Fisheries Association commented on the need for more research into the social and economic impacts on local areas, and particularly on island groups, resulting from displacement of commercial fishing activity.
 - Orkney Islands Council also commented that the Sustainability Appraisal focusses at a high level on regional effects and that greater focus and attention to each development zone would be helpful.
 - National Trust for Scotland highlighted potential displacement of fishing activity into areas designated for conservation or historic environment sites.
 - Scottish Fishermen's Federation questioned many assumptions made regarding the impacts of displacement.

Environmental Conservation

- 3.25 A variety of concerns were each identified by only one or two respondents in relation to particular species. The National Trust for Scotland commented that they would welcome greater attention to the indirect effects of developments, for example where prey species are impacted, acknowledgement of the impacts on the species that rely on the prey species.

- 3.26 A lack of data on the location of spawning grounds for pelagic species was cited as an environmental concern as well as an economic concern.
- 3.27 Shetland Islands Council commented that it was an over-simplification to state that avoidance of tidal devices is a likely response to their presence by mobile marine fauna; the respondent would welcome greater attention to the topic.
- 3.28 Whale and Dolphin Conservation commented on concerns that the SAR had not recognised potential for injuries as a result of pile driving, the use of acoustic deterrent advices and 'corkscrew injuries' from ducted propellers. The respondent commented that 'corkscrew injuries' are a serious collision risk for Scotland's harbour seal population and also commented that noise associated with construction is likely to be a consideration, notably in the North East.
- 3.29 The Scottish Geodiversity Forum expressed concerns that the SAR and SEA do not fully recognise the importance of seabed geodiversity features. This respondent put forward specific suggestions as follows:
- That in in areas of the SAR, the term Marine Geodiversity should replace Marine Geology;
 - That where the effects on coastal geodiversity are considered this should be extended to recognise the sensitivity of the 35 key marine geodiversity areas of the seabed, as well as coastal geological SSSI and Geological Conservation Review sites.
- 3.30 RSPB Scotland and Scottish Environment LINK both highlighted potential for indirect effects of Plan Option development on protected mobile marine species.

Fisheries and the Fisheries Supply Chain

- 3.31 Scottish Fishermen's Federation indicated that they 'would not quibble that the likely effects of renewables installations on fishing have been identified', whilst Orkney Fisheries Association questioned the validity of the SAR because it was informed by the Socio-economics assessment which they perceived to have significant gaps.
- 3.32 The Crown Estate noted that the Socio-economics assessment suggests that estimates of the costs to the fishing industry may be overstated and reported their view that the assessment is based on a worst-case scenario, whilst Aberdeenshire Council noted the potential impacts of any loss in income for fishermen on the fisheries supply chain.

Other Issues

- 3.33 Aquamarine Power detailed a number of concerns regarding lack of consideration for the requirements of all Oscillating Wave Surge Converter (OWSC) technology types and the associated benefits of certain technology types. Further comment from this respondent suggested that the Areas of Search for wave energy development do not include enough near shore locations and disagreement that there is a need for a 10km buffer of

development from surfing beaches. The respondent also cited a lack of scientific evidence and transparency regarding predicted effects in the SEA.

3.34 Shetland Island Council commented on a number of possible omissions or errors in the SAR, including:

- Text indicating an overlap between Plan Option OWN2 and the Pobie Bank cSAC, which the respondent felt was not borne out by available maps;
- Lack of consideration of the potential downstream impacts of other marine developments on wave devices;
- Lack of cost benefit analysis considering the potential carbon footprint in developing and installing new technologies and the offset in terms of their energy production efficiency;
- Insufficient consideration of landscape and seascape impacts of wave developments;
- Interactions with a proposed MPA designation for sand-eels and Mousa to Boddam pMPA, TN5, and possibly WN3;
- Reference to the proximity of TN7 to the northern boundary of the Fetlar to Haroldswick pMPA, which has black guillemot as a feature of interest;
- Incorrect labelling of tables, for example Tables 5.7 and 5.9 describe data for the North region but have West in the title;
- Lack of clarity as to whether the PV costs for commercial fisheries in the North region have included pelagic fishing to the north of Unst and south of Sumburgh.

3.35 Highland Council suggested that greater attention should have been given to opportunities for synergy and impacts upon aquaculture, harbours' capacity and associated marine supply chain issues.

3.36 Galloway Fisheries Trust noted that potential impacts on fish migration routes should be assessed in addition to the list of potential effects already noted.

3.37 RYA Scotland commented that potential costs associated with possible collisions with types of wave and tidal devices have not been included.

3.38 A local group (Banff and Macduff Community Council) commented that the SAR does not include reference to the sustainability of the economics of developments that were in the last Sectoral Plans (Regional Guidance) and are no longer included, nor the effects on the local communities involved.

3.39 Marine Spatial Planning Section, NAFC Marine Centre identified local data sets that had not been included in the assessment, notably for Shetland.

3.40 Sportscotland commented that the SAR did not give sufficiently detailed consideration to impacts on recreation and that there appeared to be uncertainty as to impacts on the recreation sector or that impacts were only considered to be relevant at a project level and therefore not assessed as part of the SAR.

3.41 RSPB Scotland and Scottish Environment LINK commented similarly on omissions that they recommended should be included in the final report:

- Incorporation of all Saltire Prize Identified Areas on maps;
- Representation of terrestrial conservation features in the SEA;
- Omission in the environmental assessment of the future deepwater test and demonstration offshore wind sites for which a new leasing round is progressing.

3.42 Seagreen expressed some concerns about lack of consistency in terminology between the SAR and other documents. For example, the respondent questioned how an 'activity' listed in the Sustainability Appraisal relates to 'issues' in the Draft Sectoral Plan.

3.43 Other comments, primarily from individual respondents, included:

- That the social and economic measures only deal with employment and that this does not fully encompass 'value', both material and in terms of well-being;
- An assumption that decommissioning of the sites would be covered in the process before development of the Final Draft Plans;
- Concerns about impacts on Orkney due to perceived confusing and contradictory references within the SAR, in particular with regard to adverse effects on the integrity of the area. The respondent commented that no reference was made to adverse impacts on people's psychological wellbeing and felt that some conclusions regarding economic and social impacts were arguable;
- A query regarding the suggestion of findings that there is 'no fishing industry of consequence in the South West', citing a Lobster, crab, whelk and scallop fishery in the area;
- A variety of specific comments from an individual respondent relating to the ways in which safety issues had been treated.

3.44 The Community Energy Foundation commented on potential to apply a community benefit model that may be used in relation to onshore wind farms in order to ensure communities affected by offshore wind farms take a degree of ownership in order to support the communities and help mitigate any negative economic effects.

Question 3: The SEA has identified a range of potential effects from the Draft Plans. Measures for the mitigation of these effects have been identified in the SEA environmental report. Do you have any views on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

3.45 Thirty-eight respondents, four individuals and 34 organisations, commented on this question.

3.46 The main theme to emerge from these comments related to the recognised shortfall in available data and research that might enable respondents to comment more knowledgeably or in any detail on mitigation measures or their likely effectiveness.

- 3.47 Many of the respondents who made comment, including a range of organisations as well as individuals, noted that project level assessment and site specific monitoring will be essential to identification of effects, mitigation and mitigation effectiveness. However, Pentland Firth Yachting Association commented that the focus appeared to be on measuring effects rather than avoidance measures.
- 3.48 Some respondents expressed a view that it is appropriate for mitigation measures to be project specific and that only broad good practice and design measures were appropriate at this stage. Others noted that they would welcome a more detailed assessment of broad or cumulative impacts. Whale and Dolphin Conservation commented that close links are needed between the SEA recommendations and project level EIAs and resulting consent conditions.
- 3.49 Several fisheries respondents expressed disagreement that mitigation is a matter for project level design and commented that the SEA made little mention of fishing. This in turn led to a comment that mitigation measures have not been adequately identified or addressed that would make good losses that would be sustained by the fishing industry.
- 3.50 The Institute for Archaeologists commented that they welcomed attention to both designated and non-designated heritage assets and to potential direct effects on submerged archaeology during construction.
- 3.51 National Trust for Scotland commented that any areas of particular sensitivity, including Natura 2000 sites, pMPA sites, historic MPAs, designated National Scenic Areas (NSA) and World Heritage Sites, should be excluded from any draft Plan Options. Marine Spatial Planning Section, NAFC Marine Centre also expressed surprise at proposed search locations close to Natura 2000 sites.
- 3.52 Three environment / conservation organisations cited possible MPAs or MPA search locations as areas to be avoided for overlap with draft Plan Options.
- 3.53 Dumfries and Galloway Council commented on inadequate attention to general landscape considerations outwith designated areas and potential consequential impact on tourism.
- 3.54 Other specific and detailed comments included:
- The need for consideration to floating tidal devices in tables relating to Population and Human Health;
 - The need for further consideration to potential effects on seabed geodiversity;
 - The need to incorporate proposals to mitigate impacts on commercial fishing in the North region;
 - Concern that exclusion zones for wave and tidal schemes are not an effective mitigation measure due to potential difficulties in recreational sailors avoiding them;
 - Concern that some suggested mitigation measures, such as avoiding certain work in key seasons, might make development commercially unviable;
 - The need to avoid situations where the Crown Estate enters into an Agreement of Lease with a developer and a site is then removed or a boundary changed

during plan reviews.

Question 4: The Socio-economics Report has identified a range of potential impacts on existing sea users. Do you have any views on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

3.55 Thirty respondents, two individuals and 28 organisations, commented on this question.

3.56 The major theme that emerged from responses related to insufficient detail or data relating to impacts on fishing.

Fishing

3.57 The Scottish Fishermen's Federation, as well as other respondents in the fisheries sector that are its members, made detailed observations including:

- The assessment did not take account of areas released or subject to agreement to release, meaning that the total impact on fishing is not shown;
- The assessment did not identify thresholds at which synergistic impacts might result in activity becoming uneconomic and potentially lost;
- A calculation, based in part on information in the assessment that suggests a potential loss of around £65 million turnover to the fishing sector;
- In relation to displacement effects, a failure to factor for the need for quota acquisition for species not traditionally fished by a displaced vessel;
- Concern about lack of precision in estimates as well as absence of what is perceived as ineffective mitigation in some areas.

3.58 Clyde Fishermen's Association voiced concerns about poor quantification of impacts and potential for complete displacement for some fishermen with further impacts onshore where their businesses would be based.

3.59 Orkney Fisheries Association commented that the tools for measurement of impacts have limitations and that they would encourage the use of qualitative assessments of impacts alongside quantitative socio-economic assessments.

3.60 Comhairle nan Eilean Siar commented that static gear fishing, seaweed cultivation, mussel cultivation and similar activities should be encouraged in exclusion zones for trawling to mitigate any loss of traditional fishing area and to provide a renewable resource for onshore ethanol or heat producing anaerobic digestion projects.

3.61 Orkney Islands Council noted that the assessment of impact on commercial fisheries concludes that impacts mainly accrue to the pelagic trawlers, demersal whitefish trawlers and potters and suggested that further work will be required to understand better the impact of the development zones on inshore fisheries. The respondent noted that the impact of these developments on the fuel costs for the inshore fisheries fleet, as well as catches, should be considered.

3.62 Argyll and Bute Council cited the importance of determining cumulative issues in relation to fishing, amongst a range of other sectors.

Other Issues

3.63 Some local authorities and fisheries respondents noted the importance of further ongoing consultation with stakeholders from Marine Scotland and developers.

3.64 Argyll and Bute Council and Orkney Islands Council commented specifically on their own interest in further discussions with Marine Scotland, on a range of issues related to both assessment of impacts and the planning of future development requirements. Ports and harbours work requirements were specifically mentioned as economic aspects that should be taken into account.

3.65 Marine Spatial Planning Section, NAFC Marine Centre commented that there was insufficient consideration to impacts on local communities. The respondent disagreed with a conclusion that there will be no impact on culture and heritage.

3.66 RYA Scotland commented that there is uncertainty about impact on visitors and recreational sailors, particularly in response to a series of wind farms rather than simply individual schemes. Pentland Firth Yachting Association commented that loss of amenities and seascape beauty could have direct and indirect socio-economic impacts that were not being treated sufficiently seriously.

3.67 The Institute for Archaeologists commented that insufficient attention was given in the report to economic impacts on the marine historic environment.

3.68 The British Sub Aqua Club highlighted the need to consider possible impacts on drift diving, albeit the respondent agreed that the plans are unlikely to have significant impacts on scuba diving.

3.69 A small number of respondents provided comments relating to the perceived accuracy of detailed, individual items of data throughout the socio-economic report. There was also comment on the complexity of the information for lay readers.

3.70 A local group, Banff and Macduff Community Council, noted that the Socio-economics Report did not address the lost potential of developments that were in the last Sectoral Plans (Regional Guidance) issued but no longer included.

Question 5: Taking into account the findings from the technical assessments, do you have views on the scale and pace of development that could be sustainably accommodated in Scottish Waters?

3.71 Thirty-two respondents, four individuals and 28 organisations, commented on this question.

3.72 A key theme identified related to difficulty in taking a firm view on the potential scale and pace of development until further information becomes available.

Need for Further Research and Information

3.73 Many respondents, including public sector, local authorities, fisheries, environment / conservation organisations and academic / scientific respondents, commented that gaps in information and assessments made it difficult to gauge the potential scale and / or speed of development that could take place.

3.74 For some, this led to comments that a relatively cautious, evolving approach to development would be needed, with careful management and controls. For example, JNCC suggested a precautionary approach that would allow for more and better evidence to be gathered and analysed.

3.75 A fisheries respondent, Clyde Fishermen's Association, expressed concerns that a rushed pace is being adopted, without proper evaluation taking place.

3.76 Specific areas cited by respondents where they perceive further information and analysis may be required, included:

- Effects on the marine nature conservation resource;
- Cumulative impacts;
- Research on fish migration routes, feeding areas and spawning grounds;
- Assessment of marine tourism and recreation.

Practical Constraints

3.77 A small number of respondents cited practical constraints to the scale and pace of development, primarily in relation to grid infrastructure and onshore infrastructure to support operations.

Other Views

3.78 An individual respondent and a tourism/ recreation organisation, Drummole Harbour Trust Ltd, commented that the pace was not quick enough. Another tourism / recreation organisation commented on the importance of the pace allowing for consultation and giving adequate time for responses to be considered and prepared, taking account of their limited resources.

3.79 The Association of Salmon Fishery Boards commented that their views on development beyond the existing plan areas would be subject to the delivery of the national strategy into strategic research for offshore marine renewables and anadromous fish.

3.80 Some respondents commented that ambitions might be over optimistic.

Question 6: Are there aspects of the Draft Plans that you believe should be improved? Are there any aspects you believe should be taken forward differently?

Please explain any reasons for your answer and provide details of any suggested improvements:

3.81 Twenty-seven respondents, four individuals and 23 organisations, commented at this question. Many of those who provided comment referred back to or reiterated the views they had expressed at earlier questions.

Environmental Considerations

3.82 Several respondents, including public sector and environment/ conservation organisations, commented again on the environmental assessment approach and the limited environmental sensitivities information. Three environment/ conservation organisations (Scottish Environment Link, Whale and Dolphin Conservation and RSPB Scotland) summarised their key suggested improvements as follows:

- More clarity in assessment of Impact Risks;
- More transparency in how uncertainties are dealt with in the risk based approach;
- An SEA Objective should include both pillars of the EU Habitats Directive;
- Putting the mechanisms in place to enable strategic analysis of data collected by individual developers;
- Ensure that data is made available in a timely fashion;
- Allowing development at a pace that ensures that the key data gaps can be answered, including through field data and completion of ORJIP projects;
- Proposed MPAs and Search Locations should be avoided, as well as designated sites;
- Overlap with proposed MPAs and Search Locations should be minimised, as well as with designated sites or other sensitive habitats, species and ecosystem functions;
- Ensuring that high level mitigation measures are carried through to the project level, including enforcement;
- Improving our understanding of cumulative impacts;
- Separating out marine mammal baseline data so it more accurately reflects distribution and status, especially for harbour seals; and,
- Better representation of marine mammal data in maps.

3.83 National Trust for Scotland also commented that the impacts of overlap of developments with MPAs need to be understood before such developments are progressed. The respondent also requested more consideration of:

- Cetacean distribution and potential impacts;
- Acceleration of designations for offshore SPAs;
- Adoption of the Precautionary Principle in dealing with risks to designated features and priority marine features.

3.84 Another environment / conservation respondent, Scottish Geodiversity Forum, recommended that the sensitivity of the 35 key marine geodiversity areas should be recognised.

Other Issues

3.85 Scottish Enterprise suggested that a clear explanation of the relationship between Sectoral Marine Plans and the legislative and policy context should be included early in the document, to ensure understanding of the relative status of various documents. SEPA also commented that an explanation of the make-up, role and responsibilities of the proposed Sectoral Plans Review Group would be helpful, particularly in relation to the interaction between Scottish Marine Regions, the regional plans, specific marine planning policies for any possible Strategic Sea Areas and the National Marine Plan.

3.86 Argyll and Bute Council and the Highlands Council both suggested greater attention to grid issues and considerations. In addition, the National Grid suggested it would be useful to provide an indication of the energy capacity (MW) which could be provided in each area and felt this information would support the planning of related grid connections.

3.87 An academic/ scientific organisation, Marine Spatial Planning Section, NAFC Marine Centre, recommended that additional data sets should be incorporated into the plans to ensure accurate modelling.

3.88 A fisheries organisation, Scottish White Fish Producers Association, commented that more attention is needed to establishing effects on inshore fishing.

3.89 In terms of taking things forward, the Scottish Salmon Producers Organisation commented that the preparation of the Final Draft Plans should take into account the salmon farming industries' plans to grow production, primarily on the north west coast and around Orkney, Shetland and the Outer Hebrides, as well as the importance of this industry to the Scottish economy, and the economies of those areas.

3.90 Aquamarine Power suggested greater consideration be given to benefits and opportunities associated with the development of Oyster technology.

3.91 No Tiree Array suggested that there should be more consultation with impacted communities.

3.92 Individual respondents commented on the slowness generally of the process including the consultations, lack of consideration to safety issues and the need for more research.

Question 7: Do you believe an appropriate balance, between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts has been achieved in the Draft Plans?

3.93 As the table below shows, there were more respondents who believed that an appropriate balance had been achieved than those who did not think this was the case. Opinions appear more polarised amongst fisheries and energy organisations than other respondent groupings, although varied views are evident throughout.

Table 3.2 Proportion of those who answered this question who believed an appropriate balance, between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts has been achieved in the Draft Plans

Respondent group	Yes	Yes Qualified	No Qualified	No	Other
Individuals (7)	3 (43%)	-	-	4 (57%)	-
Local Authorities (8)	7 (88%)	1 (12%)	-	-	-
Fisheries (4)	2 (50%)	-	-	2 (50%)	-
Energy (4)	1 (25%)	1 (25%)	-	2 (50%)	-
Local Groups (1)	-	-	-	1 (100%)	-
Public Sector (4)	-	2 (50%)	1 (25%)	1 (25%)	-
Recreation/Tourism (3)	2 (67%)	-	-	-	1 (33%)
Environment/Conservation (4)	3 (75%)	-	-	-	1 (25%)
Academic/Scientific (1)	-	-	-	1 (100%)	-
Total (36)	18 (50%)	4 (11%)	1 (3%)	11 (31%)	2 (6%)

3.94 All thirty-six respondents, seven individuals and 29 organisations, added comments at this question.

Main Themes

3.95 Many of the respondents who indicated that they largely or totally believed an appropriate balance had been achieved, commented on their recognition of the need for sustainable forms of energy and solutions to address climate change.

3.96 Some of these respondents indicated that there may be consequences, potential or actual and foreseen or unforeseen, which some felt may need to be accepted in the context of achieving an appropriate balance. Additionally, some commented that this is dependent on mitigations being delivered effectively.

3.97 As reported at earlier questions, several respondents found it difficult to assess whether balance has been achieved on the basis of existing research and information that is available and gaps in data were identified. Once again, the need for an iterative process taking account of emerging and ongoing research and monitoring was cited by some respondents, particularly environment / conservation organisations.

Factors and Issues

- 3.98 A variety of different factors were each identified by only one or two respondents as potentially affecting the achievement of balance.
- 3.99 SEPA commented that Climate Change priorities should be more explicitly included within planning policy and decisions.
- 3.100 Scottish Enterprise commented on the importance of effective grid infrastructure in realising the potential of the offshore industry as outlined in the SMPs.
- 3.101 The Crown Estate commented on the need to reduce uncertainty for other sea users, by refining areas, in so far as possible, before publication of the adopted Plans.
- 3.102 One energy respondent felt that the positive contribution of renewable energy technologies in limiting negative aspects of climate change had not been considered in sufficient detail; another felt there should be greater presumption in favour of development in less environmentally sensitive areas.
- 3.103 A recreation / tourism organisation, Sportscotland, commented on the need to ensure that health and well-being are considerations within social impacts in order to achieve appropriate balance.
- 3.104 An individual respondent commented that the plan [sic] is one sided and that all costs need to be considered alongside all benefits. Another individual noted that no manufacturing jobs are being created in Scotland by turbine production.

4 DRAFT PLAN OPTIONS

- 4.1 This section of the report focuses on four questions regarding the Draft Plan Options. Questions 8, 9 and 10 asked about Offshore Wind, Wave and Tidal energy respectively and each asked respondent's views on the Draft Plan options, whether they are in the correct place and whether there are reasonable alternatives that should be considered. Question 11 asked whether respondents believed any draft plan options should be removed from the Draft Plans for Offshore Wind, Wave and Tidal Energy and, if so, invited them to explain their reasons.
- 4.2 This chapter reports the findings from responses to questions 8-10 by region, and by technology within region. Details of campaign responses are also included in reporting related to the South West. The chapter then reports on question 11.

In summary:

- Comments focussed specifically on individual Draft Plan options although a small number of relatively common themes emerged:
- There were concerns expressed relating to a number of Draft Plan options regarding potential overlap with existing or potential designated sites;
- There were concerns expressed relating to several Draft Plan options about potential impacts on navigational routes, commercial and recreational;
- There were also concerns relating to several Draft Plan options regarding potential impact on migration routes, most commonly for salmon.
- Only 19 standard responses specifically stated that any Draft Plan options should be removed from the Draft Plans although the volume of campaign texts in the South West should also be borne in mind.
- The main theme from those who commented was that caution should be taken, particularly pending further evaluations, research and monitoring.

Questions 8-10 asked: The Draft Plan for (Offshore Wind / Wave /Tidal Energy) proposes (number) Draft Plan options. What are your views on the (number) Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

Please indicate which proposed Draft Plan option(s) you are commenting on using the relevant indicator

South West

4.3 The Draft Plans contained two potential future options for Offshore Wind and one potential future option for Tidal Energy in the South West region:

- OWSW1
- OWSW2
- TSW1

Offshore Wind Options

4.4 Fifteen responses, six from individuals and nine from organisations, made specific reference to Draft Plan Options for Offshore Wind in the South West. In addition, campaign texts were submitted in relation to OWSW1 and OWSW2 and these are detailed under the relevant headings.

4.5 The main themes that emerged in relation to Offshore Wind options in the South West related to public acceptability, environmental and visual impact, a perception of limited or no potential for regional economic benefit and a possibility of adverse economic impacts. All of these themes were encapsulated in the response from Dumfries and Galloway Council.

4.6 Scottish Natural Heritage referred to potential concerns already highlighted to Marine Scotland relating to the cumulative impacts of offshore windfarm development, both visual and on birds and marine mammals. In relation to the South West specifically, they commented that the cumulative effects upon Seascape, Landscape and Visual Impact that may arise from further offshore windfarm development in the Solway Firth might limit any further such development, and that military interests in the seas offshore of Luce Bay could potentially impose additional constraint.

4.7 Community Energy Foundation commented that both OWSW1 and OWSW2 are too close to the Galloway Coastline and that standard industry guidelines are for offshore wind farms to be sited at least 12 miles from “sensitive” coastlines. The respondent added that they felt it undeniable that the coastline is sensitive in this area.

OWSW1

4.8 Dumfries and Galloway Council commented that they perceived OWSW1 to replace an earlier Wigtown Bay proposal and that the Council’s opposition remained unaltered given the absence of any fundamental change. The Council added that OWSW1 would significantly impact on the views from the Fleet Valley National Scenic Areas.

4.9 Scottish Environment LINK and RSPB Scotland identified a number of key issues to be included for consideration in the assessment, some of which were also cited by Dumfries and Galloway Council, as follows:

- The presence of nationally important populations of gannets;
- Harbour and grey seals;
- Seabird foraging areas which may overlap with the proposed Plan Option;
- Mull of Galloway (RSPB reserve) is the largest breeding seabird colony in the

- region, supporting guillemots, black guillemots, fulmars, kittiwakes, shags, cormorants and gull species and is close to the Plan Option;
- Manx shearwaters are found inshore in this region throughout the summer and other species, including wader species, make passage through the Mull in spring and autumn;
 - Internationally important pink-footed and barnacle geese and whooper swans pass through Wigtown Bay Local Nature Reserve (LNR) (Cree Estuary SSSI) and some whooper swans have been tracked by the Wildlife and Wetlands Trust (WWT) offshore in the proposed Plan Option;
 - Wigtown Bay is nationally important for pintail and curlew.
- 4.10 Northern Lighthouse Board noted in their response that they felt OWSW1 offered significantly more scope for shipping than the previous Area of Search.
- 4.11 The Crown Estate indicated that an Exclusivity Agreement had been put in place to undertake a feasibility study in an area of search that includes OWSW1. The respondent commented that if OWSW1 is included in the adopted Plan and that Dong does not seek to enter into an option agreement, The Crown Estate would only make the relevant area available as part of a wider commercial leasing round.
- 4.12 RYA Scotland commented that this area is crossed by routes of recreational vessels and is considered important to both the recreational and tourism markets. The respondent noted that this should be taken into account in planning for this area.
- 4.13 As noted in the introduction chapter, 46 campaign responses were received that related to OWSW1. In these instances, respondents submitted campaign text indicating they were not in favour of developing the Solway Firth at OWSW1/ TSW1. These respondents comprised 44 individuals and two tourism/ recreation organisations. Thirty-two of the individual respondents who included postcode information with these campaign texts were responding from or 'care of' an address in the Dumfries and Galloway postcode area (representing 89% of the 36 individuals who submitted the text and provided postcode information).
- 4.14 A further four standard responses included the campaign text alongside the respondent's own views.
- 4.15 The campaign text is appended to this report and it focused on:
- The volume of listed buildings in the area;
 - Potential damage from turbines to blue carbon sinks;
 - The fact that Luce Bay is an accredited SAC and related concerns about damage to natural habitats;
 - Potential impact of underwater turbines on a gannetry at the Scare Rocks;
 - Potential impacts on sea birds at the Mull of Galloway RSPB reserve;
 - Potential adverse economic impacts.

OWSW2

- 4.16 Several respondents commented that they saw no real change in circumstance since an extension to Robin Rigg wind farm was dropped from the Offshore Plan for Wind Energy in March 2011 and that objections put forward by these respondents and others at that time remained.
- 4.17 Dumfries and Galloway Council commented that an extension to Robin Rigg would significantly impact on the views from the East Stewartry Coast National Scenic Areas and therefore affect qualities for which it has been designated.
- 4.18 Scottish Environment LINK and RSPB Scotland identified the following key issues for consideration, which they suggested should be addressed within the plan by stipulating the requirements of developers to address and assess these impacts at the project level:
- Monitoring of the original and operational offshore wind farm (Robin Rigg) has not fully established an empirical database of the movements of birds and porpoises through and around the area;
 - No remote sensing surveys have been undertaken and therefore significant uncertainties remain over how birds and porpoises react to the wind farm and any subsequent collision risks or disturbance issues respectively;
 - These issues remain outstanding in the face of additional potential development in this area/ extension to the Robin Rigg site;
 - There are nationally important numbers of red-throated divers and common scoter within the general area of Robin Rigg and the inner Solway area is important as an overwintering and passage area for large numbers of migrant waterfowl;
 - The proposed Plan Option is significantly larger than Robin Rigg and could bring the site closer to the coast, increasing the potential for interactions with the Upper Solway SPA/Ramsar site and other designations.
- 4.19 Northern Lighthouse Board noted in their response that Draft Plan Option OWSW2 is not restrictive to current shipping patterns (other than existing routes for offshore wind support vessels).
- 4.20 There were 443 campaign responses received that related to OWSW2. In these instances, respondents submitted campaign text indicating they were not in favour of developing the Solway Firth at OWSW2. These respondents comprised 434 individuals and nine organisations. Three hundred and fourteen of the individual respondents who included postcode information with these campaign texts were responding from or 'care of' an address in the Dumfries and Galloway postcode area (representing 73% of the 385 that submitted the text and included their postcode with their response).
- 4.21 The campaign text is appended to this report. It focused on:
- Adverse impacts on views from the East Stewartry Coast National Scenic Area;
 - The cumulative effects of this Draft Plan Option and the existing turbine site at Robin Rigg;
 - The proximity to Special areas of Conservation, a Site of Special Scientific

- Interest and several Important Bird Areas;
- Environmental concerns associated with Marine Geology and Coastal Processes;
- Broader issues of public acceptability, environmental and visual impact;
- Potential adverse economic impacts.

Tidal Option

- 4.22 Eight respondents, two individuals and six organisations, commented on the Tidal Draft Plan option in the South West. In addition, the campaign text that we have reported in relation to OWSW1 was titled OWSW1/ TSW1.
- 4.23 Dumfries and Galloway Council commented on the overlap between TSW1 and OWSW1 and felt that no discussion was made of the implications of this overlap, although the Council noted that since grid connections had been raised in relation to the former, they felt it likely to be an issue for the latter. The Council also referred to TSW1 having been highlighted as the main navigational concern by the Kirkcudbright Harbourmaster, stressing that any apparatus on or near the surface of TSW1 would be very hazardous to vessels.
- 4.24 In addition to navigational issues, the Council's response referred to the impact on fishing at TSW1, commenting that the Socio-Economic Evidence Base recognised the financial loss in value of potentially lost landings as between £10,000 and £60,000 depending on scenario. They also commented that TSW1 has a similar potential to OWSW1 for impact on seabirds as well as the potential for collision and noise impacts on whales and dolphins, seals, basking sharks and other fish species known to be present in this area.
- 4.25 Similarly, Scottish Environment Link reiterated some of the concerns they had expressed in relation to OWSW1 and added that RSPB Scotland has brought forward two sites to the MPA consultation as third party proposals, including Scare Rocks MPA and Mull of Galloway MPA, both of which would be marine extensions to existing SSSI designations. The respondent requested that the Plan fully considers the potential direct and indirect impacts on features for which the proposed extensions were put forward for designation and for the MPA search features which are known to exist in these areas.
- 4.26 Scottish Natural Heritage noted that no mention was made in the Plans of the military interests in the seas offshore of Luce Bay, coincident with TSW1, which might limit such development.
- 4.27 The Association of Salmon Fishery Boards commented that TSW1 is very likely to represent a key migration route for Atlantic salmon, and possibly sea trout, arising from the rivers in the Solway Firth, including the River Bladnoch SAC.
- 4.28 Galloway Fisheries Trust also commented that the TSW1 option appeared close to Luce Bay and to the River Luce and other important rivers in terms of fish species (salmon, sea trout, shad species and lamprey species). The respondent added that TSW1 may be located within a prime feeding area or in the middle of a migration route for many of south west Scotland's rivers, as well as those of the English west coast and the northern Irish/east Ireland coasts.

- 4.29 Drummore Harbour Trust commented in relation to TSW1 that Tidal Energy was their preferred method and had a proven track record.
- 4.30 Individual respondents commented on potential impacts on the breeding colony of seabirds at Scare Rocks and disturbance to the seabed with displaced sediment having a detrimental effect on feeding areas for birds on the shores of Luce Bay and on reiterations of concerns related to OWSW1.

West

4.31 The Draft Plans contained nine potential future options for Offshore Wind, Wave and Tidal Energy in the West region:

- OWW1;
- OWW2;
- OWW3;
- WW1;
- WW2;
- WW3;
- WW4;
- TW1;
- TW2.

Offshore Wind Options

- 4.32 Five organisations and no individuals commented on Draft Plan Offshore Wind Options in the West.
- 4.33 Whale and Dolphin Conservation commented on the proximity of OWW1 and OWW2 to the Skye to Mull MPA search location, which has been recognised for minke whales and basking sharks. The respondent stressed that full consideration should be given to the potential environmental impacts of offshore wind in this location on the mobile species represented. Scottish Environment LINK also commented on OWW2 as a search location for basking shark.
- 4.34 National Trust for Scotland commented that OWW3 appears to overlap the Barra Fan and Hebrides Terrace Seamount pMPA and OWW2 appears to overlap with the Staton Banks SAC and Skye to Mull MPA search location. The respondent suggested that these options be modified so there is no overlap until there is greater certainty about the effects of these developments on the aspects that have been designated.
- 4.35 Northern Lighthouse Board noted that Draft Plan Options OWW1 and OWW2 straddle the southern approaches to the Minches and suggested that there may be scope for further development in the eastern parts of these areas.
- 4.36 No Tiree Array commented that all options off Tiree should be dropped as the respondent felt they had no relation to current technological development. Specifically in relation to OWW2, they commented that with the Tiree Array on

hold as there is no solution to its design that is fit for purpose this rendered OWW2 unfeasible.

Wave Options

- 4.37 Five organisations commented on Draft Plan Options for Wave in the West region.
- 4.38 National Trust for Scotland commented again that they would like the Draft Plan Options modified to remove any overlap with designated sites. They cited specific overlaps as:
- WW4 with The Barra Fan and Hebrides Terrace Seamount pMPA;
 - WW3 within the Skye to Mull MPA search location;
 - WW2 within the same Skye to Mull MPA search location.
- 4.39 They also felt that until research into Skye to Mull MPA search area is completed and a decision taken with regard to an MPA proposal there should be no wave energy devices deployed.
- 4.40 Scottish Environment LINK also cited WW3 as overlapping with the Skye to Mull MPA search location, an area that the respondent described as a basking shark hotspot.
- 4.41 RYA Scotland commented that in their view WW1, WW2, WW3, WW4 might be possible sites but discussions would be needed at project level to minimise risk.
- 4.42 Sportscotland also expressed concerns that WW3 could have a significant impact on surf/windsurf sports and suggested a full assessment be made of the importance of this option (as well as options in two other regions) for surf sports and of the potential impact of wave devices on these sports.
- 4.43 No Tiree Array also commented that no explanation is offered as to how WW3 can co-exist within the proposed Tiree (Argyll) Array.

Tidal Options

- 4.44 Three organisations and no individuals commented specifically on the Tidal Draft Plan options in the West.
- 4.45 The Crown Estate commented that their analysis had indicated an average depth greater than 100m in TW1 and felt this may be challenging for development. The respondent suggested a review of the Option area to reflect a more feasible development area.
- 4.46 The Association of Salmon Fishery Boards commented that TW2 may sit on the key migration route for all Atlantic salmon arising from the Solway and the Clyde (including the River Bladnoch and River Endrick SACs) and that TW1 may also represent the key migration route for all fish in the South West of Scotland. The respondent identified a need for greater understanding of migration routes before any significant developments.

4.47 Galloway Fisheries Trust also commented that TW2 and TW1 could also potentially impact on the migration routes of salmon from the Solway, the west coast of England and the east coast of Ireland/ Northern Ireland.

North West

4.48 The Draft Plans contained one potential future option for Offshore Wind and one for Wave Energy in the North West region:

- OOWNW1;
- WNW1.

Offshore Wind Option

4.49 Six organisations and no individuals commented on Offshore Wind Draft Plan Options in the North West.

4.50 Comhairle nan Eilean Siar commented that OOWNW1 is a critical area for the Western Isles and that significant commercial interest has already been shown in this area for innovative Offshore Wind. The respondent described it as vitally important that OOWNW1 is retained, serviced and marketed to industry.

4.51 The Highland Council noted that some mitigation had been proposed to avoid busy shipping channels in areas such as OOWNW1, whilst commenting that it would have been helpful if more detail had been provided for the rationale of site choice within the Draft Plans, eliminating a need for reference to supplementary documents.

4.52 The Crown Estate commented that OOWNW1 would be most suitable for turbines deployed using floating foundations.

4.53 Sportscotland expressed concerns that OOWNW1 has potential to impact on an area particularly valued for its wild land qualities, whilst adding that if visibility of turbines from the mainland is negligible they have no objection. The respondent also noted this is a popular area for sailing and a wind farm is likely to have a significant impact on the landscape/seascape qualities of the area.

4.54 RYA Scotland commented on concerns relating to potential impacts on recreational sailors and suggested that if the Draft Plan Option is taken forward then the southern edge should be moved north.

4.55 Whale and Dolphin Conservation noted that OOWNW1 plan option lies adjacent to the Eye Peninsula to the Butt of Lewis MPA search location, which has been recognised for Risso's dolphins and sandeels. The respondent suggested that if OOWNW1 site remains as a Plan Option then the plan must stipulate the requirement for any future development in this area to adequately assess the potential direct impacts to these species.

Wave Option

4.56 Six organisations and no individuals commented on Wave Draft Plan Option in the North West.

- 4.57 National Trust for Scotland commented that elements of WNW1 appeared to be adjacent to NSAs and stressed a need for caution to ensure that impacts on any of the designated features are assessed and mitigated at the project design stage.
- 4.58 RYA Scotland commented that WNW1 includes important recreational sailing routes such as to the St Kilda archipelago and suggested discussion would be needed with navigational stakeholders to reduce the size of this area and reduce impacts.
- 4.59 Sportscotland also expressed concerns again here that WNW1 could have a significant impact on surf/windsurf sports and suggested a full assessment be made of the importance of these areas for surf sports and of the potential impact of wave devices on these sports.
- 4.60 Comhairle nan Eilean Siar noted concern at the deletion of the scoping area of search west of the Uists (from Harris to Barra). They recommended that this area be re-opened and noted they had aspirations for localised district heat and power schemes in the Uists, powered by wave energy in the area.
- 4.61 Scottish Natural Heritage noted concern relating to WNW1 that possible visual impacts of such development off the west coast of Lewis appear to have been under-estimated.
- 4.62 The Association of Salmon Fishery Boards noted the close proximity of WNW1 to Atlantic salmon SACs.

North

- 4.63 The Draft Plans contained twelve potential future option for Offshore Wind, Wave and Tidal Energy in the North region:

- OWN1;
- OWN2 ;
- WN1;
- WN2;
- WN3;
- TN1;
- TN2;
- TN3;
- TN4;
- TN5;
- TN6;
- TN7.

Offshore Wind Options

- 4.64 Seven organisations and no individuals commented on Draft Plan Options for Offshore Wind in the North.

OWN1

- 4.65 Orkney Islands Council expressed support for the fact that OWN1 would not be directly adjacent to the Hoy and West Mainland NSA and within the direct line of visibility from monuments within the World Heritage Site (WHS). They questioned whether consideration had been given to locating the site further offshore in order to reduce the potential magnitude of impacts on shipping and navigation, inshore fisheries, cultural heritage, recreation, landscape and seascape.
- 4.66 Orkney Fishermen's Association commented that much of OWN1 is currently fished and much of it represents a particularly productive area for brown crab. The respondent added that consultation with their members operating in the area suggested that the fishing effort heat maps released along with the RLG for offshore wind were an under-representation of fishing activity and contained some noticeable gaps. They suggested that consultation with fishermen will be needed to determine the locations where the erection of turbines might interfere with fishing and to discuss appropriate options for mitigation.
- 4.67 National Trust for Scotland noted that OWN1 is close to the Hoy & West Mainland NSA and also Neolithic Orkney WHS and commented on the importance of ensuring that any developments in the areas does not impact unduly on the qualities for which these areas have been designated.
- 4.68 Three environment/ conservation organisations noted that the plan option lies adjacent to and overlaps the proposed North West Orkney Marine Protected Area, for the conservation of sandeel. The respondents stressed that the Plan must fully consider the potential environmental impacts of offshore wind in this location on this species and the potential indirect impacts on seabirds, marine mammals and other sandeel predators. They also added that should the OWN1 site remain as a Plan Option the plan should stipulate the requirement for any future development in this area to adequately assess the potential direct impacts to sandeel and the indirect impacts to other species.
- 4.69 RYA Scotland noted that this area is crossed by sailing routes from Stromness to Shetland and Fair Isle and commented on the importance of any development leaving adequate room for safe navigation.
- 4.70 The Northern Lighthouse Board also noted that Option OWN1 includes the Fair Isle Channel route used by trans-Atlantic traffic and suggested there may be scope for further development in the South-western part of this area and the Fair Isle Channel route should be maintained for shipping.
- 4.71 Orkney Islands Council observed that the identified overlap between OWN1 and WN2 may result in competition for space, and that there may be competition for grid connection between developments around Orkney and Shetland.

OWN2

- 4.72 National Trust for Scotland noted that OWN2 appears to overlap with two historic MPAs and suggested that at the project design stage checks should be made to ensure that these MPAs are in no way impacted by the development.

4.73 The Northern Lighthouse Board noted that Option OWN2 includes the approaches to the port at Lerwick, and also impinges into the Northern Fair Isle Channel and suggested there may be scope for further development, particularly in the northern part.

Wave Options

4.74 Six organisations and no individuals commented on Wave Draft Plan Options in the North.

4.75 National Trust for Scotland commented that elements of WN3 and WN2 appeared to be adjacent to NSAs and stressed a need for caution to ensure that impacts on any of the designated features are assessed and mitigated at the project design stage.

4.76 The Scottish Salmon Producers' Organisation commented that WN2 Orkney and WN3 Shetland showed potential for developments to impact on existing and proposed salmon farms and suggested these potential impacts should be considered in any Sustainability Appraisal and Licensing process for development proposals.

4.77 RYA Scotland also commented that whilst there are locations within WN2 which might be suitable for wave energy generation, there should be coordination between the present sectoral plan, the pilot Pentland Firth and Orkney Waters Marine Spatial Plan currently being developed and the Crown Estate Pentland Firth and Orkney Waters Strategic Area Navigation Appraisal.

4.78 RSPB Scotland and Scottish Environment Link commented that WN2 overlaps the proposed North West Orkney Marine Protected Area, which is proposed for the conservation of sandeel.

4.79 With regard to WN3, RYA Scotland commented that whilst there are likely to be locations within WN3 where a wave farm may be suitable, they felt the routes from Orkney and those into Scalloway need to be protected.

4.80 RYA Scotland commented that WN1 includes the existing Farr Point proposal and that a recreational cruising route passes through this area with a possibility that a vessel under sail would have to change course a considerable distance away to avoid it. The respondent suggested a 'deploy and monitor policy' for the first phase of Farr Point if it is consented so that risks can be properly assessed before any further proposals are considered.

4.81 Sportscotland also expressed concerns here that WN1 could have a significant impact on surf/ windsurf sports and suggested a full assessment be made of the importance of these areas for surf sports and of the potential impact of wave devices on these sports.

Tidal Options

4.82 Nine organisations and no individuals commented specifically on Tidal Energy Draft Plan Options in the North.

- 4.83 Four environment / conservation organisations commented on these Draft Plan Options. Whale and Dolphin Conservation as well as Scottish Environment LINK expressed concern that TN1-4 would potentially impact on declining harbour seal populations around Orkney. Scottish Natural Heritage noted an apparent inconsistency between TN6 and TN7 and the constraints map produced for the Shetland Marine Spatial Plan. National Trust for Scotland commented also on a need to remove overlap with designated sites and referenced, as examples TN6 and aspects of the Yell Sound Coast SAC, TN7 and parts of TN5 and TN1 adjacent to NSAs. Scottish Environment LINK also noted that TN4 is very close to the Wyre and Rousay Sound pMPA.
- 4.84 The Crown Estate commented that they understood tidal areas TN5, TN6 and TN7 to have a low mean resource, which suggested that the area might struggle to support development. The respondent indicated that they would like to see some policy support for test and demonstration projects.
- 4.85 The Association of Salmon Fishery Boards commented that TN1 is a key area of importance for migratory fish and that devices deployed in this area would have the potential to impact on any river in Scotland.
- 4.86 Orkney Fisheries Association indicated concern relating to TN1, TN2, TN3 and TN4 regarding the possibility of potential exclusion zones obstructing safe navigational channels for local fishing vessels and increasing travel time to fishing grounds.
- 4.87 Scottish Salmon Producers' Organisation commented that TN1-TN7 have potential to impact on existing and proposed salmon farms.
- 4.88 Marine Spatial Planning Section, NAFC Marine Centre commented that TN5-7 are areas of significant constraint, with navigation, biodiversity and commercial interests in these areas.

North East

4.89 The Draft Plans contained two potential future options for Offshore Wind Energy in the North East region:

- OWNE1;
- OWNE2.

Offshore Wind Options

- 4.90 Six organisations and no individuals commented on the Draft Plan Options in the North East.
- 4.91 Aberdeenshire Council commented that no reference had been made to a proposed floating turbine demonstration off Aberdeenshire between the two site options, and noted that impacts of offshore renewable developments on existing users of the sea should be kept to a minimum.
- 4.92 The Crown Estate commented that both wind option areas in the North East have a minimum depth of greater than 40m and this meant the respondent

expected that these option areas would be most suitable for turbines deployed using floating foundations. The respondent noted that this technology is expected to have a greater footprint than some foundation types, that noise impacts during construction are likely to be much reduced and there is the potential for some restrictions on fishing activities in wind farms using floating foundations because of the presence of anchor lines. As such, the respondent indicated that the plans should indicate that floating foundations are the most likely type of foundation to be deployed in these areas and the assessment amended accordingly.

- 4.93 The National Grid commented that both Draft Plan Options in the North East might be affected by an offshore interconnection project between East Scotland and North East England, although final options had not been determined. The respondent added that all proposed infrastructure could probably be accommodated through appropriate consultation.
- 4.94 Scottish Natural Heritage commented on possible deferral of further offshore wind farm development on the North East coast until the results are known of any impact monitoring conducted around the currently proposed developments on the east coast and the cumulative effects of such additional development. This respondent also noted that the North East Region is the focus of interest for possible leases linked to test and demonstration projects for floating offshore wind technologies.

OWNE1

- 4.95 Aberdeen City Council expressed support for OWNE1, being its nearest and most relevant development zone.
- 4.96 Northern Lighthouse Board noted that OWNE1 includes most of the approaches to Aberdeen harbour, and also potentially impedes vessels transiting the East coast. This respondent commented that there may be scope for further development, particularly in the southern part of this area.
- 4.97 RYA Scotland commented in relation to OWNE1 that the seas off Aberdeen are very crowded with commercial vessels and recreational craft and that the proposed wind farm would be a further complication. This respondent suggested that moving the western boundary to the 12 mile limit would reduce the impact.

OWNE2

- 4.98 Northern Lighthouse Board noted that OWNE2 includes a much used turning point off Kinnaird Head for vessels transiting the East coast. This respondent added that there may be scope for further development in the Western part of this area.
- 4.99 RYA Scotland commented in relation to OWNE2 that this location is frequented by few recreational craft except those on passage between Stavanger and Banff or between Peterhead and Fair Isle or Lerwick. The respondent suggested that moving the western corner further east would reduce the impact on the latter and noted that there is already a proposal for a floating wind farm in this area (Hywind Scotland Pilot Park Project).

East

4.100 The East contained no potential future option for Offshore Wind, Wave or Tidal Energy.

Other Comments on Offshore Wind Draft Plan Options

4.101 Galloway Fisheries Trust commented that the ten options have been selected through a comprehensive process of selection specifically looking at constraints. However, the respondent expressed a concern if, for example, every offshore wind option were to be consented in one region, or group of adjoining regions, this would create an array of wind farms in one sector of Scotland's seas.

Question 11: Do you believe any draft plan options be removed from the Draft Plans for Wind, Wave and Tidal Energy?

If Yes, please indicate which proposed Draft Plan options you believe should be removed (using the relevant indicator), and explain why

4.102 As the following table shows, there were mixed opinions amongst those who answered this question directly as to whether any Draft Plan Options should be removed. Public sector organisations and most local authorities giving a direct answer did not believe any Draft Plan Options should be removed. Other respondent groupings were more mixed in their opinions.

Table 4.1 Proportion of respondents who answered this question and believed any draft plan options should be removed from the Draft Plans for Wind, Wave and Tidal Energy

Respondent group	Yes	Yes Qualified	No Qualified	No	Other
Individuals (7)	6 (86%)	-	-	1 (14%)	-
Local Authorities (8)	1 (13%)	-	1 (13%)	6 (75%)	-
Fisheries (4)	2 (50%)	-	-	2 (50%)	-
Energy (4)	1 (25%)	-	-	2 (50%)	1 (25%)
Local Groups (1)	1 (100%)	-	-	-	-
Public Sector (4)	-	-	2 (50%)	1 (25%)	1 (25%)
Recreation/Tourism (4)	3 (75%)	-	-	1 (25%)	-
Environment/Conservation (4)	3 (75%)	1 (25%)	-	-	-
Academic/Scientific (1)	1 (100%)	-	-	-	-
Other (1)	1 (100%)	-	-	-	-
Total (38)	19 (50%)	1 (3%)	3 (8%)	13 (34%)	2 (5%)

4.103 Twelve of the thirteen respondents who had indicated that none of the options should be removed provided no further comment. The remaining respondent who answered 'no', together with those who gave a qualified 'no', reiterated points discussed in earlier chapters regarding the need for caution going forward and for more research, monitoring and evaluation.

- 4.104 Five of the six individual respondents who had answered 'yes' cited OWSW1, three also cited OWSW2 and one cited TSW1 as options that should be removed and referred to their answers at questions eight and ten respectively for explanation. The remaining individual respondent who answered 'yes' felt all the options should be removed.
- 4.105 The organisations who had answered 'yes' each cited a different combination of specified options, or commented more generally, and the main theme in their comments was that caution should be taken and that they perceived a need for more evaluations, research, data and monitoring ie. that removal of options at this time represented a safer course. The gaps in information that they identified, or additional assessments that they felt were required, have been discussed at earlier questions.
- 4.106 Two respondents who had not answered either 'yes' or 'no' added comments, similar in theme to those above from those who had answered 'yes'. The Crown Estate noted the need for additional appraisal of tidal resource in Shetland to ensure there is sufficient resource to support commercial development relating to these plan options. EDPR UK commented that it may be necessary to avoid overlap of different sectoral plans, unless there is evidence that proves coexistence to be possible.

5 PLAN IMPLEMENTATION AND REVIEW

5.1 This section of the report focuses on a single question, question 12, which asked respondent's views on plan implementation and review.

In summary:

- There were varied comments on the optimum frequency of reviewing the Plans once implemented although more respondents suggested a two yearly review cycle than any other pre-determined frequency.
- Some respondents identified a need for flexibility and emphasised the importance of reviewing the Plans as new research or information became available.
- The main theme relating to the composition of the Plans Review Steering Group was that a mix of stakeholders should be included.

Question 12: The Plans, once implemented, will be reviewed to take account of actual development and increasing knowledge of development factors. How often do you believe should this be done and why? Who do you believe should be involved in the Plans Review Steering Group, to oversee the review process?

5.2 Thirty-nine respondents, three individuals and 36 organisations, made comments at this question.

Frequency of Review

5.3 Thirteen respondents commented that they supported a two yearly review cycle and a small number of these respondents noted that this is particularly important in early years.

5.4 Several of the respondents who suggested two yearly reviews commented on the need for regular reviews due to the evolving nature of issues under consideration, rapid technological developments, and also to take account of research and monitoring outcomes as they emerge. Conversely, Shetland Islands Council felt that initial reviews would only be needed every four years moving to two years as the pace of technology advances.

5.5 Association of Salmon Fishery Boards suggested that reviews should take place as and when new information becomes available. Galloway Fisheries Trust commented in similar vein that the Plans should be reviewed and updated on a rolling programme, specifically when new research becomes available.

5.6 Four respondents commented the quinquennial reviews would be appropriate, whilst three suggested reviews every three years.

5.7 Scottish Enterprise commented that the review process of the sectoral plans should be linked to the review process for the National Marine Plan (NMP),

which is at the top of the hierarchy of policy in the marine planning process. RYA Scotland also identified advantages of synchronisation with the cycle for the NMP, but with updates being issued or revisions being made to take account of emerging knowledge.

Composition of the Plans Review Steering Group

5.8 The main theme to emerge from comments regarding who should be involved in the Plans Review Steering Group, to oversee the review process, was that a mix of stakeholders should be included.

5.9 Some respondents included lists of suggested organisations and stakeholder groups and several stipulated that developers should be included. Specific suggestions included:

- Local authorities with a significant number of sites in their area such as Argyll and Bute / Local Planning Authorities;
- Scottish Enterprise;
- Scottish Renewables;
- Members of the public;
- Fisheries sector interests / Scottish Fishermen's Federation;
- The marine and coastal sport and recreation sector regulators;
- Local marine users;
- Environmental and interest groups
- A representative from National Grid;
- The Crown Estate
- Regional level groups e.g. Pentland Firth and Orkney Waters Leadership Forum.

5.10 As indicated by the list above, a number of respondents emphasised the importance of including sub-groups with a regional or local focus.

6 STRATEGIC ENVIRONMENTAL ASSESSMENT

6.1 This section of the report focuses on five questions (13 – 17) relating to the Environmental Report and to identification of additional relevant sources of information.

In summary:

- There was praise for the comprehensive nature of the Environmental Report and more respondents expressed broad agreement with the predicted environmental effects than disagreement.
- The main theme relating to the recommendations and proposals for mitigation of environmental effects was that more research and monitoring is required.
- Respondents suggested a number of additional information sources that they felt might be helpful.

Question 13: To what extent does the Environmental Report set out an accurate description of the current environmental baseline? Please also provide details of any additional relevant sources.

6.2 22 respondents, two individuals and 20 organisations, made comments at this question.

6.3 Several respondents, drawn from public sector and energy organisations, local authorities and individuals, referred to the largely comprehensive nature of the Environmental Report.

6.4 Another recurring theme related to the benefits of more signposting or obvious cross-referencing of environmental information between the SEA report and the sectoral marine plans.

6.5 Two environment / conservation respondents, Scottish Environment Link and RSPB Scotland, specifically suggested the inclusion of a map showing both the Draft Plan Options and possible MPAs and MPA search locations.

6.6 The following additional relevant sources were identified in responses at this question:

- Raw ESAS data;
- In the future, RSPB's work on FAME and modelling seabird distributions;
- Brooks et al. (2013) Characterising Scotland's marine environment to define search locations for new Marine Protected Areas;
- The identification of key geodiversity areas in Scottish waters (Scottish Natural Heritage Commissioned Report No. 432)

Question 14: Do you agree with the predicted environmental effects of the plans as set out in the Environmental Report?

- 6.7 25 respondents, five individuals and 20 organisations, made comments at this question.
- 6.8 Nine respondents indicated general overall agreement with the predicted environmental effects of the plans as set out in the Environmental Report. Some of these respondents noted their broad agreement, notwithstanding comments that they had made earlier in the consultation.
- 6.9 Some respondents reiterated concerns detailed at earlier questions whilst expressing no overall agreement or disagreement.
- 6.10 Two recreation/tourism organisations indicated disagreement and also identified areas of disagreement as follows: RYA Scotland referred to mitigation proposals relating to navigational safety that have been detailed earlier in the report, whilst Pentland Firth Yachting Club commented that there was there is insufficient data to predict reliably what the impact will be.

Question 15: Do you agree with the recommendations and proposals for mitigation of the environmental effects set out in the Environmental Report?

- 6.11 24 respondents, two individuals and 22 organisations, made comments at this question.
- 6.12 Five respondents answered 'yes' or 'generally yes' and two respondents answered 'no' without additional comment. A further six respondents asked that reference be made to the comments they had made at question 3 of the consultation.
- 6.13 The main theme that emerged from remaining responses related to the need for more comprehensive understanding and monitoring of impacts.
- 6.14 Scottish Fishermen's Federation commented that they perceived the required mitigation to be ambiguous. The respondent cited as an example 'effects on features of the historic environment can be avoided through appropriate siting of devices away from vulnerable coastlines and known historic marine features' and felt it was unclear how this would be possible.
- 6.15 A tourism/ recreation organisation, Pentland Firth Yachting Club also felt that mitigation statements were vague and many appeared to relate to additional monitoring rather than mitigation features per se.
- 6.16 JNCC identified the main mitigation proposals regarding biodiversity impacts as being the timing of construction to avoid sensitive life stages of the species and EIA/HRA at project level and expressed agreement that the former has

potential to mitigate impacts. The respondent identified other measures including changes in project design and modification of authorised areas.

6.17 The Highland Council commented that there might be too much reliance on individual project level mitigation, particularly in relation to cumulative effects.

6.18 SSE Renewables observed that some aspects were not mitigation but more design considerations and that the level of detail provided was variable.

Question 16: Are you aware of any additional on-going research or monitoring that may help to fill gaps in the evidence base, particularly relating to the marine environment and its interactions with renewable energy devices? Please give details of additional relevant sources

6.19 Nineteen respondents, one individual and 18 organisations, made comments at this question. Eight of the organisations and the individual respondent answered 'no' and ten other organisations gave more detailed responses

6.20 The sources that were identified as additional relevant sources were:

- Moray Firth research;
- Evidence from throughout Europe;
- A Crown Estate commissioned review of wave and tidal EIA/HRA issues and research priorities ('A Consolidation of Wave and Tidal EIA/HRA Issues and Research Priorities');
- PFOW Shipping and Navigation Study;
- Forthcoming tourism and recreation case study for PFOW;
- Pilot Pentland Firth & Orkney Waters marine spatial plan project and related Stage 2 studies;
- Shetland Islands' Marine Spatial Plan;
- The national strategy into strategic research for offshore marine renewables and anadromous fish;
- A conference paper prepared by researchers at the ICIT in Orkney: Bell, M., Side, J., Kerr, S., Johnson, K., Baston, S. & Collin, R. (2010) The emergence of a new marine renewable industry – what are the implications for fisheries? (ICES Annual Science Conference 2010);
- West Islay Tidal Environmental Statement and associated technical appendices;
- Fair Head Tidal Baseline monitoring;
- Work of the International network for Social Studies of Marine Energy (ISSMER) (<http://www.issmer-network.org/>) and the NERC funded Marine Renewable Energy Knowledge Exchange Programme (MREKEP) Fishery and Marine Renewable Energy Working Group;
- Research carried out in Strangford Lough where an extensive monitoring programme and an adaptive management approach was undertaken as part of the deployment of a free stream tidal energy device;
- The Comhairle bid, with local partners, for the Third Party Management Contract in respect of The Crown Estate leasing round for Wave Demonstration

and Testing for which consideration of environmental interactions will be a key part of the management process;

- The Western Isles international Environmental Interaction of Marine Renewable Technologies conference in late April 2014;
- Lews Castle College monitoring of the marine resource around the Western Isles;
- Research in other UK and EU countries.

Question 17: Are you aware of any further environmental information that will help to inform the environmental assessment findings?

6.21 Sixteen respondents, one individual and 15 organisations, made comment at this question. The individual respondent and seven of the organisations simply answered 'no' and seven other organisations gave more detailed responses.

6.22 The environmental information sources suggested by respondents were as follows:

- Shetland Islands' Marine Spatial Plan (two mentions);
- Shetland Regional Locational Guidance;
- Findings from research carried out in Strangford Lough where an extensive monitoring programme and an adaptive management approach was undertaken as part of the deployment of a free stream tidal energy device;
- Brooks et al. (2013) Characterising Scotland's marine environment to define search locations for new Marine Protected Areas. Part 2: The identification of key geodiversity areas in Scottish waters. Scottish Natural Heritage Commissioned Report No. 432.2;
- Pilot Pentland Firth & Orkney Waters marine spatial plan project and related Stage 2 studies;
- Areas of Search for possible future SPAs in the marine environment, currently being considered, as well as any proposed sites that come forward during Plan review;
- The Comhairle bid, with local partners, for the Third Party Management Contract in respect of The Crown Estate leasing round for Wave Demonstration and Testing for which consideration of environmental interactions will be a key part of the management process;
- The Western Isles international Environmental Interaction of Marine Renewable Technologies conference in late April 2014;
- Lews Castle College monitoring of the marine resource around the Western Isles;
- Location of spawning and nursery grounds for commercial fish and shellfish stocks;
- Amateur groups who may have data going back many years.

² <http://www.snh.org.uk/pdfs/publications/commissioned_reports/432.pdf>.

7 ADDITIONAL COMMENTS

- 7.1 As noted in the introduction to this report, 29 respondents (28 individuals and a local group) submitted answers to an additional question circulated by Struan Stevenson MEP, alongside their own views. This question asked "Do you support the development of commercial scale offshore renewable energy at a national and regional level?" and requested a 'yes' or 'no' answer as well as providing space for additional comments.
- 7.2 Twenty-three individuals and a local group answered 'no' they did not support the development of commercial scale offshore renewable energy at a national and regional level. Three individual respondents answered 'yes' and the two remaining individual respondents did not indicate whether they supported this or not.
- 7.3 A majority of comments from those respondents who indicated they did not support development of commercial scale offshore renewable energy at a national and regional level focused on wind energy specifically; it was not always easy to determine whether comments were limited to offshore wind energy as opposed to onshore.
- 7.4 The main themes emerging in additional comments at this question related to adverse visual impacts and a perception of costly or poor value energy sources.
- 7.5 In terms of other additional comments, beyond responses to the questions circulated by Struan Stevenson MEP and comments not referenced elsewhere, the following points were made:
- Shetland Islands Council suggestion that confusion may arise due to a perception that Marine Scotland and the Crown Estate appear to be attempting to move marine renewable developments forward;
 - An individual respondent suggested a need to create more accountability for the Crown Estate, in its designation of zones for development-testing of different tidal energy technologies and the process of allocation of rights to different companies;
 - Community Energy Foundation expressed surprise that Marine Scotland has not considered any tidal barrage schemes;
 - Orkney Fisheries Association observed that in fishing, especially in island communities, a rare model exists of autonomous self-employed small business enterprises and that an 'interest group' should go further than a sectoral interest related to targeted fish or gear, but as a minority on a par with crofters and which should receive similar protection;
 - The Civil Aviation Authority commented that aviation stakeholders are primarily concerned with offshore wind turbine sites and there is an international requirement for all obstacles of 300 feet or more in height to be marked on aeronautical charts and listed in the UK Aeronautical Information Publication.

APPENDICES

APPENDIX 1: LIST OF ORGANISATIONS

Organisation name
Aberdeen City Council
Aberdeenshire Council
Aquamarine Power
Argyll and Bute Council
Association of Salmon Fishery Boards
Banff and Macduff Community Council
Barlocco Farms
Boarhills and Dunino Community Council
Buittle Parish Community Council
City of Edinburgh Council
Civil Aviation Authority
Clyde Fishermen's Association
Comhairle nan Eilean Siar
Community Energy Foundation
COSLA
DP Marine Energy
Drummore Harbour Trust Ltd
Dumfries and Galloway Council
Dumfries and Galloway Council Conservative and Unionist Group
Dundee City Council
E.ON
EDPR UK
Fife Council
Galloway Fisheries Trust
Institute for Archaeologists
Isle of Whithorn Community Council
JNCC
Joint Nautical Archaeology Policy Committee
Kintyre Waters Static Gear FA
Kirkmaiden Community Council
Mallaig and North-West Fishermen's Association Limited
Marine Spatial Planning Section, NAFC Marine Centre
Maryport Fishing Company
Mega Environment Group: Ayrshire
Moray Firth and North Coast IFG
National Grid
National Trust for Scotland
Natural Resource Wales
No Tiree Array
Northern Lighthouse Board

Orkney Fisheries Association
Orkney Islands Council
Pentland Canoe Club
Pentland Firth Yachting Club
Power4Islay
RSPB Scotland
RYA Scotland
Scottish Enterprise
Scottish Environment LINK
Scottish Fishermen's Federation
Scottish Geodiversity Forum
Scottish Natural Heritage
Scottish Power Renewables
Scottish Renewables
Scottish Salmon Producers' Organisation
Scottish Water
Scottish White Fish Producers Association
Seafish
SEPA
Shetland Islands Council
South West IFG
Sportscotland
SSE Renewables
Subsea Cables
The British Sub Aqua Club
The Crown Estate
The Highland Council
The People's Project
Tiree Community Development Trust
Whale and Dolphin Conservation
Wigtown Community Council
WWF Scotland

APPENDIX 2: GLOSSARY

ASFB	Association of Salmon Fishery Boards
EIA	Environmental Impact Assessment
HRA	Habitats Regulations Appraisal
JNCC	Joint Nature Conservation Committee
MPA	Marine Protected Area
MPS	Marine Policy Statement
NMP	National Marine Plan
NSA	National Scenic Areas
OWSC	Oscillating Wave Surge Converter
SAC	Special Area of Conservation
SAR	Sustainability Appraisal Report
SEA	Strategic Environmental Assessment
SPA	Special Protection Area

APPENDIX 3: CONSULTATION QUESTIONS

1. Do you agree with the approach (outlined in Section 3 of the Sectoral Marine Plans) used to develop the Plans?

Yes No

Please explain:

Comments

2. Do you have any views on the findings of the Sustainability Appraisal Report? Do you think that all the social, economic and environmental effects (positive and negative) have been identified? Are there other issues that should be taking into account in the preparation of the Final Draft Plans?

Comments

3. The SEA has identified a range of potential effects from the Draft Plans. Measures for the mitigation of these effects have been identified in the SEA environmental report. Do you have any views on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

Comments

4. The Socio-economics Report has identified a range of potential impacts on existing sea users. Do you have any views on these findings? Do you think that the proposed mitigation measures will be effective? Do you have any additional suggestions?

Comments

5. Taking into account the findings from the technical assessments, do you have views on the scale and pace of development that could be sustainably accommodated in Scottish Waters?

Comments

6. Are there aspects of the Draft Plans that you believe should be improved?
Are there any aspects you believe should be taken forward differently?

Please explain any reasons for your answer and provide details of any suggested improvements:

Comments

7. Do you believe an appropriate balance, between tackling climate change, maximising opportunities for economic development and dealing with environmental and commercial impacts been achieved in the Draft Plans?

Yes No

Please explain:

Comments

8. The Draft Plan for Offshore Wind Energy proposes 10 Draft Plan options. What are your views on the Offshore Wind Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

Please indicate which proposed Draft Plan option(s) you are commenting on using the relevant indicator (i.e. OWN1)

Comments

9. The Draft Plan for Wave Energy proposes 8 Draft Plan options . What are your views on the Wave Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

Please indicate which proposed Draft Plan option(s) you are commenting on using the relevant indicator (i.e. WN1)

Comments

10. The Draft Plan for Tidal Energy proposes 10 Draft Plan options. What are your views on the Tidal Draft Plan options? Are they in the correct place? Are there reasonable alternatives that should be considered?

Please indicate which proposed Draft Plan option(s) you are commenting on using the relevant indicator (i.e. TN1)

Comments

11. Do you believe any draft plan options be removed from the Draft Plans for Wind, Wave and Tidal Energy?

Yes No

If Yes, please indicate which proposed Draft Plan options you believe should be removed (using the relevant indicator), and explain why :

Comments

12. The Plans, once implemented, will be reviewed to take account of actual development and increasing knowledge of development factors. How often do you believe should this be done and why? Who do you believe should be involved in the Plans Review Steering Group, to oversee the review process?

Comments

13. To what extent does the Environmental Report set out an accurate description of the current environmental baseline? Please also provide details of any additional relevant sources.

Comments

14. Do you agree with the predicted environmental effects of the plans as set out in the Environmental Report?

Comments

15. Do you agree with the recommendations and proposals for mitigation of the environmental effects set out in the Environmental Report?

Comments

16. Are you aware of any additional on-going research or monitoring that may help to fill gaps in the evidence base, particularly relating to the marine environment and its interactions with renewable energy devices? Please give details of additional relevant sources.

Comments

17. Are you aware of any further environmental information that will help to inform the environmental assessment findings?

Comments

18. Do you any other comments you wish to make of the Plans and / or the related assessments?

Comments

APPENDIX 4: CAMPAIGN TEXT REGARDING OWSW1/TSW1

- Munitions dumping on the sea bed has taken place from WW1 up till the 1970's. With wind and tide these munitions have drifted into the Solway and into Luce Bay. Disturbance of the munitions has been shown in the past to cause problems and puts coastal communities at risk.
- Any reduction in the numbers of tourists coming to this area will impact on job opportunities for locals. Since there are already approximately 38 wind farms built, consented or in planning in Wigtownshire this area will look like a giant power plant and will be less conducive as a holiday destination. In addition, the Mull of Galloway is now owned by the community and a reduction in the use of the holiday cottages will reduce investment in the local community. Also the sheltered waters of Luce Bay and the Mull of Galloway are used extensively for sea angling particularly charter fishing and the SSACN estimate that sea angling is worth about £25 million per year to the Solway area. The proposed development area is an important breeding ground for sharks, which use electromagnetic fields (EMF) to navigate. If research is inconclusive then the precautionary principle should apply. Marine Scotland's SEA (2013) states that 'It is difficult to predict the precise impact of potential changes to amenity on recreational use of the area. Some displacement could be permanent leading to recreational activities being discontinued...' this is an area that can ill afford to lose income from tourism. Marine Scotland in 2010 published information indicating that in D&G the tourism spend was £143 million which has direct and indirect effects on employment.
- Much of the South Rhins coast is classified SSSI and should be protected.
- The Mull of Galloway Lighthouse, cottages, wall, engine house and old byer (RSPB building) are category 'A' listed buildings (Historic Scotland Building ID number13578). There are approximately 32 listed buildings on the S. Rhins/Luce Bay coast and a similar number on the Machars coast.
- The term 'Blue carbon' is relatively unknown, but its environmental importance is unrivalled. Blue carbon stores are natural carbon sinks that absorb and store millions of tonnes of carbon. Every day 22 million metric tonnes of CO₂ (55% of all carbon in the atmosphere) is absorbed by the oceans. Blue Carbon ecosystems which include: sea grass meadows, kelp forests, salt-marshes, store up to 70% of the carbon permanently in the sea and Scottish waters are home to over 20% of all sea-grass meadows in north west Europe and much of this is in the Solway Firth. Despite their importance around 2-7% of global blue carbon sinks are lost annually. The rate of loss is four times that of rainforests. Building massive turbines near such resources exacerbates the damage releasing huge amounts of CO₂.
- Luce Bay is an accredited Special Area of Conservation (SAC) and contains habitats, animals or plants of European importance. Marine Scotland's first draft plan took the sub-sea cable ashore at the northern most part of the Bay requiring a sub-sea plough tearing up the sea bed and the construction of large pylons and substations. Luce bay is important because of its dune, shore and seabed habitats. The SAC is an intricate mosaic of mud and sandy sediments with sandbanks, reefs and boulders supporting a wide variety of plants and animals.
- The Scare Rocks is a registered gannetry with 2,000 breeding pairs. Diving birds will be affected by underwater turbines.
- The Mull of Galloway is a RSPB reserve. There are rare species like the Manx Shearwater. Insects are attracted to wind turbines for unknown reasons but as a

result bird strikes occur and this is causing conservationists considerable concern. Whilst this plan attempts to protect marine life with MPA's, sea birds are decreasing at an alarming rate around Scotland and there are no measures to protect them. The Mull of Galloway is the most important sea bird hot spot in the South West.

- Marine Scotland in 2011 when considering a wind farm in Wigtown Bay stated that there was 'the possibility of adverse economic impacts'. Developing Luce Bay is likely to have adverse effects on the local economy.

APPENDIX 5: CAMPAIGN TEXT REGARDING OWSW2

- The proposed siting of the wind-farm would adversely affect views from the East Stewartry Coast National Scenic Area, an area recognized nationally and internationally for its outstanding scenery. The area includes beaches and coastal paths of local and national importance, and the uninterrupted views from the coast give the area a unique character which must be preserved in the interests of not only local amenity but of tourism, which makes a significant contribution to the local economy.
- The proposed site adjoins the existing 60 turbine site at Robin Rigg. This development cannot be considered in isolation as the cumulative effect of the existing turbines and those proposed in the Plan would have a highly detrimental effect on the visual amenity of the Colvend coast, resulting in a "wall" of turbines running across the entire Solway coastal panorama of the Lake District, Cumbria and the Irish Sea.
- The proposed site is in the vicinity of two Special Areas of Conservation, a Special Protection Area, a Site of Special Scientific Interest and several Important Bird Areas. A range of other environmental concerns associated with Marine Geology and Coastal Processes have also been identified.
- Furthermore, the *Sectoral Marine Plan for Offshore Wind Energy in Scottish Territorial Waters* published in 2011 stated that this site specifically presented significant problems for the development of offshore wind. The significant strategic issues being public acceptability, environmental and visual impact.
- In addition, socio-economic assessment suggested that there was little or no potential for regional economic benefit, and indeed that there was a possibility of adverse economic impacts. Both the relevant Planning Authority and local consultees expressed real and sustained opposition to ... any form of offshore wind development within the Solway.
- As a result, the Scottish Ministers then decided that " the Solway Firth and Wigtown Bay sites are unsuitable for the development of offshore wind and should not be progressed ". Nothing in the present plan would appear to mitigate the issues previously identified, and the Inner Solway Firth site (OWSW2) should therefore be removed from the plan.



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