



**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**

Proposed Natura 2000/Ramsar designation

Impact Assessment Document

Northern Cardigan Bay / Gogledd Bae Ceredigion potential Special Protection Area (SPA)

October 2016

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Mae'r ddogfen hon yn gofnod o'r Aseiad Effaith a gynhaliwyd ar gyfer yr Ardal Gwarchodaeth Arbennig (AGA) arfaethedig Northern Cardigan Bay / Gogledd Bae Ceredigion. Yr oedd fersiwn blaenorol o'r ddogfen hon (dyddiedig Ionawr 2016) yn destun ymgynghoriad a gynhaliwyd gan Cyfoeth Naturiol Cymru (CNC) rhwng mis Ionawr a mis Mai 2016. Mae hwn yn fersiwn derfynol a baratowyd yn sgil yr ymatebion i'r ymgynghoriad hwnnw.

This document is a record of the Impact Assessment undertaken for the Northern Cardigan Bay / Gogledd Bae Ceredigion proposed Special Protection Area (SPA). A previous version of this document (dated January 2016) was the subject of a consultation carried out by Natural Resources Wales (NRW) between January and May 2016. This final version has been prepared in light of the responses to that consultation.

Contents

Summary of Impact Assessment	3
Section 1 Impact Assessment: purpose and process	4
Section 2 Description of proposed designation	5
Section 3 Analysis	6
Section 4 Conclusion	14
Section 5 References	15

Summary of Impact Assessment

Document summary	
Name of proposed designation	Northern Cardigan Bay / Gogledd Bae Ceredigion
Designation type	Special Protection Area
Details	This is a new site
Document version number	2
Date	24/10/2016
Natural Resources Wales declaration	
<p>The information in Section 3 of this document is an accurate description of Natural Resources Wales' understanding of the likely social and economic impacts of this proposed designation based on evidence provided in Developing the Evidence Base for Impact Assessments for Recommended dSACs and dSPAs report (ABPMer 2015) and in light of the responses to the consultation that was carried out on version 1 of this document.</p>	
Signed	
Name	Mary Lewis
Position	Marine Strategic Planning, Energy and Advice Team Leader
Approval by Welsh Government	
<p>I have read the Impact Assessment and I am satisfied that given the available evidence it represents a reasonable view of the likely costs, benefits and impact of the proposal.</p>	
Signed:	
Name:	Julian Bray
Position:	Head of Marine Nature Conservation and Biodiversity Branch
Date:	24 November 2016
Summary	
<p>The SPA proposal under consideration is a new site which has significant overlap with the existing the Pen Llŷn a'r Sarnau SAC. As such, impacts of plans and projects within or in the vicinity of the proposed SPA are already required to be considered through the Habitats Regulation Assessment (HRA) where there is the potential for an effect on SAC features. HRA would now also have to give consideration to the red throated diver and its supporting habitats but this is not considered likely to impose significant further requirements on the majority of plan or project proponents or competent authorities. Based on some assumptions about the need for small ports/harbours in the vicinity of the SPA to undertake works which would require HRA to consider the potential for impacts on red throated divers, a potential new total cost of £99,400 has been estimated over a 20 year period. Additional regulation of ongoing activities which may not be subject to HRA, such as commercial shipping and some sea fisheries activities, have also been considered. Potential impacts have been identified for commercial fishing activities (static gear) based on an assumption that a 5% reduction in fishing effort with static gear would be required within the proposed SPA. The impact of this assumed management measure has been calculated as a reduction in GVA of £133,000 over the 20 year period 2015 to 2034, and a loss of 0.2 full-time equivalent jobs. These estimations are based on an assumption that all affected landings are lost, that is, there is no displacement of fishing activities to alternative fishing grounds.</p>	

Section 1 Impact Assessment: purpose and process

1.1. Purpose

An Impact Assessment (IA) is a process to help policy-makers understand the consequences of possible and actual government interventions in the public, private and third sectors. While an IA cannot inform or affect the decision to designate a Natura 2000 site¹ it will:

- ensure Government/Ministers are aware of the costs, benefits and impacts of a decision to designate an area; and
- inform how the site may need to be managed should it be designated.

1.2. Process

The level of analysis required for an impact assessment should be proportionate to the likely impact of the intervention². When assessing potential impacts of Natura 2000 proposals (Special Areas of Conservation, SAC and Special Protected Areas, SPA) there are 2 possible options: (1) do nothing; or (2) classify the SPA or propose the SAC to European Commission.

The levels of analysis which can be carried out are:

- Level 1** **Description of who and what will be affected** by the proposal compared to the baseline. The main groups that could be affected will include business, public sector and consumers.
- Level 2** Full **description of the impacts** (i.e. positive or negative impacts on any group) and order of magnitude (e.g. low, medium, high).
- Level 3** **Quantify the effect** (e.g. number of applications per year, number of management measures per year) where possible. Where quantitative analysis is not possible, qualitative analysis should be carried out
- Level 4** **Monetise fully** all costs and benefits.

Analysis at levels 1 and 2 is a minimum requirement for Natura 2000 proposals and must be undertaken in all cases. Where impacts are identified, consideration should be given to whether further analysis is required (including further information gathering) under Levels 3 and 4, and a recommendation made to the Welsh Government.

This process has guided the IA for the Northern Cardigan Bay / Gogledd Bae Ceredigion potential Special Protection Area (SPA) and a draft of this IA formed part of the package of information that was consulted on alongside the scientific proposal to designate. The IA and the level of analysis has been reviewed and where necessary adjusted to reflect information received through the consultation process.

¹ Social and economic factors cannot be invoked as reasons for classifying/proposing (or not) a site or extending designations; only nature conservation science criteria are allowed. As such an impact assessment can have no bearing on whether a site is designated or not.

² Developed in line with UK Government Better Regulation Framework (March 2015).

Section 2 Description of the proposed designation

2.1. Background

The proposal is described fully in NRW (2016) which contains Natural Resources Wales' recommendation to Welsh Government to classify Northern Cardigan Bay / Gogledd Bae Ceredigion as a Special Protection Area (SPA) under the EU Birds Directive (2009/14/EC). The proposed designation is intended to support the delivery of the UK's obligations under Article 4 of the Directive, which requires Members States to classify as SPAs the most suitable territories on land and at sea for bird species listed in Annex 1 of the Directive and for regularly occurring migratory species.

The purpose of SPAs is to enable the application of special conservation measures concerning habitats of Annex 1 species and/ or regularly occurring migratory species in order to ensure their survival and reproduction in their areas of distribution.

New SPAs along with existing protected areas in the UK marine area will contribute to achieving Good Environmental Status under the Marine Strategy Framework Directive and the UK's contribution to an ecologically coherent network of marine protected areas under the OSPAR convention.

2.2. Northern Cardigan Bay / Gogledd Bae Ceredigion potential SPA

The Joint Nature Conservation Committee (JNCC) has been working over the past decade on behalf of all the UK Statutory Nature Conservation Bodies (SNCBs) to complete a programme of data collection and analyses to identify a suite of important areas for seabirds within UK waters. JNCC identified approximately 50 Areas of Search around the UK and conducted surveys in all of them to identify sites that might hold important numbers of inshore waterbirds during the non-breeding season, one of which was in the northern part of Cardigan Bay (NRW 2016).

As required by Article 4 of the Birds Directive, the purpose of SPAs is to enable the application of special conservation measures concerning the habitat(s) of Annex 1 species and/or regularly occurring migratory species (other than those listed in Annex 1) in order to ensure their survival and reproduction in their area of distribution.

Northern Cardigan Bay / Gogledd Bae Ceredigion potential SPA qualifies under Article 4.1 of the Birds Directive by regularly supporting more than 1% of the GB population of red-throated diver *Gavia stellata* (O'Brien et al. 2015). This site therefore qualifies for SPA designation in accordance with Stage 1.1 of the UK SPA selection guidelines (JNCC 1999). The JNCC analysis concluded that Northern Cardigan Bay / Gogledd Bae Ceredigion potential SPA supports 7% of GB population of wintering red-throated diver (O'Brien et al. 2015; NRW 2016).

Section 3 Analysis

This analysis is based on Natural Resources Wales' review of the evidence on the potential social and economic costs and benefits of the Northern Cardigan Bay / Gogledd Bae Ceredigion potential SPA, presented in the JNCC-commissioned report examining the potential impact of a proposed UK suite of new SACs and SPAs entitled *Developing the Evidence Base for Impact Assessments for Recommended dSACs and dSPAs* (ABPMer 2015). Version 1 of this document was the subject of a public consultation between January and May 2016, and relevant representations made during the consultation have been taken into account. Potential impacts have been assessed over a 20 year period (2015 to 2034).

3.1 Description of activities that could be affected by the proposed designation or change in designation and the level of impact compared to the baseline of no change

Level 1 and 2

Natural Resources Wales (NRW) has reviewed, in comparison with the baseline, the evidence of the potential benefits and costs of the proposed SPA for the following human activities: aggregates; commercial fisheries; offshore renewables; oil and gas; ports and harbours; recreational boating; and navigational aids. AMPMer (2015) highlights that other sectors could possibly incur minor costs associated with individual projects but considers that any costs to other sectors are unlikely to be significant.

Table 1 summarises the Level 1 and 2 analysis for these activities, and the potential for management requirements and impacts as compared against the baseline. Public sector and social costs and benefits are described in Section 3.2.

NRW does not foresee any significant changes to the current management regime for most activities which fall under the definition of plans or projects under the Habitats Regulations, as there is significant overlap between the proposed SPA and the Pen Llŷn a'r Sarnau SAC for which HRA is already a requirement. The only additional HRA requirement is that impacts of plans and projects would now have to consider potential impacts on the red-throated diver, in addition to impacts on the features for which Pen Llŷn a'r Sarnau SAC is designated. Should additional management measures be required to protect seabed habitats that support the red-throated diver, it is likely that these would already be required in relation to the SAC features (ABPMer 2015).

Level 1 and 2 analysis identified potential low level impacts on commercial fishing activities and ports and harbours, which warranted Level 3 and 4 analysis.

Table 1 Level 1 and 2 analysis of the potential impacts of the proposed SPA on activities considered and the potential for additional management requirements (based on evidence from ABMer 2015 and responses to the consultation on version 1 of this document).

Analysis	Level 1		Level 2	
Activity	Baseline	Impact of proposed SPA	Description of impact	Magnitude of impact
Aggregates	There are currently no existing licensed marine aggregate sites, application areas or prospecting areas within the vicinity of the proposed SPA. The potential for aggregate extraction from the proposed SPA is considered to be low.	Any new proposals within the vicinity of the proposed SPA would require Habitats Regulations Assessment (HRA), taking consideration of the red throated diver but no additional conditions required above those already required to protect the features of the Pen Llŷn a'r Sarnau SAC.	No impact	Not applicable
Commercial fisheries-mobile and static gears	The key fishing gears used in the proposed SPA are pots and traps. Only UK vessels are permitted to fish within the inshore area (<6nm); and no foreign vessels operate within the proposed SPA.	It is possible that the proposed SPA could require some reduction in static fishing gear use during the winter months in areas particularly favoured by red-throated divers during the non-breeding season, to reduce disturbance of birds. An assumed 5% reduction in the total annual static gear effort across the proposed SPA has been considered ³ . It is considered unlikely that the proposal would require any further management measures	Negative	Low

³ Note that in the event that measures of this nature were considered necessary, it is likely that they would be targeted towards specific locations and activities rather than expressed in terms of a blanket reduction in fishing effort across the site (ABPMer 2015).

Analysis	Level 1		Level 2	
Activity	Baseline	Impact of proposed SPA	Description of impact	Magnitude of impact
		for commercial fishing activities within the proposed SPA over and above current measures ⁴ .		
Offshore renewables	This includes activities associated with offshore wind, wave, tidal stream and tidal lagoon energy production together with transmission capacity. There are no existing or proposed developments within or in proximity to the proposed SPA.	Any new proposals within the vicinity of the proposed SPA would require Habitats Regulations Assessment (HRA), taking consideration of the red throated diver but no additional conditions required above those already required to protect the features of the Pen Llŷn a'r Sarnau SAC.	No impact	Not applicable
Oil and gas	There are no existing oil and gas licences and no current awards under the 26 th , 27 th or 28 th oil and gas licensing within or in proximity of the proposed SPA. Further licensing rounds could result in more licence areas but it is not possible to estimate the number, nature of timing of such awards. Given the lack of historical oil and gas activity within the proposed SPA, it is considered unlikely that there	Any new proposals within the vicinity of the proposed SPA would require Habitats Regulations Assessment (HRA), taking consideration of the red throated diver but no additional conditions required above those already required to protect the features of the Pen Llŷn a'r Sarnau SAC.	No impact	Not applicable

⁴ 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 the Welsh Government. It is possible that new management measures might be identified in order to ensure protection of the existing SPA in accordance with Article 6.

Analysis	Level 1		Level 2	
Activity	Baseline	Impact of proposed SPA	Description of impact	Magnitude of impact
	will be significant levels of activity in the future.			
Ports and harbours	This includes activities associated with port/harbour development and maintenance activities including maintenance dredging and disposal. A number of industries are strongly related to the ports and harbour sector e.g. ship building, oil and gas, commercial fishing, maritime transportation (including ferry services) and leisure moorings. There are no large ports in close proximity to the proposed SPA but there are 7 small ports with quays or jetties within or in proximity to the proposed SPA.	Any new proposals within the vicinity of the proposed SPA would require Habitats Regulations Assessment (HRA), taking consideration of the red throated diver but no additional conditions required above those already required to protect the features of the Pen Llŷn a'r Sarnau SAC. However there could be additional costs associated with providing information about potential impacts on red throated divers as part of HRA of port and harbour related developments (for example, extension or modification of harbour structures), dredging (capital and maintenance) and dredge spoil disposal (if disposal sites in or in the vicinity of the SPA are used).	Negative	Low
Recreational boating	Recreational boating includes small, medium and large sailing vessels, yachts, powerboats and motorboats. Voluntary codes of conduct exist to reduce impacts of recreational activities on marine Natura 2000 features (in	Activity during the winter months is expected to be very low therefore it is unlikely that any additional management measures would be required on recreational boating activities within the proposed SPA over and above existing requirements.	No impact	Not applicable

Analysis	Level 1		Level 2	
Activity	Baseline	Impact of proposed SPA	Description of impact	Magnitude of impact
	Pen Llŷn a'r Sarnau SAC).			
Navigation aids	This includes the installation, maintenance, modification and decommissioning of lighthouses, buoys and other navigation markers. There are a number of such assets in and around the proposed SPA.	It is unlikely that any additional management measures would be required in relation to these activities, over and above existing requirements. Activities connected with the routine maintenance of navigational aids (such as marker buoys) within the SPA boundary or in the proximity of the SPA would be unlikely to significantly affect the red throated diver population.	No impact	Not applicable

Level 3 and 4

Commercial fisheries

It is possible that the proposed SPA would require a reduction in static fishing gear use (predominantly pots, traps and set nets) to reduce disturbance of red-throated divers by the presence of vessels. An assumed 5% reduction in the total annual static gear fishing effort across the site has been considered⁵. Potential impacts of this assumed management measure have been identified for commercial fishing activities (static gear) (Table 1 above) and further analysis of the evidence was undertaken to, where possible, quantify and monetise these impacts (Table 2).

Potential impacts have been calculated as a total reduction in GVA over the period of 2015 to 2034 of £133,000, and a loss of 0.2 full-time equivalent jobs (Table 2). These estimations are based on an assumption that all affected landings are lost, that is, there is no displacement of fishing activities to alternative fishing grounds (ABPMer 2015). It is possible that, if additional measures were to be introduced, some or all of the possible reduction in effort (and hence in GVA) would be offset by displacement to other locations.

Table 2 Level 3 and 4 analysis of potential costs to commercial fisheries (static gear only) of the proposed SPA (ABPMer 2015). The reduction in GVA is the estimated total reduction over the period 2015 to 2034. These estimations are based on an assumption that all affected landings are lost, that is, there is no displacement of fishing activities to alternative fishing grounds.

Analysis	Level 3	Level 4
Activity	Quantified/Qualified effect	Monetised costs/benefits
Commercial fisheries - static gears only	Impact in terms of a reduction in: 1. Gross Value Added (GVA) ⁶ 2. Number of jobs (FTE ⁷)	Reductions: 1. £133,000 2. 0.2 FTE

Ports and harbours

It is possible that port/harbour operators would incur additional costs when carrying out Habitats Regulations Assessments (HRAs) of developments, through the additional requirement to include potential impacts on the red throated diver population of the pSPA, which would be over and above the information requirements for conducting HRAs in relation to existing SAC and SPA features (including in particular the Pen Llŷn a'r Samau

⁵ Note that should such measures be considered necessary, it is likely that they would be targeted towards specific locations and activities rather than a blanket reduction in fishing effort across the site (ABPMer 2015).

⁶ Includes both direct and indirect effects. Direct effects: if the loss of landings that results in a loss of traditional fishing grounds reduces the output of the sector which will, all else being equal, reduce the GVA generated by the sector. Indirect effects: if the decrease in output reduces this sector's demand on their suppliers, there will be knock-on effects on those industries that supply them services e.g. diesel suppliers, gear suppliers (ABPMer 2015).

⁷ FTE: Full time equivalent. Includes direct (catching sector) & indirect (upstream supply chain) employment.

SAC). Further analysis has been undertaken to quantify and monetise this impact as far as possible.

The potential impact has been calculated based on the following assumptions (see ABP Mer 2015):

- Seven ports/harbours within or close to the pSPA where developments would need to address potential impacts on red throated divers through the HRA process (Aberystwyth, Aberdyfi, Barmouth, Pensarn, Porthmadog, Pwllheli, Abersoch);
- Each port to undertake, over the 20 year period covered by this Impact Assessment, one capital project and one dredge spoil disposal operation requiring HRA in relation to potential red throated diver impacts (i.e. 14 projects in total);
- Additional costs for each HRA (over and above existing HRA costs) to fully consider red throated divers of £7,100 (at 2015 prices).

This gives a total cost to this sector of £99,400 over 20 years (14 projects x 7,100) (Table 3). The cost burden would fall largely on the port/harbour authorities themselves, as the bodies responsible both for conducting the HRAs and providing the necessary information to do so. In most cases these harbour authorities are in the public sector (local authorities).

Table 3 Level 3 and 4 analysis of potential costs to ports and harbours sector (see text for the assumptions on which this is based)

Analysis	Level 3	Level 4
Activity	Quantified/Qualified effect	Monetised costs/benefits
Ports and harbours	Direct monetary cost	£99,400 (2015 prices)

3.2 Public sector and social costs and benefits of the proposed designation (compared to the baseline of no change)

3.2.1 Public sector costs and benefits

Costs to the public sector of the Northern Cardigan Bay / Gogledd Bae Ceredigion draft SPA have been considered in terms of:

- Preparation of marine management schemes
- Preparation of Statutory Instruments
- Development of voluntary measures
- Site monitoring
- Compliance and enforcement
- Promotion of public understanding
- Regulatory and advisory costs associated with licensing decisions and Review of Consents.

Estimated total public sector costs of £282,000 over the 20 year period 2015 to 2034 were identified for the Northern Cardigan Bay / Gogledd Bae Ceredigion potential SPA and are summarised in Table 4.

Table 4 Summary of the public sector costs (discounted) arising from the designation and management of the site (2015 to 2034 inclusive) (ABP Mer 2015).

Quantified public sector costs	£
Preparation of statutory instruments	3,000
Development of voluntary measures	4,000
Site monitoring	272,000
Regulatory and advisory costs associated with licensing decisions ⁸	3,000
Total	282,000
Average annual costs	14,100

3.2.2 Social costs and benefits

The potential social costs of the proposal are covered by the analysis of activities in section 3.1 above, being directly related to the economic implications in different sectors. No other social costs have been identified.

Effective conservation of wild bird populations, including through the identification and effective protection and management SPAs, can provide a wide range of social benefits by creating opportunities to enjoy and appreciate wildlife and the associated habitats, landscapes and seascapes, such as through tourism, formal and informal recreational activity, artistic and spiritual appreciation and recognition of 'non-use' or intrinsic values in the natural world. However no attempt has been made to characterise these social benefits in detail or to quantify them in relation to this proposal because of the lack of empirical evidence that can be reliably referenced to this particular proposal (as distinct from other wildlife, habitat or landscape conservation measures in the immediate vicinity or further afield). Attempting to quantify these benefits would entail disproportionate effort in the current context.

3.3 Other sensitivities or areas of possible concern

Based on the available evidence, NRW considers that there are no other sensitivities or significant areas of possible concern regarding the proposed SPA.

⁸ This does not include costs described in Table 3 specifically relating to HRA of port and harbour related development.

Section 4 Conclusion

NRW has reviewed the available information on current and future activities in the Northern Cardigan Bay / Gogledd Bae Ceredigion potential SPA, and has considered the potential for additional management requirements and the impact they would have on marine users and regulators.

The SPA proposal under consideration is a new site, but which has significant overlap with the existing Pen Llŷn a'r Sarnau SAC. As such, impacts of plans and projects within or in the vicinity of the proposed SPA are already required to be considered through the Habitats Regulation Assessment (HRA) where there is the potential for an effect on SAC features. HRA would now also have to give consideration to the red throated divers and their supporting habitat, although should management measures be required to protect seabed habitats that support the red-throated diver, it is likely that these would in any case need to be brought forward in relation to the SAC. It is therefore considered unlikely that the proposed SPA will impose significant further requirements on proponents of the majority of plans and projects or on competent authorities. However, based on some assumptions about the need for small ports/harbours in the vicinity of the SPA to undertake harbour development works which would require HRA, and the need for those HRAs to properly consider the potential for impacts on the red throated diver population and its habitat, a potential new total regulatory cost of £99,400 has been estimated over a 20 year period, the majority of which would fall on the harbour authorities concerned.

Additional regulation of ongoing activities which may not be subject to HRA, such as commercial shipping and some sea fisheries activities, have also been considered. Any such activities currently taking place in the area proposed for designation, and the exercise of regulatory functions by relevant/competent authorities in that area, are already subject to the requirements of the Habitats Regulations, particularly in relation to the Pen Llŷn a'r Sarnau SAC.

Potential impacts have been identified for commercial fishing activities (static gear) based on an assumption that a 5% reduction in fishing effort with static gear would be required within the proposed SPA. Potential impacts of this assumed management measure have been calculated as a reduction in GVA over the period of 2015 to 2034 of £133,000 (predominantly as a result of reduced landings), and a loss of 0.2 full-time equivalent jobs. These estimates are based on an assumption that all affected landings are lost, that is there is no displacement of fishing activities to alternative fishing grounds. If measures of this kind were introduced, it is possible that effort would be displaced to other nearby locations, rather than reduced overall.

Not counting the potential additional HRA costs for harbour developments referred to above, total public sector costs for the period 2015 to 2034 are estimated at £282,000, equating to annual public sectors costs of £14,100. The major element (>95%) of these estimated public sector costs would be for monitoring of the red throated diver population.

A range of potential social benefits have been identified but these are considered likely to be minor and have not been quantified.

Section 5 References

ABP Mer (2015). *Developing the evidence base for impact assessments for recommended dSACs and dSPAs.* Report Commissioned by JNCC. November 2015.

JNCC (1999). *The Birds Directive – selection guidelines for Special Protection Areas.* JNCC, Peterborough. Available at: <http://jncc.defra.gov.uk/page-1405>

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O' Brien et al. (2015). *An assessment of the numbers and distribution of wintering waterbirds using Bae Ceredigion /Cardigan Bay area of search.* JNCC Report No. 555. Available at: <http://jncc.defra.gov.uk/page-6992>