

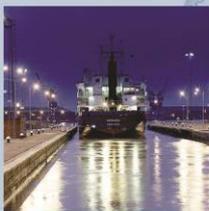
Joint Nature Conservation Committee

**Developing the Evidence Base for Impact Assessments for  
Recommended dSACs and dSPAs  
Appendix D: Scenarios for  
Recommended dSAC and dSPA Proposals**

Report R.2462

August 2015

Creating sustainable solutions for the marine environment



Page intentionally left blank

Joint Nature Conservation Committee

## Developing the Evidence Base for Impact Assessments for Recommended dSACs and dSPAs Appendix D: Scenarios for Recommended dSAC and dSPA Proposals

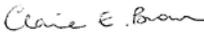
Date: August 2015

Project Ref: R/4321/1

Report No: R.2462

© ABP Marine Environmental Research Ltd

Version	Details of Change	Date
1	Issue for Client Comment	18.6.2015
2	Issue after Review	27.07.2015
3	Issue after SNCB Review	11.08.2015

Document Authorisation		Signature	Date
Project Manager:	C E Brown		11.08.2015
Quality Manager:	S F Walmsley		11.08.2015
Project Director:	S C Hull		11.08.2015

### ABP Marine Environmental Research Ltd

Quayside Suite, Medina Chambers, Town Quay, Southampton, Hampshire SO14 2AQ

Tel: +44 (0) 23 8071 1840

Web: [www.abpmer.co.uk](http://www.abpmer.co.uk)

Fax: +44 (0) 23 8071 1841

Email: [enquiries@abpmer.co.uk](mailto:enquiries@abpmer.co.uk)

ABPmer is certified by:



**Disclaimer:**

- *Any 'Draft' issue of this report, and any information contained therein, may be subject to updates and clarifications on the basis of any review comments before 'Final' issue. All content should therefore be considered provisional, and should not be disclosed to third parties without seeking prior clarification from ABP Marine Environmental Research Ltd ("ABPmer") of the suitability of the information for the intended disclosure and should not be relied upon by the addressee or any other person.*
- *Unless previously agreed between the addressee and ABPmer, in writing, the 'Final' issue of this report can be relied on by the addressee only. ABPmer accepts no liability for the use by or reliance on this report or any of the results or methods presented in this report by any party that is not the addressee of the report. In the event the addressee discloses the report to any third party, the addressee shall make such third party aware that ABPmer shall not be liable to such third party in relation to the contents of the report and shall indemnify ABPmer in the event that ABPmer suffers any loss or damage as a result of the addressee failing to make such third party so aware.*
- *Sections of this report rely on data supplied by or drawn from third party sources. Unless previously agreed between the addressee and ABPmer, in writing, ABPmer accepts no liability for loss or damage suffered by the addressee or any third party as a result of any reliance on third party data contained in the report or on any conclusions drawn by ABPmer which are based on such third party data.*

# Appendix D

Scenarios for  
Recommended dSAC and dSPA Proposals



# Developing the Evidence Base for Impact Assessments for Recommended dSACs and dSPAs

## Appendix D: Scenarios for Recommended dSAC and dSPA Proposals

### Contents

	Page
D.1 Introduction.....	9
D.2 New dSAC.....	10
D.2.1 North Minch dSAC Proposal.....	10
D.2.1.1 Overlapping Designations.....	10
D.2.2 Sea of the Hebrides dSAC Proposal.....	14
D.2.2.1 Overlapping Designations.....	14
D.2.3 North Channel and Outer Solway dSAC.....	19
D.2.3.1 Overlapping Designations.....	19
D.2.4 North Anglesey Marine / Gogledd Môn Forol dSAC.....	23
D.2.4.1 Overlapping Designations.....	23
D.2.5 West Wales Marine / Gorllewin Cymru Forol dSAC.....	27
D.2.5.1 Overlapping Designations.....	27
D.2.6 Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC.....	32
D.2.6.1 Overlapping Designations.....	32
D.2.7 Southern North Sea dSAC.....	37
D.2.7.1 Overlapping Designations.....	37
D.2.8 Outer Moray Firth dSAC.....	41
D.2.8.1 Overlapping Designations.....	41
D.3 Draft SPAs.....	45
D.3.1 Anglesey Terns / Morwenoliaid Ynys Môn dSPA.....	45
D.3.1.1 Overlapping Designations.....	45
D.3.2 Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA.....	49
D.3.2.1 Overlapping Designations.....	49
D.3.3 Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA.....	53
D.3.3.1 Overlapping Designations.....	53

## Tables

D.2.1	Existing, planned and proposed management measures for overlapping designations for the North Minch dSAC .....	10
D.2.2	Management scenarios for North Minch dSAC.....	12
D.2.3	Existing, planned and proposed management measures for overlapping designations for the Sea of the Hebrides dSAC.....	14
D.2.4	Management scenarios for Sea of the Hebrides dSAC .....	17
D.2.5	Existing, planned and proposed management measures for overlapping designations for the North Channel and Outer Solway dSAC.....	19
D.2.6	Management scenarios for North Channel and Outer Solway dSAC.....	21
D.2.7	Existing, planned and proposed management measures for overlapping designations for the North Anglesey Marine / Gogledd Môn Forol dSAC .....	23
D.2.8	Management scenarios for North Anglesey Marine / Gogledd Môn Forol dSAC .....	25
D.2.9	Existing, planned and proposed management measures for overlapping designations for the West Wales Marine / Gorllewin Cymru Forol dSAC.....	27
D.2.10	Management scenarios for West Wales Marine / Gorllewin Cymru Forol dSAC.....	30
D.2.11	Existing, planned and proposed management measures for overlapping designations for the Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC .....	32
D.2.12	Management scenarios for Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC .....	35
D.2.13	Existing, planned and proposed management measures for overlapping designations for the Southern North Sea dSAC.....	37
D.2.14	Management scenarios for Southern North Sea dSAC .....	39
D.2.15	Existing, planned and proposed management measures for overlapping designations for the Outer Moray Firth dSAC .....	41
D.2.16	Management scenarios for Outer Moray Firth dSAC.....	43
D.3.1	Existing, planned and proposed management measures for overlapping designations for the Anglesey Terns / Morwenoliaid Ynys Mon dSPA.....	45
D.3.2	Anglesey Terns / Morwenoliaid Ynys Mon dSPA management scenarios.....	48
D.3.3	Existing, planned and proposed management measures for overlapping designations for the Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA.....	49
D.3.4	Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA management scenarios.....	51
D.3.5	Existing, planned and proposed management measures for overlapping designations for the Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA.....	53
D.3.6	Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA management scenarios.....	55

## Figures

D1.	Designated Sites near North Minch dSAC .....	11
D2.	Designated Sites near Southern Sea of Hebrides dSAC .....	16
D3.	Designated Sites near North Channel and Outer Solway dSAC.....	20
D4.	Designated Sites near North Anglesey Marine / Gogledd Môn Forol dSAC .....	24
D5.	Designated Sites near West Wales Marine / Gorllewin Cymru Forol dSAC .....	29
D6.	Designated Sites near Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC .....	34
D7.	Designated Sites near Southern North Sea dSAC .....	38
D8.	Designated Sites near Outer Moray Firth dSAC .....	42
D9.	Designated Sites near Anglesey Terns / Morwenoliaid Ynys Môn dSPA.....	47
D10.	Designated Sites near Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA.....	50
D11.	Designated Sites near Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA .....	54

## D. Scenarios for Recommended dSAC and dSPA Proposals

### D.1 Introduction

This appendix sets out the management scenarios that will be used within the study to estimate the costs and benefits of designation of individual sites. The management scenarios take account of the Management Options Papers prepared by JNCC for the dSACs (JNCC, 2015) and dSPAs (awaited) and other key factors contributing to uncertainty in the costs and benefits. The three management scenarios have been used within the intervention option ('lower' (no additional mitigation measures), 'intermediate' (most likely scenario – some additional mitigation measures may be necessary to support achievement of conservation objectives) and 'upper' (very unlikely – highly protective measures)). These scenarios were developed by the Statutory Nature Conservation Bodies (SNCBs) which take account of different assumptions about the level of management measures that might be required to support achievement of site conservation objectives. The scenarios have been developed only to help inform the impact assessment and should not be seen as prejudging the outcome of any project level appropriate assessments at such time as these may be required.

The management scenarios also take account of existing or planned management measures associated with overlapping designations and therefore represent the **additional** management measures that may be required to support achievement of the conservation objectives for individual features. A summary of existing/planned management measures associated with existing designated sites which overlap with the new dSAC or Marine dSPA proposals is provided for each proposed site together with an accompanying map. Information on the management measures for existing designated sites has been drawn from the following sources:

- Designated Scottish Nature Conservation MPAs - Final MPA Impact Assessment (Marine Scotland, 2014. The Scottish Marine Protected Area Project - Developing the Evidence Base for Impact Assessments and the Sustainability Appraisal - Refresh);
- Proposed Scottish Nature Conservation MPAs and dSPAs (Marine Scotland, 2015. The Scottish Marine Protected Area Project Second Iteration of Site Proposals – Developing the Evidence Base for Impact Assessments);
- Inshore SACs in Scottish waters – (Marine Scotland, 2014. Consultation on the Management of Inshore Special Areas of Conservation and Marine Protected Areas);
- Designated Marine Conservation Zones in English territorial waters and offshore waters of England, Wales and Northern Ireland (Defra, 2012. Designation of Marine Conservation Zones in English Inshore Waters and English and Welsh Offshore Waters. Impact Assessment. IA No: Defra 1475.);
- Proposed Marine Conservation Zones in English territorial waters and offshore waters of England, Wales and Northern Ireland (Defra, 2014. Impact Assessment for Designation of the second tranche of Marine Conservation Zones in waters for which the Secretary of State has responsibility (English inshore, English, Welsh and Northern Irish offshore);
- Regulation 33/35 Advice Packages and Schemes of Management prepared under the Habitats Regulations (Natural England, dates various); and
- Schemes of Management under the Habitats Regulations.

## D.2 New dSAC

### D.2.1 North Minch dSAC Proposal

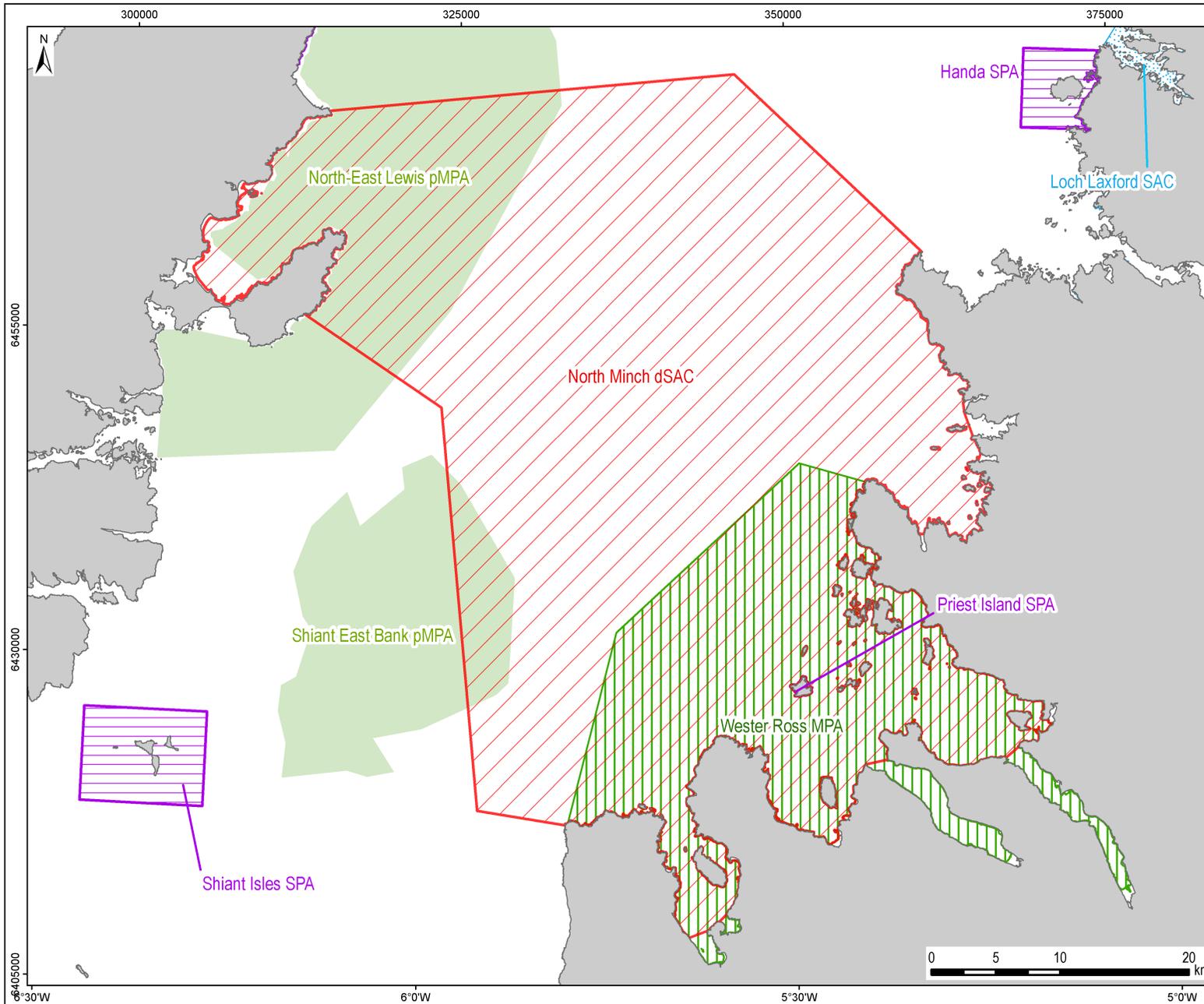
#### D.2.1.1 Overlapping Designations

Figure D1 identifies existing and possible designations that overlap with the North Minch dSAC. Table D2.1 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.1 Existing, planned and proposed management measures for overlapping designations for the North Minch dSAC**

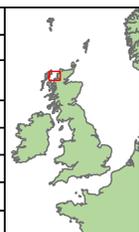
Site	Activity	Management Measure
Priest Island SPA	n/a*	n/a
Wester Ross NCMPA	Aquaculture – finfish	Remove or avoid pressures associated with new finfish farms, undeveloped consents, expansion or relocation in areas where they would be likely to impact on flame shell beds, maerl beds, maerl or coarse shell gravel with burrowing sea cucumbers and northern feather star aggregations on mixed substrata. Reduce or limit pressures from areas of burrowed mud (particularly with tall sea pens) and circalittoral muddy sand communities.
	Commercial fishing	Reduce or limit pressures by reducing or limiting mobile/active fishing on burrowed mud habitats. Reduce or limit pressures to reduce or limit static gear fishing on burrowed mud particularly where there are high densities of tall sea pen. Reduce or limit static gear fishing on maerl beds.
Shiant East Bank pMPA	Commercial fishing	Reduce/limit – there is potential for impacts resulting from abrasion. Impacts are likely to be related to intensity of fishing.
North-east Lewis pMPA	Aquaculture – new finfish sites	Reduce/limit – impact of noise from ADD use on Risso's dolphin (depending on location).
	Commercial fishing	Reduce/limit – bycatch and collision risk. Reduce/limit - relating to use of mobile gear over sandeel habitat.
	Offshore renewables – new wave development	Reduce/limit – focus on activities/development that would cause disruption of feeding activity (seasonal), barrier effects and collision risk. Reduce/limit – Follow existing best practice (JNCC Guidelines) in relation to noise. Plus consider seasonal restriction on timing of survey to avoid disruption of feeding activity (depending on location).
	Ports and Harbours	Reduce/limit - best practice to minimise underwater noise impacts on Risso's dolphin.
*n/a No known activities for which management measures exist within the site		

Depending on the detail of management measures adopted for commercial fishing, it is possible that measures in relation to recently designated and proposed Nature Conservation MPAs could contribute to the achievement of dSAC conservation objectives (Table D2.2). To the extent to which this occurs, there could be some double counting in the dSAC management measures and associated cost impacts.



- Recommended dSAC
- SPA
- SAC
- MPA
- pMPA

Date	By	Size	Version
Jun 15	DLW	A4	1
<b>Coordinate System</b>		WGS 1984 UTM Zone 30N	
<b>Projection</b>		Transverse Mercator	
<b>Scale</b>		1:410,000	
<b>QA</b>		NKD	
4321 - Fig1_North_Minch_dSAC.mxd			
Produced by ABPmer			



© ABPmer. All rights reserved, 2015. JNCC; NRW; SNH; NE, 2015; Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION



### Designated Sites near North Minch dSAC

**Figure D1**

Table D.2.2 Management scenarios for North Minch dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aquaculture – finfish	Harbour porpoise	Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries. This should include best practice measures such as net tensioning.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures such as net tensioning.
Commercial fisheries – set nets		Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit , remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure.  Remove or avoid this pressure appropriate.
		Underwater noise from geophysical surveys	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.2 Sea of the Hebrides dSAC Proposal

### D.2.2.1 Overlapping Designations

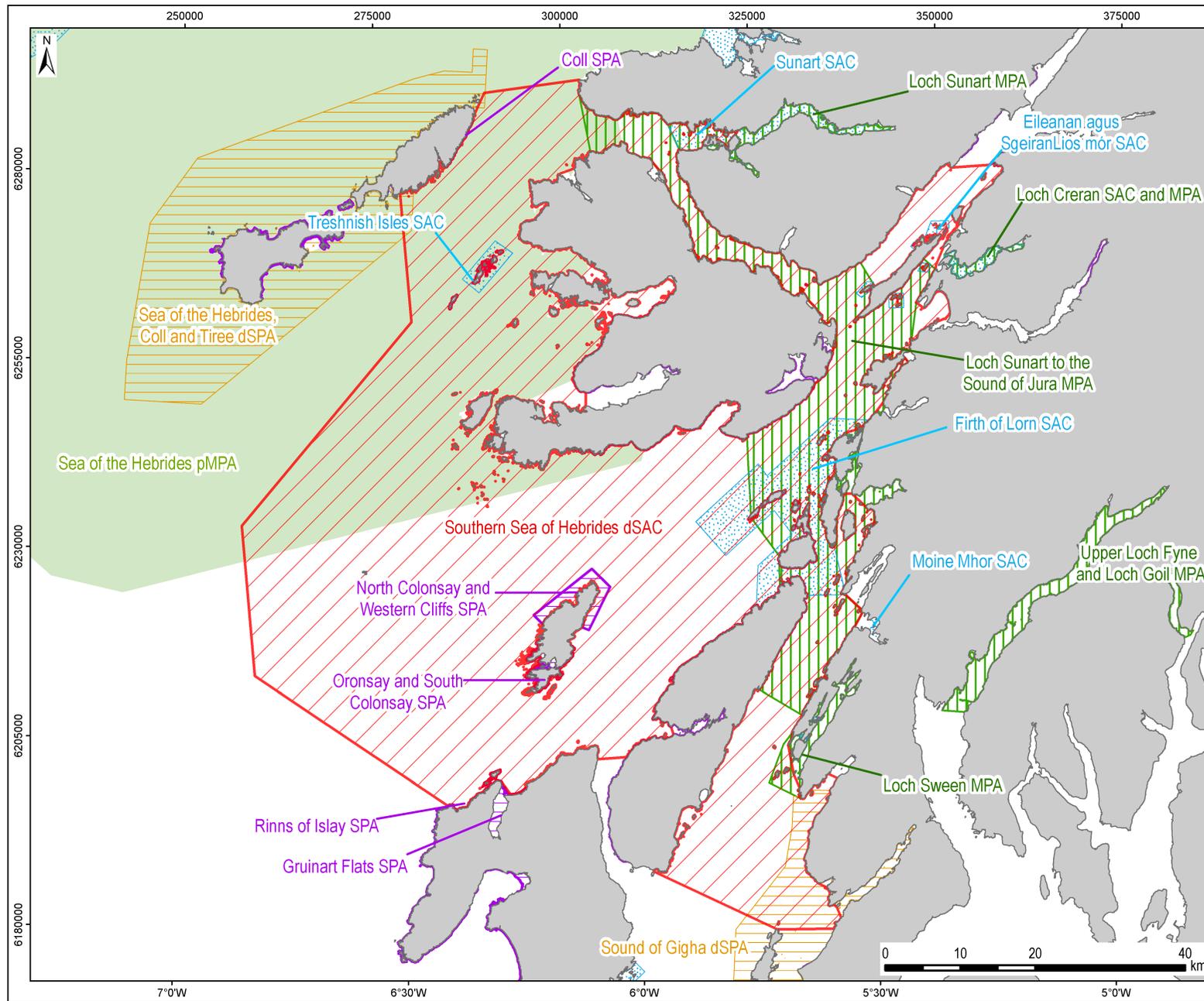
Figure D2 identifies existing and possible designations that overlap with the Sea of the Hebrides dSAC. Table D2.3 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.3 Existing, planned and proposed management measures for overlapping designations for the Sea of the Hebrides dSAC**

Site	Activity	Management Measure
Coll SPA	n/a*	n/a
Gruinart Flats, Islay SPA	n/a	n/a
North Colonsay and Western Cliffs SPA	n/a	n/a
Oronsay and South Colonsay SPA	n/a	n/a
Rinns of Islay SPA	n/a	n/a
Sunart SAC	n/a	n/a
Firth of Lorn SAC	n/a	n/a
Eileanan agus Sgeiran Lios mor SAC	n/a	n/a
Treshnish Isles SAC	n/a	n/a
Moine Mhor SAC	n/a	n/a
Loch Sunart NCMPA	Aquaculture – finfish	Remove or avoid pressures associated with finfish farming from areas of flame shell beds, northern feather star aggregations and serpulid aggregations.
	Commercial fisheries	Remove or avoid pressures by the exclusion of mobile/active gears from areas of flame shell beds and serpulid aggregations. Reduce or limit pressures of intensity of towed / active gears in areas of northern feather star aggregations on mixed substrata. Remove or avoid pressures by the exclusion of static gears from areas within the site where serpulid aggregations are found. Reduce or limit pressures to reduce or limit physical disturbance of flame shell beds
Loch Sunart to the Sound of Jura NCMPA	Commercial fisheries	Reduce or limit the use of mobile/towed active gear spatially and/or temporally to ensure levels of mortality do not affect the long-term viability of common skate associated with the site. Remove or avoid by the exclusion of bottom-set nets and long-lines.
Loch Sween NCMPA	Aquaculture – finfish	Remove or avoid pressures associated with new finfish Farms, undeveloped consents, expansion or relocation where they would be likely to impact on maerl bed. Reduce or limit pressures associated where they would be likely to impact on burrowed mud or sublittoral mud and mixed sediments communities.

Site	Activity	Management Measure
	Commercial fisheries	Remove or avoid pressures by excluding mobile/active gears from areas within Loch Sween where maerl beds and native oysters occur. Reduce or limit pressures of towed / active gear in areas where burrowed mud and sublittoral mud and mixed sediment communities. Reduce or limit static gear fishing on burrowed mud and sublittoral mud and mixed sediment communities. Reduce or limit static gear fishing on maerl beds and where native oysters occur.
Sea of the Hebrides pMPA	Aquaculture – finfish	Reduce/limit – best practice to minimise collision risk from boats.
	Commercial fisheries	Reduce/limit – relating to incidental catch and collision risk. Reduce/limit – relating to fishing for herring and sprat (with emphasis on the limit rather than reduce). Reduce/limit – Recommend focussing management around biogenic habitats (maerl beds, seagrass, native oysters etc.). Reduce/limit – relating to incidental catch (creels) and collision risk. Reduce/limit – measures that support sustainable management of shellfisheries within IHCPA should be considered.
	Military	Reduce/limit
	Ports and harbours	Reduce/limit - best practice to minimise underwater noise impacts on minke whale.
Sound of Gigha dSPA	Aquaculture - finfish	Reduce/limit – best practice to restrict risk of bird entanglement and displacement
	Commercial fisheries	Reduce/limit – relating mainly to mobile bottom gear
	Offshore renewables - tidal	Reduce/limit
	Ports and harbours	Ensure new development proposals do not compromise achievement of site conservation objectives.
Sea of the Hebrides, Coll and Tiree dSPA	Commercial fisheries	Reduce/limit mobile bottom gear. Reduce/limit fishing for sprats and herrings.
	Military	Reduce/limit
	Ports and harbours	Ensure new development proposals do not compromise achievement of site conservation objectives
*n/a	No known activities for which management measures exist within the site	

Depending on the detail of management measures adopted for commercial fishing, particularly in the Sea of Hebrides dMPA, it is possible that these measures could contribute to the achievement of dSAC conservation objectives (Table D2.4). To the extent to which this occurs, there could be some double counting in the dSAC management measures and associated cost impacts.



	Recommended dSAC
	SPA
	dSPA
	SAC
	MPA
	pMPA

Date	By	Size	Version
Jun 15	DLW	A4	1

<b>Coordinate System</b>	WGS 1984 UTM Zone 30N
<b>Projection</b>	Transverse Mercator
<b>Scale</b>	1:700,000
<b>QA</b>	NKD
4321 - Fig2_Sea_of_Hebrides.mxd	
Produced by ABPmer	

© ABPmer. All rights reserved. 2015. JNCC; NRW; SNH; NE, 2015; Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION



**Designated Sites near Southern Sea of Hebrides dSAC**

**Figure D2**

Table D.2.4 Management scenarios for Sea of the Hebrides dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aquaculture – finfish	Harbour porpoise	Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries. This should include best practice measures such as net tensioning.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures such as net tensioning.
Commercial fisheries – set nets		Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit , remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure
		Underwater noise from geophysical surveys	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.3 North Channel and Outer Solway dSAC

### D.2.3.1 Overlapping Designations

Figure D3 identifies existing and possible designations that overlap with the North Channel and Outer Solway dSAC. Table D2.5 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.5 Existing, planned and proposed management measures for overlapping designations for the North Channel and Outer Solway dSAC**

Site	Activity	Management Measure
Outer Ards SPA	n/a*	n/a
Copeland Islands SPA	n/a	n/a
Loch of Inch and Torrs Warren SPA	n/a	n/a
Pisces Reef Complex SAC Offshore	Commercial fisheries	Not known
	Oil and gas	Not known
Luce Bay and Sands SAC	n/a	n/a
The Maidens SAC	n/a	n/a
Slieve Na Griddle rMCZ	Commercial fisheries	Measures to be determined (see below)
South Rigg rMCZ	Commercial fisheries	Measures to be determined (see below)
Solway Firth rMCZ	Commercial fisheries	Measures to be determined (see below)
*n/a No known activities for which management measures exist within the site		

Management measures for the rMCZ and MCZs are still being developed. The measures most likely to provide a benefit to harbour porpoise would be those related to commercial fishing (reduction in fishing effort). These measures are currently being considered by the Fisheries in MPAs Implementation Group. Depending on the final measures implemented these may or may not contribute to the measures required to support achievement of harbour porpoise conservation objectives in the areas to which the measures apply.

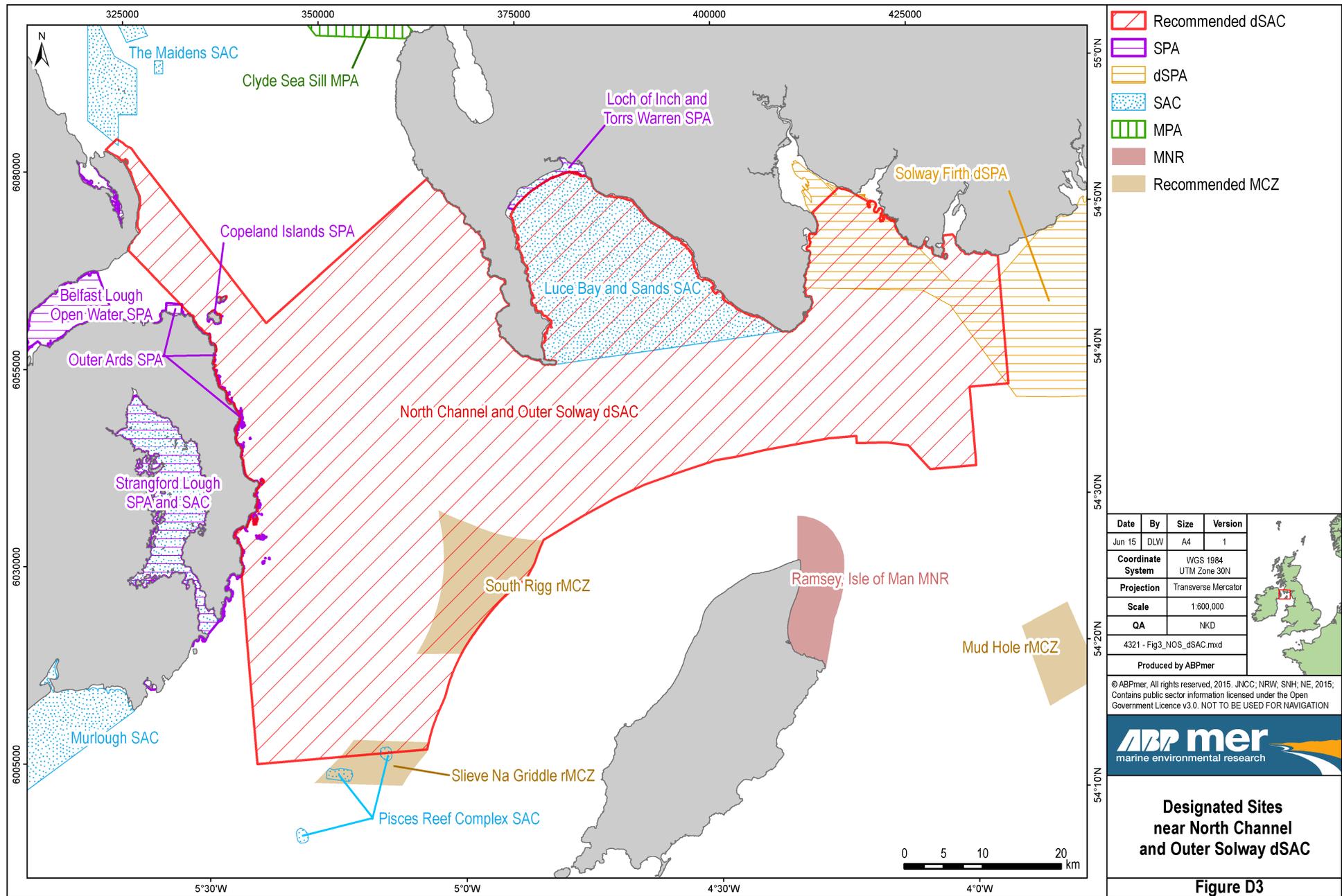


Table D.2.6 Management scenarios for North Channel and Outer Solway dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Commercial fisheries – set nets	Harbour porpoise	Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit, remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit, remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure
		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.4 North Anglesey Marine / Gogledd Môn Forol dSAC

### D.2.4.1 Overlapping Designations

Figure D4 identifies existing and possible designations that overlap with the North Anglesey Marine / Gogledd Môn Forol dSAC Table D2.7 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.7 Existing, planned and proposed management measures for overlapping designations for the North Anglesey Marine / Gogledd Môn Forol dSAC**

Site	Activity	Management Measure
Anglesey Terns / Morwenoliaid Ynys Mon dSPA (this project)	Commercial fisheries	Reduce overall fishing effort; apply spatial controls
	Offshore renewables	Limit areas where development may occur; apply construction and operating conditions
	Oil and gas	Limit areas where development may occur; apply construction and operating conditions
Ynys Feurig, Cemlyn Bay and The Skerries SPA	n/a*	n/a
Glannau Ynys Gybi/ Holy Island Coast SPA	n/a	n/a
Liverpool Bay / Bae Lerpwl SPA	n/a	n/a
Croker Carbonate Slabs SAC Offshore	n/a	n/a
North St George's Channel rMCZ	Commercial fisheries	n/a
North St George's Channel Extension rMCZ	Commercial fisheries	n/a
*n/a No known activities for which management measures exist within the site		

NRW has indicated that any mitigation measures required for harbour porpoise would also already be required under European Protected Species legislation.

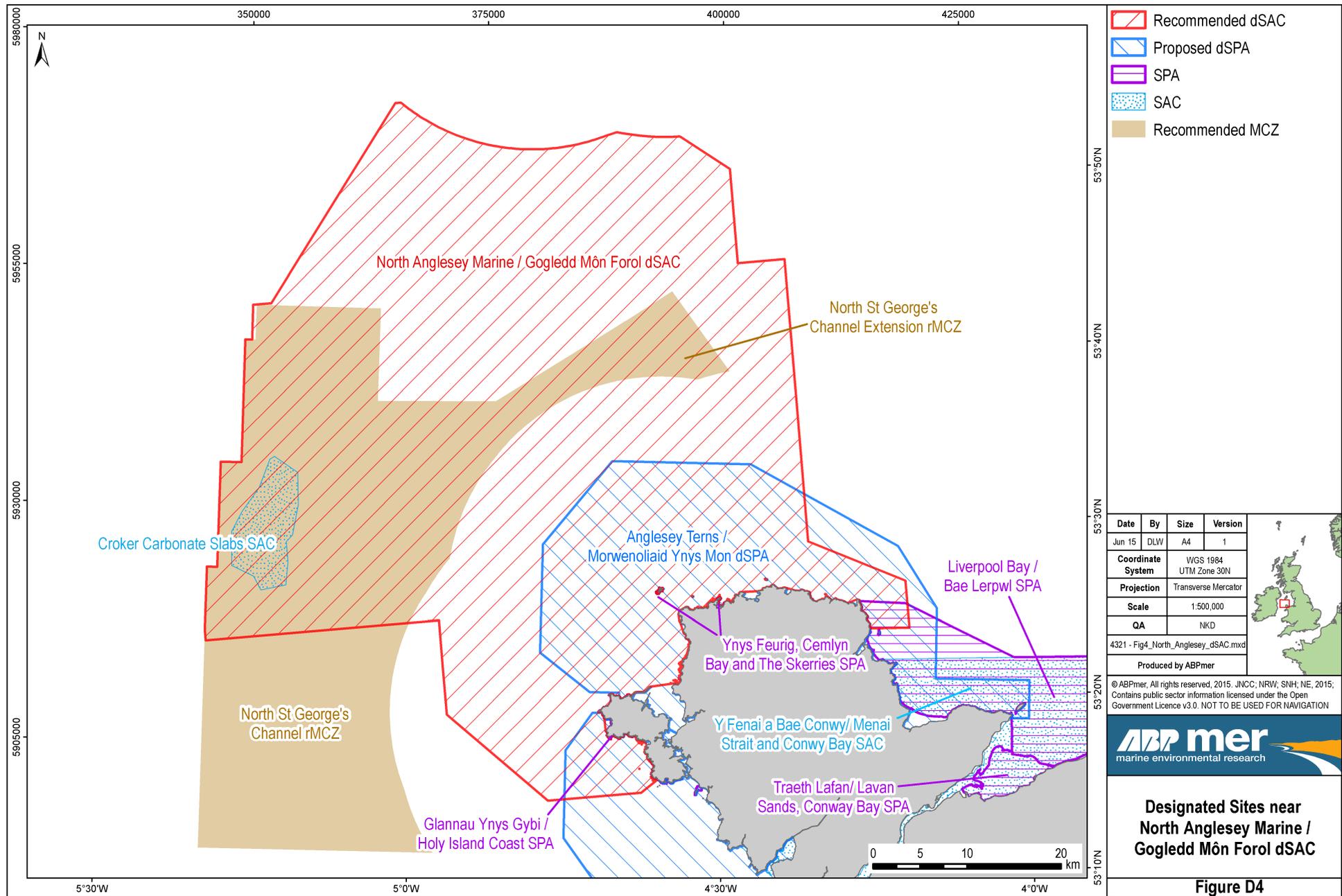


Table D.2.8 Management scenarios for North Anglesey Marine / Gogledd Môn Forol dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Commercial fisheries – set nets	Harbour porpoise	Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit, remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit, remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure
		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.5 West Wales Marine / Gorllewin Cymru Forol dSAC

### D.2.5.1 Overlapping Designations

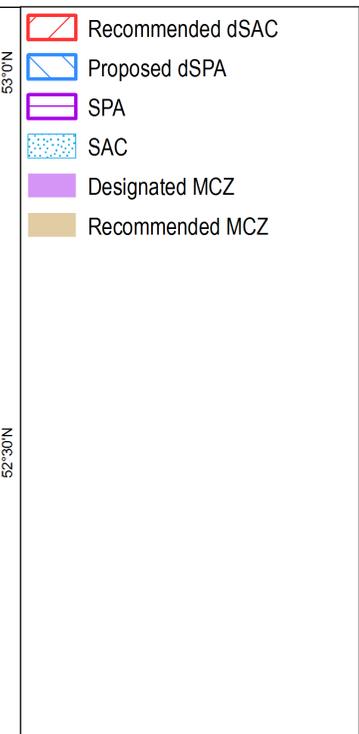
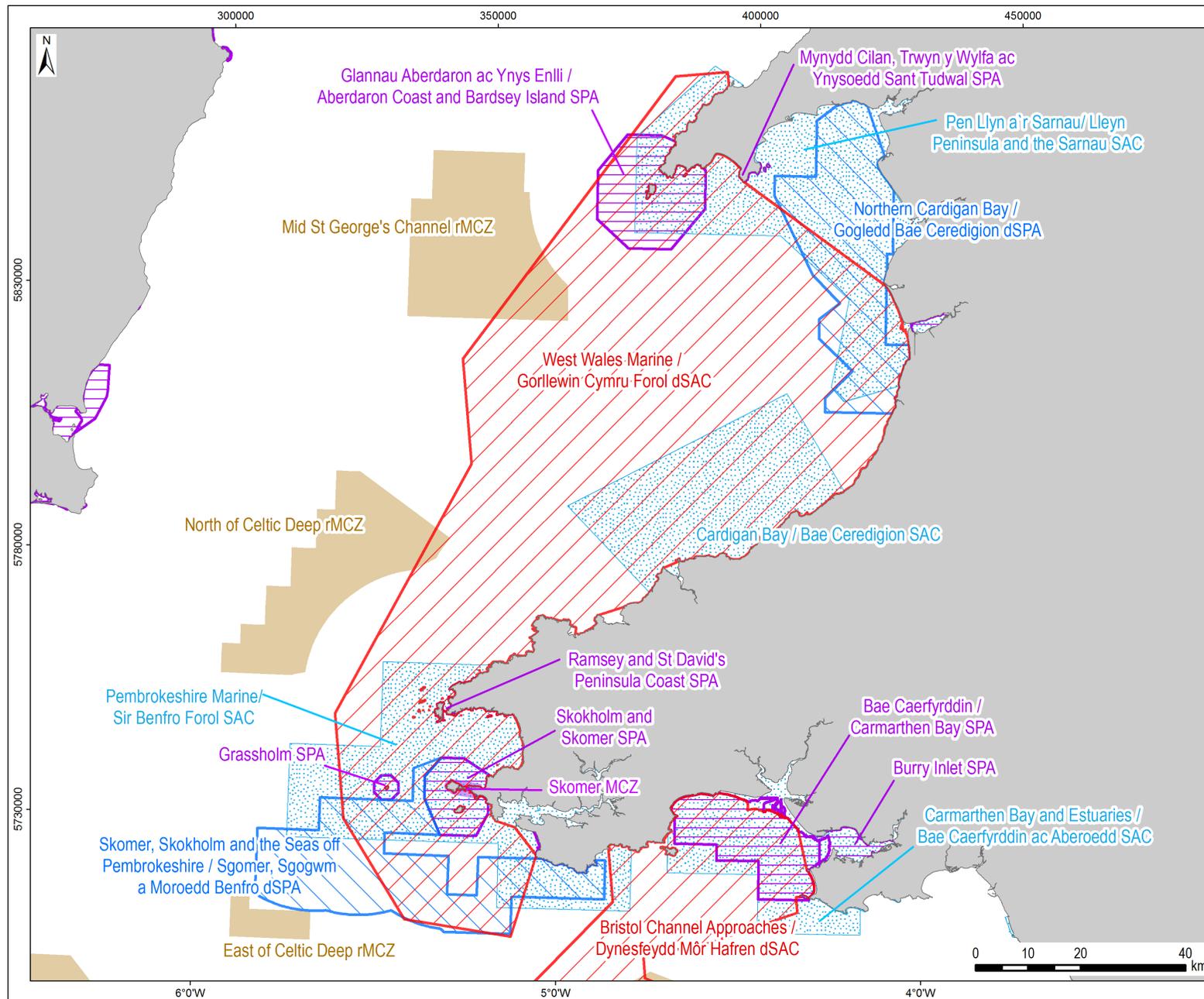
Figure D5 identifies existing and possible designations that overlap with the. West Wales Marine / Gorllewin Cymru Forol dSAC Table D2.9 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.9 Existing, planned and proposed management measures for overlapping designations for the West Wales Marine / Gorllewin Cymru Forol dSAC**

Site	Activity	Management Measure
Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA (this project)	Commercial fisheries	Reduce overall fishing effort; apply spatial controls
	Offshore renewables	Limit areas where development may occur; apply construction and operating conditions
	Oil and gas	Limit areas where development may occur; apply construction and operating conditions
Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA (this project)	Commercial fisheries	Reduce overall fishing effort; apply spatial controls
	Offshore renewables	Limit areas where development may occur; apply construction and operating conditions
	Oil and gas	Limit areas where development may occur; apply construction and operating conditions
	Ports and harbours	Limit areas where development may occur; apply construction and operating conditions
Glannau Aberdaron and Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	n/a*	n/a
Grassholm SPA	n/a	n/a
Skokholm and Skomer SPA	n/a	n/a
Ramsey and St David's Peninsula Coast SPA	n/a	n/a
Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal SPA	n/a	n/a
Cardigan Bay / Bae Ceredigion SAC	Commercial fisheries	Ensure fisheries are managed sustainably and that SAC features are safeguarded from any adverse impact of fishing activities (e.g. physical damage to SAC habitats features, prey depletion of SAC species features)
	Military	Safeguard SAC features from any unfavourable effect of military activities through assessment and management of the activity.
	Offshore renewables	Ensure assessment of all proposals for offshore renewables (wind, tidal and wave power generation) with the potential to cause unfavourable effects on the site's features is carried out.
	Oil and gas	Assessment of all new proposals with the potential to cause unfavourable effects on the site's features
	Ports and harbours	Safeguard SAC features from any unfavourable effect of shipping activities through assessment and management of the activity.

Site	Activity	Management Measure
Pembrokeshire Marine / Sir Benfro Forol SAC	Commercial fisheries	Ensure fisheries management infrastructure is fit for the purpose of safeguarding SAC features. Manage all fisheries consents to safeguard SAC features. Secure management of fisheries resource exploitation to contribute to safeguarding SAC features. Manage fisheries trawling and dredging activities to safeguard SAC features. Manage netting and potting/trapping fishing gear activity to safeguard SAC features. Manage commercial rod and handline fishing to safeguard SAC features.
	Ports and harbours	Manage shipping movements to safeguard SAC features. Manage anchoring and mooring to safeguard SAC features. Manage capital and maintenance dredging to safeguard SAC features. Manage vessel maintenance operations to safeguard SAC features (includes toxic antifoulant use). Manage provision and maintenance of port and harbour facilities to safeguard SAC features. Manage inputs / losses to the SAC marine environment from shipping to safeguard SAC features, (includes introduction of alien species, discharge of ballast water, non-hydrocarbon cargo losses).
Pen Llyn a'r Sarnau / Lleyr Peninsula and the Sarnau SAC	Commercial fisheries	Monitor and manage fisheries so that populations of prey species subject to existing commercial fisheries are equal to, or at greater abundance, than that required to achieve maximum sustainable yield. Enforce relevant wildlife protection legislation.
	Offshore renewables	Treat as plan or project as appropriate.
	Oil and gas	Treat new proposed developments as plan or project as appropriate.
	Ports and harbours	Treat as plan or project as appropriate. Review, revise or establish management practices and spatial, temporal and technical operational limits suitable to secure features at FCS; monitor compliance and enforce.
Mid St George's Channel rMCZ	Commercial fisheries	n/a
North of Celtic Deep rMCZ	Commercial fisheries	n/a
Skomer MCZ	Commercial fisheries	n/a
*n/a No known activities for which management measures exist within the site		

In the area of overlap between the dSAC and Pembrokeshire Marine / Sir Benfro Forol and Pen Llyn a'r Sarnau SACs (which also include marine mammal features) any mitigation measures required for harbour porpoise would already likely be required for the existing SAC marine mammal features. NRW has also indicated that any mitigation measures required for harbour porpoise would also already likely be required under European Protected Species legislation.



Date	By	Size	Version
Aug 15	DLW	A4	1
Coordinate System	WGS 1984 UTM Zone 30N		
Projection	Transverse Mercator		
Scale	1:1,000,000		
QA	NKD		
4321 - Fig5_West_Wales_M_dSAC.mxd			
Produced by ABPmer			

© ABPmer. All rights reserved. 2015. JNCC; NRW; SNH; NE. 2015. Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION



**Designated Sites near West Wales Marine / Gorllewin Cymru Forol dSAC**

**Figure D5**

Table D.2.10 Management scenarios for West Wales Marine / Gorllewin Cymru Forol dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Commercial fisheries – set nets	Harbour porpoise	Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit , remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure
		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.6 Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC

### D.2.6.1 Overlapping Designations

Figure D6 identifies existing and possible designations that overlap with the Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC Table D2.11 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

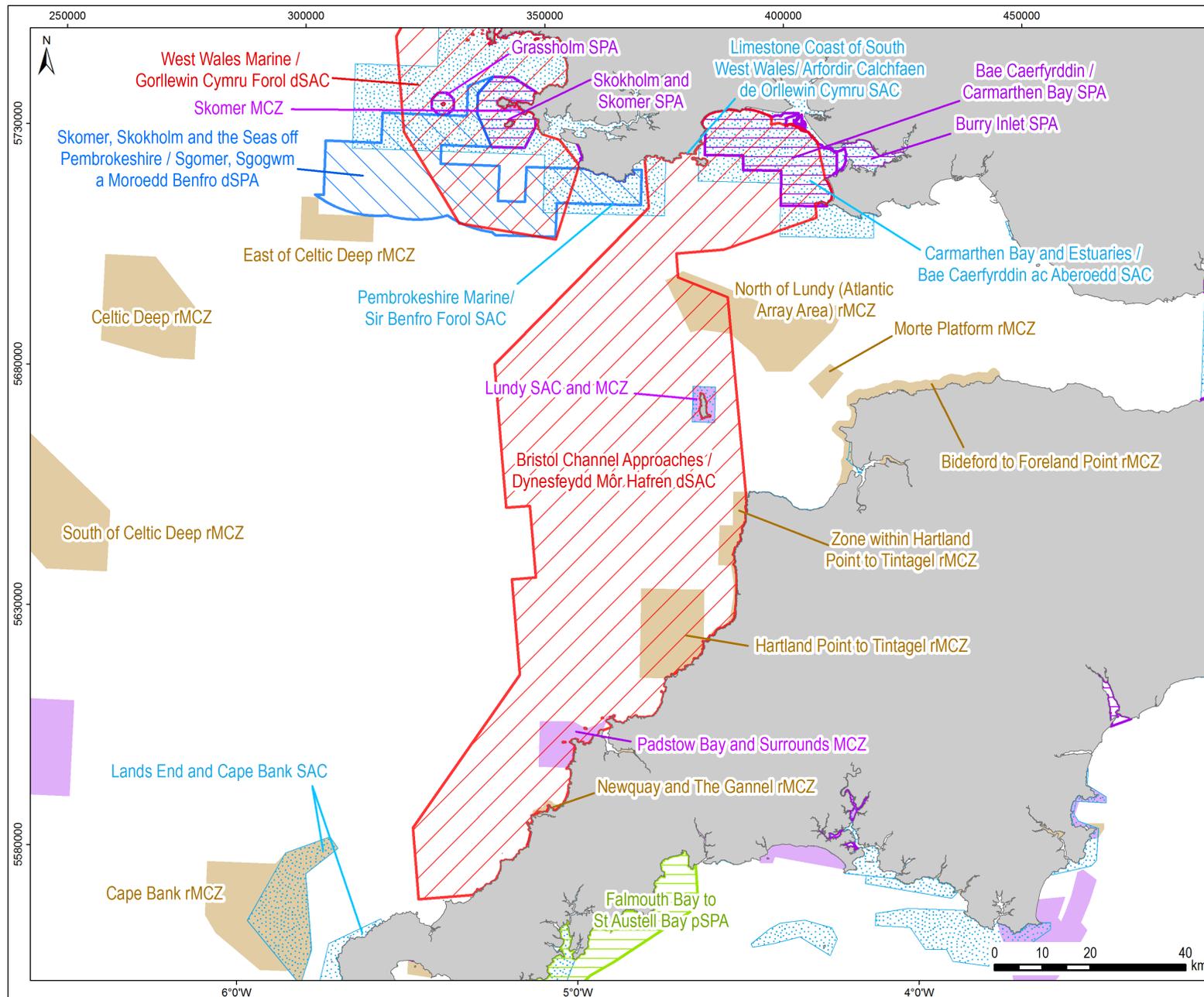
**Table D.2.11 Existing, planned and proposed management measures for overlapping designations for the Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC**

Site	Activity	Management Measure
Bae Caerfyrddin/ Carmarthen Bay SPA	n/a*	n/a
Lundy SAC	n/a	n/a
Pembrokeshire Marine / Sir Benfro Forol SAC	Aggregates	Undertake Appropriate Assessments where there may be a 'likely significant effect' on SAC features
	Commercial fisheries	Ensure fisheries management infrastructure is fit for the purpose of safeguarding SAC features. Manage all fisheries consents to safeguard SAC features. Secure management of fisheries resource exploitation to contribute to safeguarding SAC features. Manage fisheries trawling and dredging activities to safeguard SAC features. Manage netting and potting/trapping fishing gear activity to safeguard SAC features. Manage commercial rod and handline fishing to safeguard SAC features.
	Ports and harbours	Manage shipping movements to safeguard SAC features. Manage anchoring and mooring to safeguard SAC features. Manage capital and maintenance dredging to safeguard SAC features. Manage vessel maintenance operations to safeguard SAC features (includes toxic antifoulant use). Manage provision and maintenance of port and harbour facilities to safeguard SAC features. Manage inputs / losses to the SAC marine environment from shipping to safeguard SAC features,(includes introduction of alien species, discharge of ballast water, non-hydrocarbon cargo losses).
Limestone Coast of South West Wales / Arfordir Calchfaen de Orllewin Cymru SAC	n/a	n/a
Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd SAC	Aggregates	Treat as plan or project as appropriate.
	Commercial fisheries	Monitor and manage fisheries so that populations of prey species subject to existing commercial fisheries are equal to, or at greater abundance, than that required to achieve maximum sustainable yield.
	Ports and harbours	Treat as plan or project as appropriate. Consenting bodies ensure appropriate integration, inclusion and consultation Review, revise or establish management practices and spatial, temporal and technical operational limits suitable to secure features at FCS; monitor compliance and enforce.

Site	Activity	Management Measure
Hartland Point to Tintagel rMCZ	Commercial fisheries	Measures to be determined (see below)
Newquay and The Gannel rMCZ	Commercial fisheries	Measures to be determined (see below)
Zone within Hartland Point to Tintagel rMCZ	Commercial fisheries	Measures to be determined (see below)
Lundy MCZ	Commercial fisheries	This site is within the jurisdiction of the Devon & Severn IFCA, therefore all Devon & Severn IFCA District-wide byelaws will apply to this site, in addition to all relevant national and EU fisheries legislation. Relevant restrictions relating to this site include the proposed Potting and Shellfish Permit Byelaw and the proposed Mobile Fishing Permit Byelaw.
Padstow Bay and Surrounds MCZ	Commercial fisheries	Measures to be determined (see below)
North of Lundy (Atlantic Array area) rMCZ	Commercial fisheries	Measures to be determined (see below)
*n/a No known activities for which management measures exist within the site		

In the area of overlap between the dSAC and Pembrokeshire Marine / Sir Benfro Forol SAC (which also includes a marine mammal feature) any mitigation measures required for harbour porpoise may already be required for the existing SAC marine mammal feature. NRW has indicated that within Welsh waters, any mitigation measures required for harbour porpoise would also already be required under European Protected Species legislation.

Management measures for the MCZs and rMCZs in English waters are still being developed. The measures most likely to provide a benefit to harbour porpoise would be those related to commercial fishing (reduction in fishing effort). These measures are currently being considered by the Fisheries in MPAs Implementation Group. Depending on the final measures implemented these may or may not contribute to the measures required to support achievement of harbour porpoise conservation objectives in the areas to which the measures apply.



**Legend:**

- Recommended dSAC
- Proposed dSPA
- SPA
- pSPA
- SAC
- Designated MCZ
- Recommended MCZ

Date	By	Size	Version
Aug 15	DLW	A4	1

<b>Coordinate System</b>	WGS 1984 UTM Zone 30N
<b>Projection</b>	Transverse Mercator
<b>Scale</b>	1:1,100,000
<b>QA</b>	NKD
4321 - Fig6_BCA_dSAC.mxd	
Produced by ABPmer	

© ABPmer. All rights reserved. 2015. JNCC; NRW; SNH; NE; 2015. Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION

**Designated Sites near  
Bristol Channel Approaches /  
Dynesfeydd Môr Hafren dSAC**

**Figure D6**

Table D.2.12 Management scenarios for Bristol Channel Approaches / Dynesfeydd Môr Hafren dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aggregates	Harbour porpoise	Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Commercial fisheries – set nets		Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit , remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure
		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.7 Southern North Sea dSAC

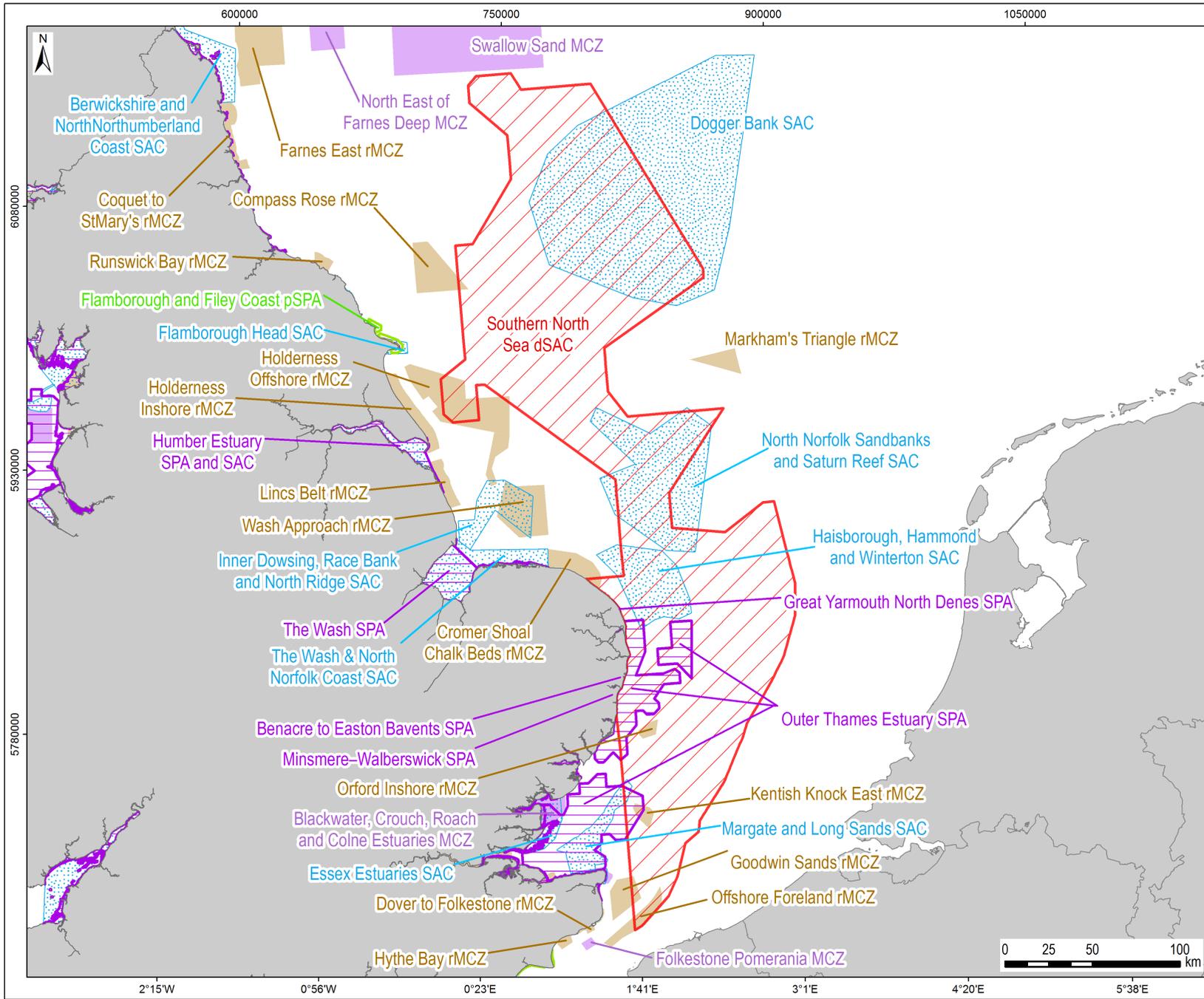
### D.2.7.1 Overlapping Designations

Figure D7 identifies existing and possible designations that overlap with the Southern North Sea dSAC. Table D2.13 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.13 Existing, planned and proposed management measures for overlapping designations for the Southern North Sea dSAC**

Site	Activity	Management Measure
Minsmere-Walberswick SPA	n/a*	n/a
Great Yarmouth North Denes SPA	n/a	n/a
Benacre to Easton Bavents SPA	n/a	n/a
Outer Thames Estuary SPA	n/a	n/a
North Norfolk Sandbanks and Saturn Reef SAC Offshore	Aggregates	Not known
	Commercial fisheries	Not known
	Oil and gas	Not known
Haisborough, Hammond and Winterton SAC Offshore	Aggregates	Not known
	Commercial fisheries	Not known
	Oil and gas	Not known
Dogger Bank SAC Offshore	Aggregates	Not known
	Commercial fisheries	Not known
	Offshore renewables	Not known
	Oil and gas	Not known
Margate and Long Sands SAC	n/a	n/a
Compass Rose rMCZ	Commercial fisheries	Measures to be determined (see below)
Cromer Shoal Chalk Beds rMCZ	Commercial fisheries	Measures to be determined (see below)
Goodwin Sands rMCZ	Commercial fisheries	Measures to be determined (see below)
Holderness Offshore rMCZ	Commercial fisheries	Measures to be determined (see below)
Kentish Knock East rMCZ	Commercial fisheries	Measures to be determined (see below)
Offshore Foreland rMCZ	Commercial fisheries	Measures to be determined (see below)
Orford Inshore rMCZ	Commercial fisheries	Measures to be determined (see below)
*n/a No known activities for which management measures exist within the site		

Management measures for the SACs and rMCZs are still being developed. The measures most likely to provide a benefit to harbour porpoise would be those related to commercial fishing (reduction in fishing effort). These measures are currently being considered by the Fisheries in MPAs Implementation Group. Depending on the final measures implemented these may or may not contribute to the measures required to support achievement of harbour porpoise conservation objectives in the areas to which the measures apply.



- Recommended dSAC
- SPA
- pSPA
- SAC
- Designated MCZ
- Recommended MCZ

Date	By	Size	Version
Jun 15	DLW	A4	1
Coordinate System		WGS 1984 UTM Zone 30N	
Projection		Transverse Mercator	
Scale		1:3,000,000	
QA		NKD	
4321 - Fig7_SN_Sea_dSAC.mxd			
Produced by ABPmer			



© ABPmer, All rights reserved, 2015. JNCC; NRW; SNH; NE, 2015; Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION



**Designated Sites near Southern North Sea dSAC**

**Figure D7**

Table D.2.14 Management scenarios for Southern North Sea dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aggregates	Harbour porpoise	Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Commercial fisheries – set nets		Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit , remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Military activities		Underwater noise	Reduce or limit , remove or avoid	No further management within site boundaries	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.	Update to MoD Environmental Protection Guidelines to encompass the proposed sites and any seasonal sensitivities.
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure
		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.2.8 Outer Moray Firth dSAC

### D.2.8.1 Overlapping Designations

Figure D8 identifies existing and possible designations that overlap with the Outer Moray Firth dSAC. Table D2.15 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.2.15 Existing, planned and proposed management measures for overlapping designations for the Outer Moray Firth dSAC**

Site	Activity	Management Measure
Buchan Ness to Collieston Coast SPA	n/a*	n/a
Troup, Pennan and Lion's Heads SPA	n/a	n/a
Southern Trench dMPA	Commercial fisheries	Reduce/limit the potential to focus management around most sensitive epibenthic features. Reduce/limit incidental catch and collision risk. Reduce/limit fishing for herring and sprat. Reduce/limit the incidental catch (creels) and collision risk
	Oil and gas	Follow existing best practice (JNCC Guidelines) to reduce/limit noise. Consider seasonal restriction on timing of survey to avoid disruption of feeding activity (depending on location).
	Ports and harbours	Use best practice to minimise underwater noise impacts on minke whale
Ythan Estuary and Sands of Forvie dSPA	Commercial fisheries	Reduce/limit fishing for sprats and herrings
	Ports and harbours	Ensure new development proposals and maintenance dredging and disposal do not compromise achievement of site conservation objectives
Moray Firth dSPA	Commercial fisheries	Reduce/limit bottom dredging.
	Port and harbours	Ensure new development proposals and maintenance dredging and disposal do not compromise achievement of site conservation objectives. Spatially manage anchoring of rigs and vessels and temporary storage of gravity base foundations.
*n/a No known activities for which management measures exist within the site		

Depending on the detail of management measures adopted for commercial fishing, particularly in the Southern Trench dMPA, it is possible that the measures could contribute to the achievement of dSAC conservation objectives (Table D2.16). To the extent to which this occurs, there could be some double counting in the dSAC management measures and associated cost impacts.

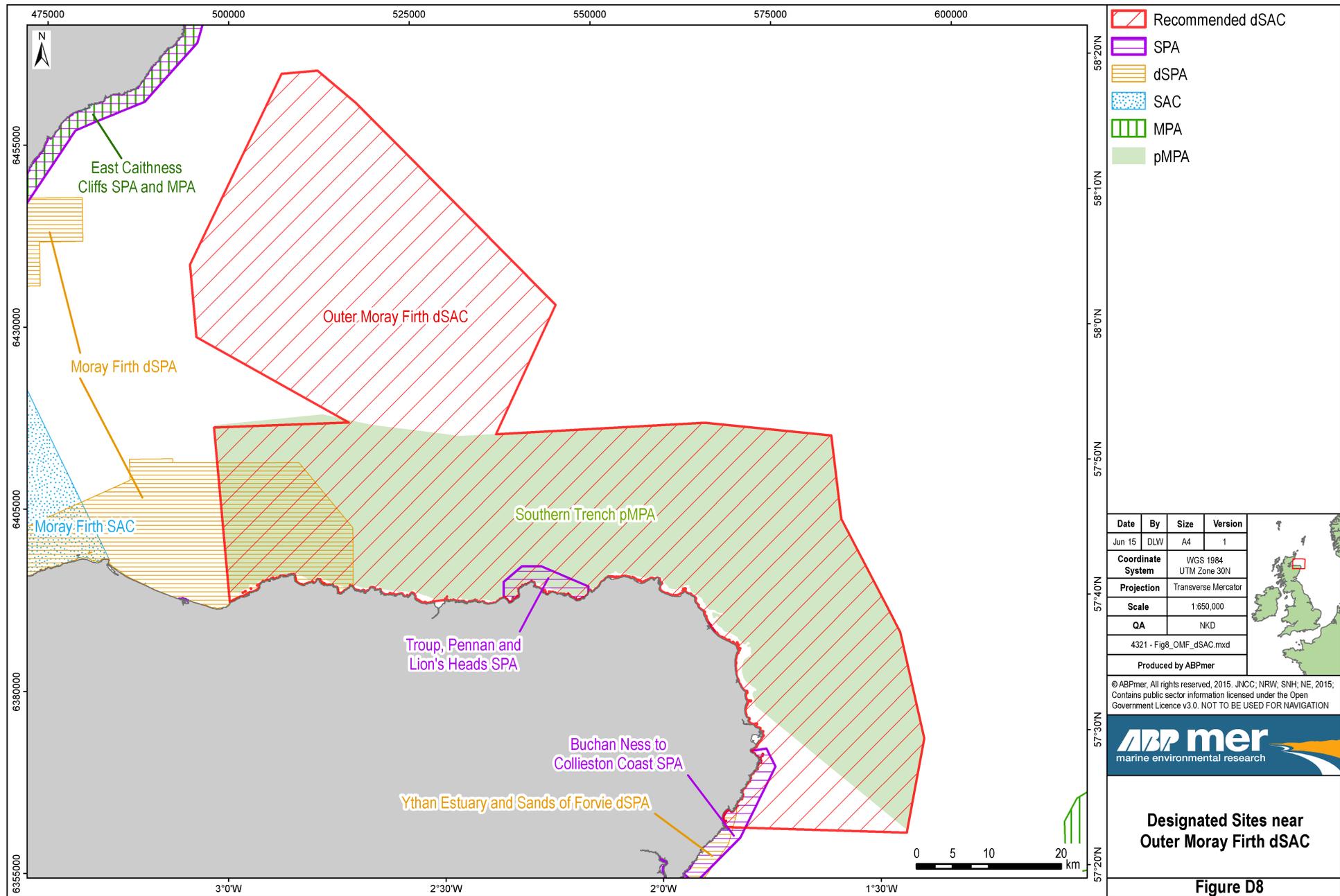


Table D.2.16 Management scenarios for Outer Moray Firth dSAC

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Commercial fisheries – set nets	Harbour porpoise	Removal of non-target species (bycatch of harbour porpoise)	Reduce or limit, remove or avoid	No additional management within site boundary	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure i.e. prohibit use of static nets within site boundary.
Commercial fisheries – salmon nets		Underwater noise from acoustic deterrent devices (ADDs)	Reduce or limit, remove or avoid	No further management within site boundaries	Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.	Remove or avoid this pressure, i.e. prohibit the use of ADDs, within site boundaries and ensure adherence to best practice measures.
Commercial fisheries using bottom and pelagic mobile gears		Removal of target and non-target species (reduction in prey resource)	Reduce or limit	No change to existing	No change to existing	10% reduction in effort across the site (likely to be focussed seasonally).
Offshore Renewables – offshore wind, tidal stream, tidal lagoons		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within site boundaries.
		Collision risk tidal devices (in streams and lagoons)	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure. Remove or avoid this pressure

Activity	Proposed Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
Oil & gas - exploration, development and decommissioning		Underwater noise from geophysical surveys	Reduce or limit , remove or avoid	No further management within site boundaries	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.	Remove or avoid this pressure by imposing a limit on the number and duration of geophysical surveys
		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries..
Ports and harbours – construction projects		Underwater noise from explosives	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.	Remove or avoid this pressure, i.e. prohibit the use of explosives, within site boundaries.
		Underwater noise from percussive piling activity	Reduce or limit, remove or avoid	No further management within site boundaries	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries	Remove or avoid this pressure, i.e. prohibit the use of pile driving within a suitable buffer zone of site.

## D.3 Draft SPAs

### D.3.1 Anglesey Terns / Morwenoliaid Ynys Mon dSPA

#### D.3.1.1 Overlapping Designations

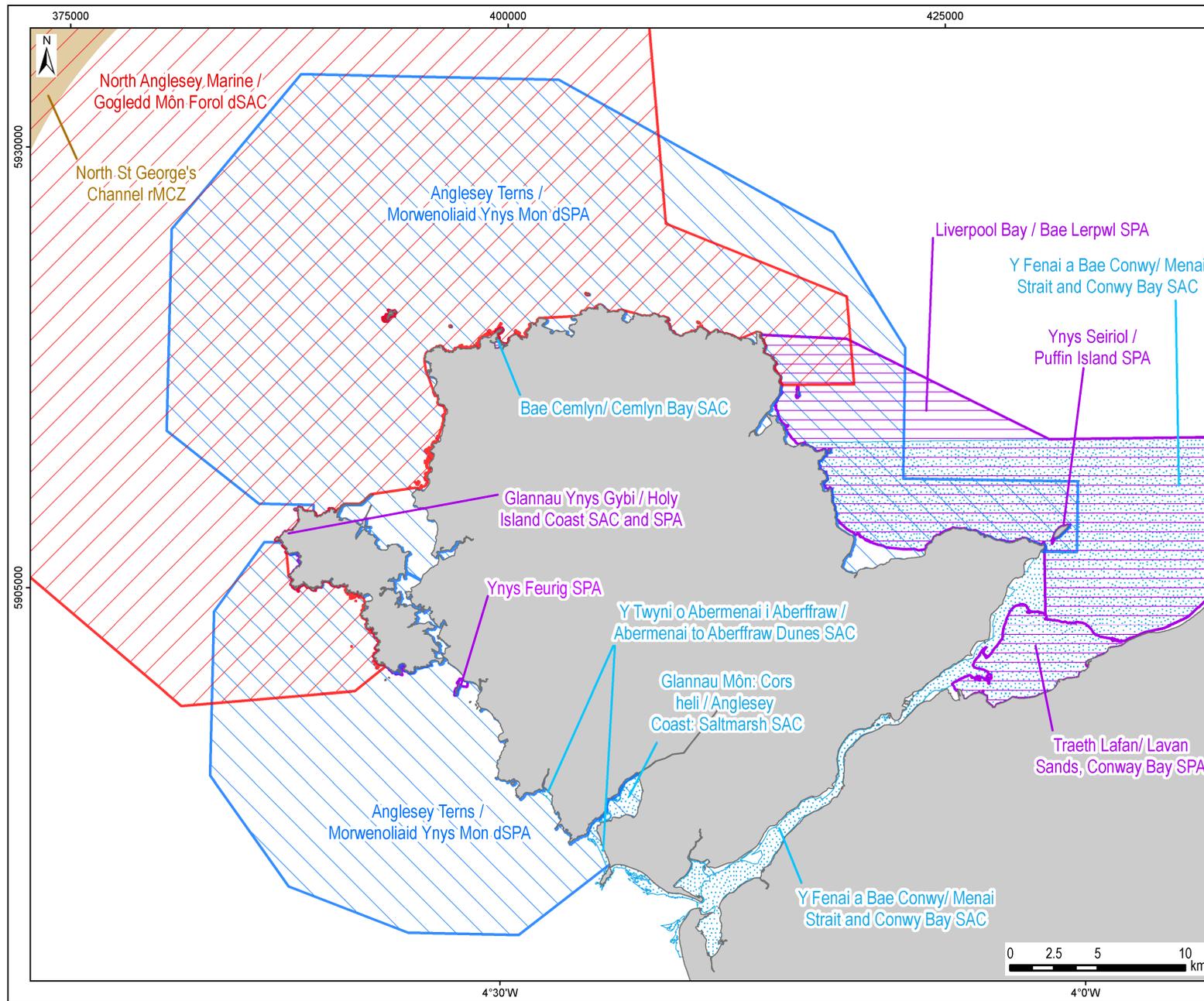
Figure D9 identifies existing and possible designations that overlap with the Anglesey Terns / Morwenoliaid Ynys Mon dSPA Table D3.1 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.3.1 Existing, planned and proposed management measures for overlapping designations for the Anglesey Terns / Morwenoliaid Ynys Mon dSPA**

Site	Activity	Management Measure
North Anglesey Marine / Gogledd MĀ'n Forol dSAC (this project)	Commercial fisheries	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate.
	Offshore renewables	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries. Reduce or limit the pressure through effective mitigation measures within site boundaries. These may be seasonal or year round, as appropriate. Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.
	Oil and gas	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate. Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal.
Glannau Ynys Gybi/ Holy Island Coast SAC and SPA	n/a*	n/a
Y Twyni o Abermenai i Aberffraw/ Abermenai to Aberffraw Dunes SAC	n/a	n/a
Glannau MĀ'n: Cors heli / Anglesey Coast: Saltmarsh SAC	n/a	n/a
Bae Cemlyn/ Cemlyn Bay SAC	n/a	n/a
Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay SAC	n/a	n/a
Ynys Feurig, Cemlyn Bay and The Skerries SPA	n/a	n/a
Ynys Seiriol / Puffin Island SPA	n/a	n/a
Liverpool Bay / Bae Lerpwl SPA	n/a	n/a
*n/a No known activities for which management measures exist within the site		



The Anglesey Terns / Morwenoliaid Ynys Mon dSPA, if designated, will protect the sea area around Anglesey for tern species, but it is recognised that the Ynys Feurig, Cemlyn Bay and The Skerries SPA already provides a high level of protection for terns both at their nesting sites and marine foraging areas. Therefore only a limited range of additional management measures has been identified for the dSPA.



	Recommended dSAC
	Proposed dSPA
	SPA
	SAC
	Recommended MCZ

Date	By	Size	Version
Jun 15	DLW	A4	1

<b>Coordinate System</b>	WGS 1984 UTM Zone 30N
<b>Projection</b>	Transverse Mercator
<b>Scale</b>	1:300,000
<b>QA</b>	NKD

4321 - Fig9\_Anglesey\_Terns\_dSPA.mxd

Produced by ABPmer

© ABPmer. All rights reserved. 2015. JNCC: NRW; SNH; NE, 2015; Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION

**Designated Sites near  
Anglesey Terns / Morwenoliaid  
Ynys Mon dSPA**

**Figure D9**

Table D.3.2 Anglesey Terns / Morwenoliad Ynys Mon dSPA management scenarios

Activity	Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aggregate extraction	Common tern; Arctic tern; Sandwich tern; Roseate tern.	Removal of prey species; Smothering of supporting habitats of prey species; Increased turbidity.	Limit areas where aggregate extraction may occur; apply operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against new proposals within the site boundary
Commercial fisheries - mobile gear		Removal of prey species.	Reduce overall fishing effort; apply spatial controls	No change to existing management	No change to existing management	No change to existing management
Offshore renewable energy –wind and tidal. Potential new schemes		Collision with turbines leading to mortality; Displacement of birds from favoured feeding areas; Loss of food resource.	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against new proposals within the boundary
Oil & gas - development		Oil spillage leading to injury or death of birds; Displacement of birds from favoured foraging areas	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against future oil or gas developments in or near (within 10km of) the site.
Recreational boating		Disturbance or displacement of birds at breeding sites	Reduce/limit	No change to existing management	No change to existing management	Prohibit use of motorised pleasure craft within 500m of known breeding sites between 1 May and 31 August

## D.3.2 Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA

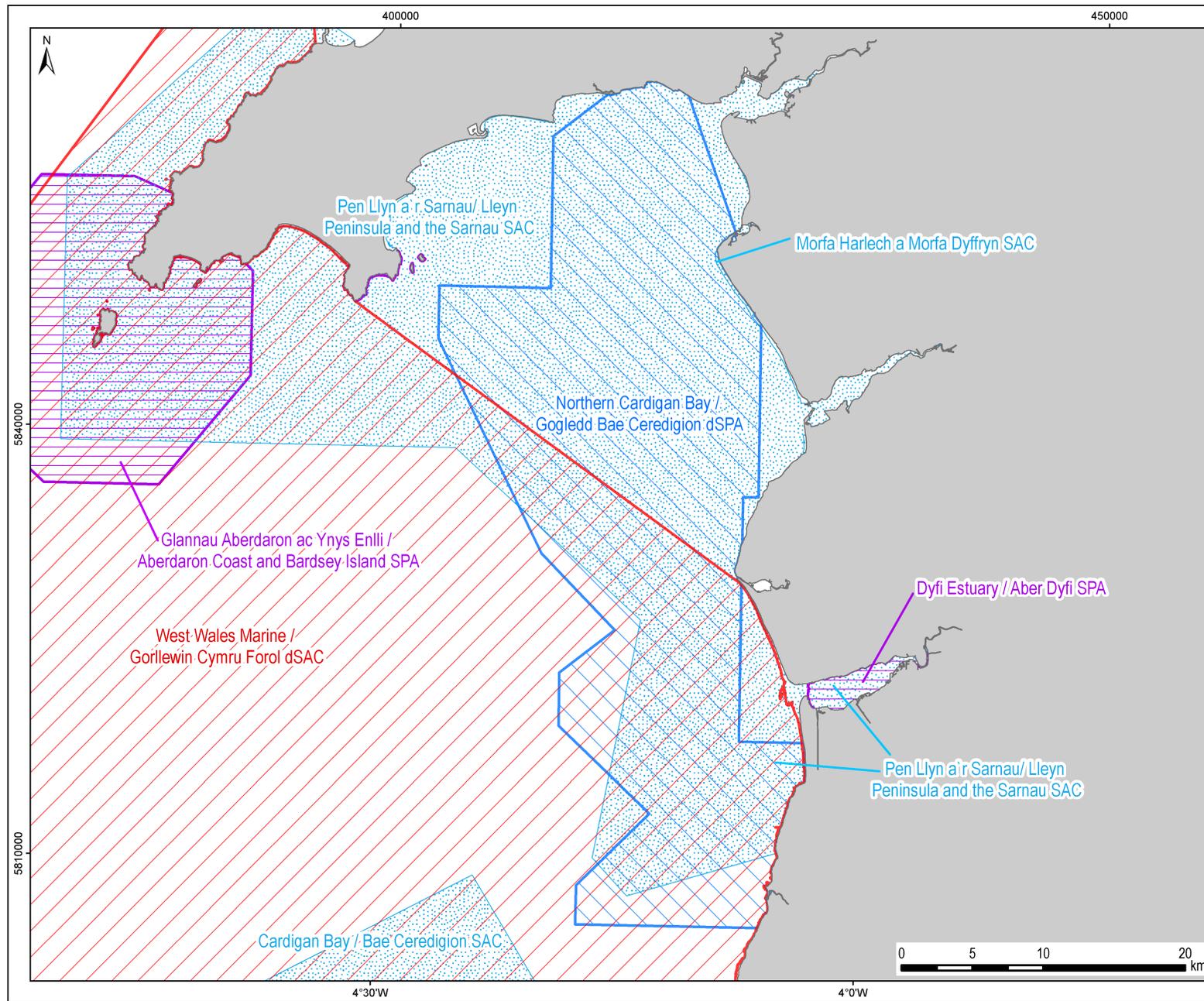
### D.3.2.1 Overlapping Designations

Figure D10 identifies existing and possible designations that overlap with the Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA Table D3.3 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.3.3 Existing, planned and proposed management measures for overlapping designations for the Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA**

Site	Activity	Management Measure
West Wales Marine / Gorllewin Cymru Forol dSAC (this project)	Commercial fisheries	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate. Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.
	Offshore renewables	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries. Reduce or limit the pressure through effective mitigation measures within site boundaries. Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.
	Oil and gas	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.
Pen Llyn a`r Sarnau/ Lley Peninsula and the Sarnau SAC	n/a*	n/a
Morfa Harlech a Morfa Dyffryn SAC	n/a	n/a
*n/a No known activities for which management measures exist within the site		

There is a significant overlap between the dSPA and the Pen Llyn a`r Sarnau/ Lley Peninsula and the Sarnau SAC. Should management measures be required to protect seabed habitats on which Red throated diver depend, it is likely that these would be brought forward in relation to the SAC.



	Recommended dSAC
	Proposed dSPA
	SPA
	SAC

Date	By	Size	Version
Jun 15	DLW	A4	1

<b>Coordinate System</b>	WGS 1984 UTM Zone 30N
<b>Projection</b>	Transverse Mercator
<b>Scale</b>	1:370,000
<b>QA</b>	NKD
4321 - Fig10_NCB_dSPA.mxd	
Produced by ABPmer	

© ABPmer. All rights reserved, 2015. JNCC: NRW; SNH; NE, 2015; Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION

**Designated Sites near  
Northern Cardigan Bay /  
Gogledd Bae Ceredigion dSPA**

**Figure D10**

Table D.3.4 Northern Cardigan Bay / Gogledd Bae Ceredigion dSPA management scenarios

Activity	Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aggregate extraction	Red throated diver	Removal of prey species; Smothering of supporting habitats of prey species; Disturbance/displacement of birds.	Limit areas where aggregate extraction may occur; apply operating conditions	HRA of new proposals to address RTD impacts, but no additional conditions required above those already required to protect features of Pen Llyn a'r Sarnau SAC	HRA of new proposals to address RTD impacts, but no additional conditions required above those already required to protect features of Pen Llyn a'r Sarnau SAC	Presumption against new proposals within the site boundary
Commercial fisheries – mobile gear		Abrasion to the seabed surface causing damage to supporting habitats (bottom gear only); Removal of prey species; Disturbance or displacement of birds.	Reduce overall fishing effort; apply spatial controls	No change to existing management	No change to existing management	Limit use of mobile gear in the areas particularly favoured by RTDs – 10% reduction in total annual fishing effort across the site.
Commercial fisheries – static gear		Removal of non-target species (i.e. bycatch); Removal of prey species; Disturbance or displacement of birds.	Reduce overall fishing effort; apply spatial controls	No change to existing management	Limit use of static gear in the areas particularly favoured by RTDs – 5% reduction in total annual fishing effort across the site.	Limit use of static gear in the areas particularly favoured by RTDs – 10% reduction in total annual fishing effort across the site.

Activity	Protected Feature	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Offshore renewable energy –wind and tidal. Potential new schemes		Collision with turbines leading to mortality. Disturbance or displacement of birds; Loss of food resource.	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals to address RTD impacts, but no additional conditions required above those already required to protect features of Pen Llyn a'r Sarnau SAC	HRA of new proposals to address RTD impacts, but no additional conditions required above those already required to protect features of Pen Llyn a'r Sarnau SAC	Presumption against new proposals within the boundary
Oil & gas - development		Oil spillage leading to injury or death of birds; Disturbance or displacement of birds; Loss of food resource.	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals to address RTD impacts, but no additional conditions required above those already required to protect features of Pen Llyn a'r Sarnau SAC	HRA of new proposals to address RTD impacts, but no additional conditions required above those already required to protect features of Pen Llyn a'r Sarnau SAC	Presumption against future oil or gas developments in or near (within 10km of) the site.
Recreational boating		Disturbance or displacement of birds from favoured foraging areas	Reduce/limit	No change to existing management	No change to existing management	Prohibit use of motorised pleasure craft within most sensitive areas (10% of the site) between 1 October and 31 March

### D.3.3 Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA

Note that a review of the management of fisheries in Welsh waters to ensure compliance with Article 6 of the Habitats Directive is to be carried out by Welsh Government. It is possible that new management measures might be identified in order to ensure protection of the existing SPAs at Anglesey and Skokholm/Skomer in accordance with Article 6, irrespective of the proposed marine extensions.

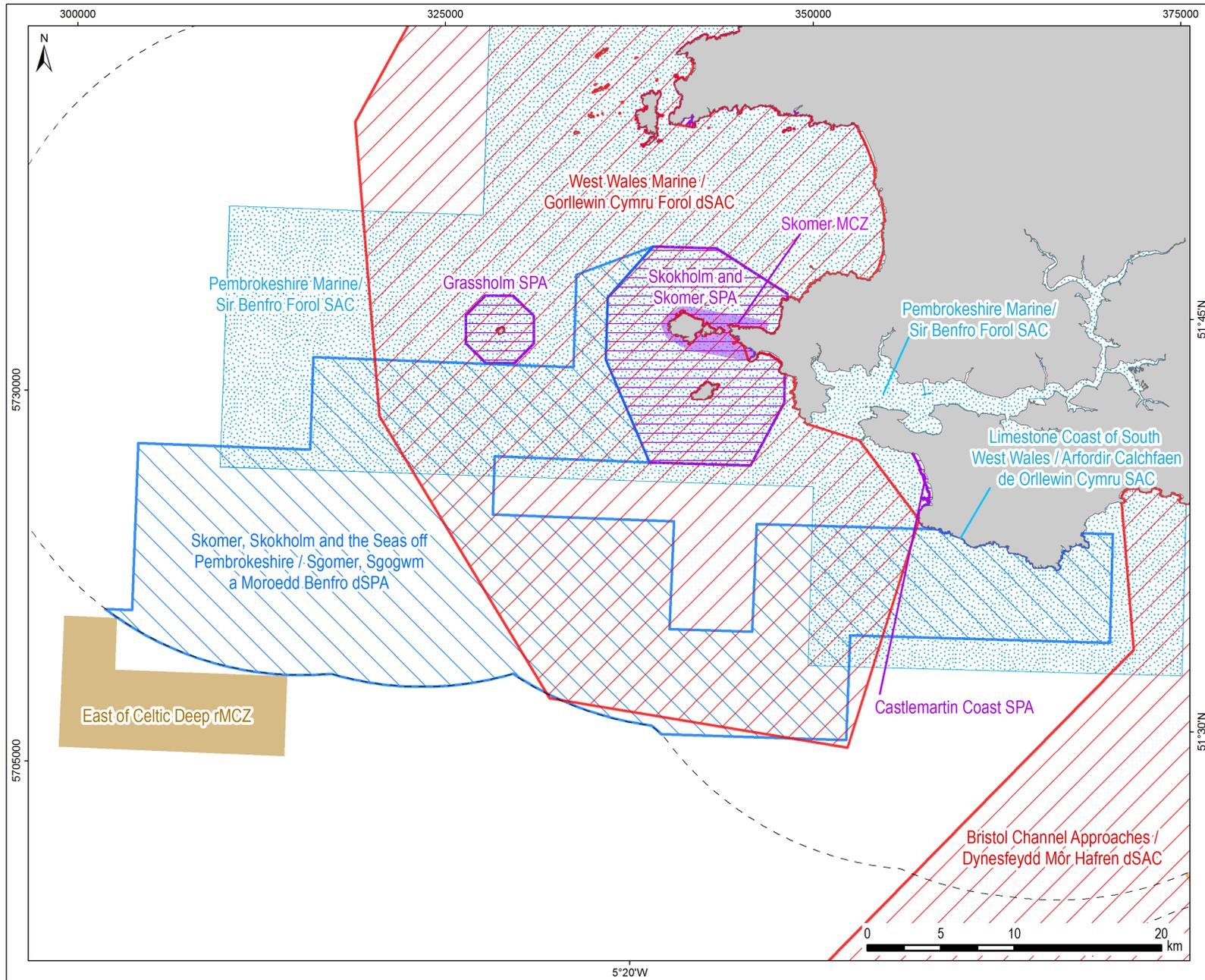
#### D.3.3.1 Overlapping Designations

Figure D11 identifies existing and possible designations that overlap with the. Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA Table D3.5 summarises the existing, planned and proposed management measures associated with these sites which have been taken into account in developing the management scenarios for the new MPA proposal.

**Table D.3.5 Existing, planned and proposed management measures for overlapping designations for the Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA**

Site	Activity	Management Measure
West Wales Marine / Gorllewin Cymru Forol d SAC (this project)	Commercial fisheries	Reduce or limit the pressure by implementing effective bycatch mitigation measures on all vessels within site boundary, with increased enforcement and monitoring on the site. These may be seasonal or year round, as appropriate. Limit or reduce the pressure using effective seasonal or year-round mitigation measures, as appropriate, within site boundaries.
	Offshore renewables	Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries. Reduce or limit the pressure through effective mitigation measures within site boundaries. Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries. These may be seasonal or year round, as appropriate.
	Oil and gas	Reduce or limit the pressure through effective enhanced mitigation measures within site boundaries.
	Ports and harbours	Reduce or limit the pressure by enhanced mitigation measures within site boundaries. These may be seasonal. Reduce or limit the pressure i.e. employing spatio-temporal conditions to piling or reducing the sound levels at source within site boundaries.
Pembrokeshire Marine/ Sir Benfro Forol SAC	n/a*	n/a
Limestone Coast of South West Wales/ Arfordir Calchfaen de Orllewin Cymru SAC	n/a	n/a
Castlemartin Coast SPA	n/a	n/a
Skomer MCZ	Commercial fisheries	n/a
*n/a No known activities for which management measures exist within the site		

The dSPA extends an existing SPA to formally protect a larger sea area used by foraging birds. The presence of the existing designation means that it is likely that some of the management requirements for the dSPA could be implemented under measures for the existing SPA.



	Recommended dSAC
	Proposed dSPA
	12nm Limit
	SPA
	SAC
	Designated MCZ
	Recommended MCZ

Date	By	Size	Version
Aug 15	DLW	A4	1

<b>Coordinate System</b>	WGS 1984 UTM Zone 30N
<b>Projection</b>	Transverse Mercator
<b>Scale</b>	1:350,000
<b>QA</b>	NKD
4321 - Fig11_SSS_dSPA.mxd	
Produced by ABPmer	

© ABPmer. All rights reserved. 2015. JNCC; NRW; SNH; NE, 2015. Contains public sector information licensed under the Open Government Licence v3.0. NOT TO BE USED FOR NAVIGATION

**Designated Sites near Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA**

**Figure D11**

Table D.3.6 Skomer, Skokholm and the Seas off Pembrokeshire / Sgomer, Sgogwm a Moroedd Benfro dSPA management scenarios

Activity	Protected Feature*	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Aggregate extraction	Manx shearwater; Atlantic puffin; Storm petrel; Lesser black backed gull; Seabird assemblage.	Removal of prey species; Smothering of supporting habitats of prey species; Increased turbidity	Limit areas where aggregate extraction may occur; apply operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against new proposals within the site boundary
Commercial fisheries - mobile gear		Abrasion to the seabed surface causing damage to supporting habitats (bottom gear only); Removal of prey species; Disturbance or displacement of foraging birds.	Reduce overall fishing effort; apply spatial controls	No change to existing management	No change to existing management	Limit use of mobile gear in the main bird foraging locations – 10% reduction in total annual fishing effort across the site.
Commercial fisheries – static gear		Removal of non-target species (i.e. bycatch); Removal of prey species.	Reduce overall fishing effort; apply spatial controls	No change to existing management	No change to existing management	Prohibit use of static gear in 'Puffin box'*** immediately west of Skomer Island between 1 May and 31 August.
Offshore renewable energy –wind and tidal. Potential new schemes		Collision with turbines leading to mortality; Disturbance or displacement of foraging birds; Loss of food resource.	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against new proposals within the boundary

Activity	Protected Feature*	Pressure	Management Option	Lower Scenario (No Additional Mitigation Measures)	Intermediate Scenario (Most Likely Scenario)	Upper Scenario (Very Unlikely)
Oil & gas - development		Oil spillage leading to injury or death of birds. Disturbance or displacement of foraging birds; Loss of food resource.	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against future oil or gas developments in or near (within 10km of) the site.
Ports and harbours - port development		Smothering of supporting habitats due to sedimentation; Alteration to coastal processes leading to damage to supporting habitat; Disturbance or displacement of birds from breeding sites.	Limit areas where development may occur; apply construction and operating conditions	HRA of new proposals (i.e. no change from current position)	HRA of new proposals (i.e. no change from current position)	Presumption against further development within or immediately adjacent to the site
Recreational boating		Disturbance or displacement of birds from favoured foraging and/or loafing areas	Reduce/limit	No change to existing management	No change to existing management	Prohibit use of motorised pleasure craft within the 'Puffin box' immediately west of Skomer between 1 May and 31 August
<p>* The SPA is also classified for Chough and Short-eared owl, but these are terrestrial species and not relevant to the Impact Assessment of the proposed marine extension. ** See JNCC Report 461 <a href="http://jncc.defra.gov.uk/pdf/461_final_web.pdf">http://jncc.defra.gov.uk/pdf/461_final_web.pdf</a>, Figure 9.</p>						



ABP Marine Environmental Research Ltd (ABPmer)  
Quayside Suite, Medina Chambers, Town Quay, Southampton SO14 2AQ

T +44 (0)23 80 711840

F +44 (0)23 80 711841

E [enquiries@abpmer.co.uk](mailto:enquiries@abpmer.co.uk)

[www.abpmer.co.uk](http://www.abpmer.co.uk)

Creating sustainable solutions for the marine environment