



Habitat Regulations Assessment Record

Name of relevant CCC Officer:

George HT Ryley, Highway's Ecologist

1. INTRODUCTION

This is a record of the Habitats Regulations Assessment of the proposal outlined below, undertaken by Ceredigion County Council as the Highway's Authority. This assessment is required by Regulation 63 of The Conservation of Habitats and Species Regulations 2017, in accordance with the EC Habitats Directive (Council Directive 92/43/EDC) before the Council as the 'Competent Authority'.

2. INFORMATION ABOUT THE PROJECT

2.1 Type of activity:

Bridge Abutment Maintenance and Scour Protection

2.2 National Grid reference:

SN 58704 84018

2.3 Site reference:

ED3816 PRoW Glan Y Mor Footbridge, Clarach

2.4 Brief description of the project

The northern abutment of the PRoW bridge has experienced scouring, requiring remediation and protection. A two-part operation is proposed:

Abutment Maintenance: An area of up to two metres in front of the east and west parapets of the northern abutment will be shuttered off using sandbags and/or ton bags, or equivalents, and the water pumped out through sediment filter bags. Once the working areas are dry, marine-grade concrete will be used to fill the voids and the scoured areas. This will be left to dry before the shuttering is removed.

Erosion Protection: A maximum total of 10m³ of up to 1.5-ton boulders will be placed along the west and east face of the northern abutment. In the case of the east face, this will be a 1-2 metre extension of the pre-existing line of scour protection boulders discussed above.

Purpose of works: to ensure the continued functioning of the PRoW bridge as required under the Highways Act (1980) and the safety of the public when using the bridge.

3. INFORMATION ABOUT THE EUROPEAN AND RAMSAR SITES

3.1 European site name(s) and status:

Based on the information provided in the application the assessment is that the following European sites have features which could be affected by the project and will be taken forward:

1. West Wales Marine SAC (UK0030397)
2. Northern Cardigan Bay SPA (UK9020327)

	3. Pen Llyn a’r Sarnau Marine SAC (UK0013117)		
	Site(s) scoped out of assessment due to lack of impact pathway (i.e. distance, no hydrological connection, not functionally linked etc):		
	Cardigan Bay Marine SAC (UK0012712)		
3.2.1. Site description (reasons for designation, key ecological characteristics, information available on general ecological trends and current issues or sensitivities)			
West Wales Marine SAC (UK0030397)	Reasons for designation:		
		Habitats	Species
	Primary reason for selection	NA	1351: Harbour porpoise (<i>Phocoena phocoena</i>)
	Qualifying feature	NA	NA
	The sole qualifying feature of this site is the Habitats Directive Annex II species harbour porpoise. West Wales Marine / Gorllewin Cymru Forol has been designated because of its importance to harbour porpoise in both the summer and winter months. The works site is situated 135m east of the West Wales Marine SAC.		
3.3 Reference documents that provide further details on the site, and have been used to inform the assessment:	Harbour Porpoise (<i>Phocoena phocoena</i>) Special Area of Conservation: West Wales Marine /Gorllewin Cymru Forol Conservation Objectives and Advice on Operations., NRW, March 2019		
	The Habitats Regulations Handbook, DTA Publications, updated 2015.		
	Tyldesley, D. (2011) Assessing Projects under the Habitats Directive: guidance for competent authorities. Report to Countryside Council for Wales, Bangor.		
	Ryley, GHT. 2023. ED3816 – Glan Y Mor PRoW Bridge Erosion Control: Preliminary Ecological Appraisal & Ecological Impact Assessment. Ceredigion County Council, Penmorfa, Aberaeron.		
3.2.2. Site description (reasons for designation, key ecological characteristics, information available on general ecological trends and current issues or sensitivities)			
Northern Cardigan Bay SPA (UK9020327)	Reasons for designation:		
		Habitats	Species
	Primary reason for selection	NA	A001: Red Throated diver (<i>Gavia stellate</i>)

	Qualifying feature	NA	NA
	The sole qualifying feature of this site is the Habitats Directive Annex II species Red Throated diver. Northern Cardigan Bay / Gogledd Bae Ceredigion has been designated because of its importance to overwintering Red Throated diver populations. The works site is situated 135m east of the Northern Ceredigion SPA.		
3.3 Reference documents that provide further details on the site, and have been used to inform the assessment:	Northern Cardigan Bay / Gogledd Bae Ceredigion Special Protection Area: Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017.January 2019		
	The Habitats Regulations Handbook, DTA Publications, updated 2015.		
	Tyldesley, D. (2011) Assessing Projects under the Habitats Directive: guidance for competent authorities. Report to Countryside Council for Wales, Bangor.		
	Ryley, GHT. 2023. ED3816 – Glan Y Mor PRoW Bridge Erosion Control: Preliminary Ecological Appraisal & Ecological Impact Assessment. Ceredigion County Council, Penmorfa, Aberaeron.		
3.2.3 Site description (reasons for designation, key ecological characteristics, information available on general ecological trends and current issues or sensitivities)			
Penllŷn a’r Sarnau Marine SAC	Reasons for designation and trends The Pen Llŷn a’r Sarnau SAC encompasses areas of sea, coast and estuary that support a wide range of different marine habitats and wildlife. It is a multiple interest site which has been selected for the presence of nine marine habitat types and associated wildlife (Habitats Directive Annex I habitat types) and 3 mammal species (Habitats Directive Annex II species). For the qualifying habitats and species, the Pen Llŷn a’r Sarnau SAC is considered to be one of the best areas in the UK for: • Reefs • Large shallow inlets and bays • Sandbanks which are slightly covered by seawater all the time • Estuaries • Coastal lagoons; and to support a significant presence of: • Mudflats and sandflats not covered by seawater at low tide • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) • Salicornia and other annuals colonising mud and sand • Submerged or partially submerged sea caves		

	• Grey seal – <i>Halichoerus grypus</i> • Bottlenose dolphin – <i>Tursiops truncatus</i> • Otter – <i>Lutra lutra</i> The features are distributed throughout the SAC with no single feature occupying the entire SAC and with features overlapping in some locations. The works site is situated 25m east of the Pen Llyn a'r Sarnau Marine SAC
3.3 Reference documents that provide further details on the site, and have been used to inform the assessment:	Pen Llyn a'r Sarnau / Llyn Peninsula and the Sarnau SAC: Advice provided by Natural Resources Wales in fulfilment of Regulation 37 of the Conservation of Habitats and Species Regulations 2017, NRW, March 2018.
	Harbour Porpoise (<i>Phocoena phocoena</i>) Special Area of Conservation: West Wales Marine /Gorllewin Cymru Forol Conservation Objectives and Advice on Operations., NRW, March 2019
	The Habitats Regulations Handbook, DTA Publications, updated 2015.
	Tyldesley, D. (2011) Assessing Projects under the Habitats Directive: guidance for competent authorities. Report to Countryside Council for Wales, Bangor.
	Ryley, GHT. 2023. ED3816 – Glan Y Mor PRoW Bridge Erosion Control: Preliminary Ecological Appraisal & Ecological Impact Assessment. Ceredigion County Council, Penmorfa, Aberaeron.

4. TEST OF LIKELY SIGNIFICANT EFFECTS

- The first stage of a HRA is a Test of Likely Significant Effect (TLSE) which is a screening assessment of impacts, to determine if an appropriate assessment is required.
- Unless this screening assessment enables significant effects on any European site to be ruled out, the project will need to be subject to an appropriate assessment.
- The legislation requires consideration of plans and projects “either alone or in combination with other plans and projects”.
- The test of likely significant effect is initially carried out by considering the proposal on its own (i.e. rather than in-combination with other plans or projects).
- If it is decided that the proposal alone is likely to have a significant effect, it is subject to appropriate assessment alone.
- An assessment in combination with other plans projects is only required if the proposal would be insignificant on its own, but has effects which may be significant if combined with the effects of other plans/projects which are also insignificant on their own.

This screening assessment is based on the application as submitted.

4.1 Is the proposal directly connected with or necessary to the management of the site for nature conservation?

No

4.2. Screening Assessment SAC's and SPA

The screening assessment indicates the possible pathways through which the proposal may impact upon the relevant European site features. Each potential impact pathway is recorded in the left hand column below. The assessment in the right hand column below is made in view of the conservation objectives for the European sites concerned, as set out in either NRW's extant advice under Regulation 35 of the Conservation of Habitats and Species Regulations 2010 (for a European marine site), or in the current Core Management Plan (for a terrestrial European site).

The Designated Features which could be affected are:

West Wales Marine SAC

Harbour Porpoise

Northern Cardigan Bay SPA

Red Throated Diver

Pen Llyn a'r Sarnau SAC

Reefs (*Sabellaria alveolata*)

Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)

Grey Seal

Bottlenose Dolphin

Otter

The Designated Features which have been scoped out of the assessment are:

Pen Llyn a'r Sarnau SAC

- Large shallow inlets and bays. Rationale: None near to works area or vicinity.
- Sandbanks which are slightly covered by seawater all the time. Rationale: None near works site or vicinity.
- Estuaries. Rationale: None near works site or vicinity; nearest is the Dyfi 8 miles north.
- Coastal lagoons. Rationale: None near works site or vicinity.
- Mudflats and sandflats not covered by seawater at low tide. Rationale: None near works site or vicinity. Nearest begins at Borth ~5 miles to the north.
- Salicornia and other annuals colonising mud and sand. Rationale None known to works area or vicinity. Nearest is the Dyfi Estuary ~8 miles to the north.
- Submerged or partially submerged sea caves. Nearest just to the north of Clarach Bay, but no possible impact pathway from works.

The following potential hazards are taken forward for the Test of Likely Significant Effect below: 1. Chemical Pollution 2. Litter and Material Pollution 3. Siltation and Sedimentation 4. Introduction of Invasive and Non-Native Species (INNS) 5. Noise and Vibration 6. Direct Physical Disturbance	The possible effects may occur: During construction.
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4.2.2 Potential Hazards Scoped Out of Assessment and Why	
The following hazards have been scoped out of the TLSE assessment, but this does not mean they have not been considered by the project.	
Hazard	Why
Change in Salinity Regime	Works will not introduce/remove salts or change evaporation rates.
Change in Water Levels or Table	Works will not involve introducing/removing water.
Changes in Thermal Regime	Works will not directly or indirectly change rates of heat absorption.
Direct Habitat Loss	Works do not involve the potential for direct habitat loss.
Change in Surface Flooding	Works will not increase/decrease/change dynamic of existing surface flooding patterns.
Habitat Fragmentation	Due to the exact location and small scale of the works, there will be no habitat fragmentation.
Habitat/Community Simplification	Due to the exact location and small scale of the works, there will be no habitat/community simplification.
Collision	The works have no element that could result in collision.
Modification of Hydrodynamic Regime	The works will not result in a modification of the hydrodynamic regime.
Addition of Microbial Pathogens	Works do not contain elements that could introduce microbial pathogens.
Habituation of Wild Animals to Humans	Works do not involve the potential for this.

4.3 West Wales Marine SAC and Northern Cardigan Bay SPA Test of Likely Significant Effect				
Hazard	Interest Features	Potential Impact Pathway(s)	Assessment of Likelihood in View of Design and Supporting Documentation	Conclusion
4.3.1. Chemical Pollution	<u>West Wales Marine SAC</u> Harbour Porpoise <u>Northern Cardigan Bay SPA</u> Red Throated Diver <u>Pen Llyn a'r Sarnau SAC</u> Reefs (<i>Sabellaria alveolata</i>) Atlantic Salt Meadows (<i>Glauco-Puccinellietalia maritimae</i>) Grey Seal Bottlenose Dolphin Otter	The spilling of fuels and other chemicals could have a direct poisoning or smothering effect on all of the listed interest features. The Harbour Porpoise, Red Throated Diver, Grey Seal, Bottlenose Dolphin, and Otter could also be negatively impacted indirectly through effects on their supporting species, e.g., prey.	The design documentation comes with contractor constraints on compliance with General Practice for Pollution Prevention 5: Works in or Near Water, as well as a detailed Pollution Prevention Plan covering storage, refuelling, access to the riverbank/river/beach, working in the dry, use of marine-grade concrete, and machinery condition. Full adherence to this plan and GPP5 minimises the risk of the described impact pathway coming to fruition.	No likely significant effect from this hazard on the listed designated features of the SAC's and SPA is predicted.
4.3.2. Litter and Material Pollution	<u>West Wales Marine SAC</u> Harbour Porpoise <u>Northern Cardigan Bay SPA</u> Red Throated Diver <u>Pen Llyn a'r Sarnau SAC</u> Grey Seal Bottlenose Dolphin	Flooding of the shuttered area through high river levels caused by excessive rainfall, or high tides, and these combined with storm swells, could result in the loss of the shuttering materials, leading to plastic and sand/stone being released to the watercourse/entering the designated areas. This could result in an entanglement risk, and a potential future source of microplastics.	The Pollution Prevention Plan comes with contractor constraints on working at times of low water only and that river levels, tides, and weather forecasts will be monitored prior to and during the works. It also states that all waste material generated from the works must be disposed of to a licenced waste facility. With the works location also being at the very top of and above the beach, this further reduces storm swell risks.	No likely significant effect from this hazard on the listed designated features of the SAC's and SPA is predicted.

	Otter			
4.3.3. Siltation and Sedimentation	<u>West Wales Marine SAC</u> Harbour Porpoise <u>Northern Cardigan Bay SPA</u> Red Throated Diver <u>Pen Llyn a'r Sarnau SAC</u> Reefs (<i>Sabellaria alveolata</i>) Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) Grey Seal Bottlenose Dolphin Otter	Minor excavation to fully access the scoured faces of the parapets and the pumping of water from the shuttered areas could result in the mobilisation and release of sediments. This could have a direct smothering effect on the listed features and/or an indirect effect by negatively impacting supporting species, e.g., prey availability.	Given the area of shuttering is small and potential excavation minimal, the likelihood of generating significant quantities of sediment that could result in the fruition of the impact pathway is low. This risk is reduced to negligible with the dewatering and sediment filtration provisions contained within the design documentation.	No likely significant effect from this hazard on the listed designated features of the SAC's and SPA is predicted.
4.3.4. Introduction of Invasive and Non-Native Species	<u>Pen Llyn a'r Sarnau SAC</u> Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>)	The movement of the scour protection boulders, personnel, plant, and machinery could introduce Invasive and Non-Native Plant species from outside sources. These could have a negative impact on the Atlantic Salt Meadow/Saltmarsh upstream of the works area.	The Ecological Appraisal and Impact report stated that no Invasive and Non-Native Species were recorded at the works area at the time of survey, and that the contractor will need to ensure that all plant and machinery are clean upon entering site, and that all imported stone is from an accredited source. The nearest saltmarsh area also occurs at least 50 metres upstream of the works in the field east of the bend in the river.	No likely significant effect from this hazard on the listed designated feature of the SAC is predicted.
4.3.5. Noise and Vibration	<u>West Wales Marine SAC</u> Harbour Porpoise	The movement and operation of plant or machinery, such as a dewatering pump, could produce noise and vibration leading to disturbance of the listed	The design documentation states that all works will be undertaken in the dry, therefore minimising the risk of sound and vibration entering the water	No likely significant effect from this hazard

	<u>Pen Llyn a'r Sarnau SAC</u> Grey Seal Bottlenose Dolphin Otter	protected features, such as affecting feeding, breeding or navigational habits.	column and disturbing Bottlenose Dolphins, Harbour Porpoises, and Grey Seals. The risk of audible sound disturbance to Otters is minimised by the provisions for pre-commencement checks, and the lack of Holt activity in the works area. In the case of Grey Seals the beach is not a known pupping site, likely due to frequent disturbance from human activity and dog walkers.	on the listed designated features of the SAC's is predicted.
4.3.6. Direct Physical Disturbance	<u>Pen Llyn a'r Sarnau SAC</u> Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	The tracking of machinery could lead to the direct crushing of any areas of Atlantic Salt Meadow/Saltmarsh present.	The Ecological Appraisal and Impact Report for the project did not identify any Salt Meadow/Saltmarsh present in the works area, which includes machinery access points.	No likely significant effect from this hazard on the listed designated feature of the SAC is predicted.
4.4 Based on the Test of Likely Significant Effect, is the project likely to have a Significant Effect on the West Wales Marine SAC <u>alone</u> ?		No Significant effect is predicted based on the design and supporting documentation for this project alone. All hazards have been screened out of the assessment.		
4.5 In Combination Assessment		As there are no predicted residual effects there are no in-combination effects.		
4.6 Conclusion of the Test of Likely Significant Effect: Will a full Appropriate Assessment be required?		No Significant effect is predicted based on the design and supporting documentation for this project alone or in combination with other projects. No Appropriate Assessment will be required for this scheme.		
 Signed: Date: 08/08/2023				

APPENDIX 1 - European Site Conservation Objectives for the West Wales Marine SAC (UK0030397)

Conservation Objective for Harbour Porpoise

The feature will be considered to be in a favourable conservation status when each of the following conditions are met:

1. Harbour porpoise is a viable component of the site;
2. There is no significant disturbance of the species; and
3. The condition of supporting habitats and processes, and the availability of prey is maintained.

APPENDIX 2 – European Site Conservation Objectives for the Northern Cardigan Bay SPA (UK9020327)

Conservation Objective for Red Throated diver

The feature will be considered to be in a favourable conservation status when each of the following conditions are met:

1. The wintering population of Red-throated diver should be stable or increasing, for a peak mean of 1,186 individuals
2. The foraging habitat of this species should not decrease significantly, and its quality should remain unaffected by anthropogenic factors

APPENDIX 3 – European Site Conservation Objectives for the Pen Llyn a'r Sarnau Marine SAC (UK0013117)

Conservation Objectives for Grey Seal, Bottlenose Dolphin, and Otter

The features will be considered to be in a favourable conservation status when each of the following conditions are met:

1. The population is maintaining itself on a long-term basis as a viable component of its natural habitat.
2. The species population within the site is such that the natural range of the population is not being reduced or likely to be reduced for the foreseeable future.

3. The presence, abundance, condition, and diversity of habitats and species required to support these species is such that the distribution, abundance and populations dynamics of the species within the site and population beyond the site is stable or increasing.

Conservation Objectives for Reefs, Large Shallow Inlets and Bays, Sandbanks which are Slightly Covered by Seawater All the Time, Estuaries, Coastal Lagoons, Mudflats and Sandflats Not Covered By Seawater at Low Tide, Atlantic Salt Meadows, Salicornia and Other Annuals Colonising Mud and Sand, and Submerged or Partially Submerged Sea Caves

1. The overall distribution and extent of the habitat features within the site, and each of their main component parts is stable or increasing.
2. The physical biological and chemical structure and functions necessary for the long-term maintenance and quality of the habitat are not degraded.
3. The presence, abundance, condition and diversity of typical species is such that habitat quality is not degraded.