

Ardal Gwarchodaeth Arbennig Cilfach Tywyn / Burry Inlet Special Protection Area

Advice provided by Natural Resources Wales in fulfilment of Regulation 37(3) of the Conservation of Habitats and Species Regulations 2017.

June 2025



Eurasian Oystercatcher Haematopus ostralegus by Peter Richman under licence CC BY-SA 2.0

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Crynodeb Gweithredol

Mae'r ddogfen hon yn cynnwys cyngor Cyfoeth Naturiol Cymru ar gyfer ardal gwarchodaeth (AGA) Cilfach Tywyn a gyhoeddwyd o dan Reoliad 37(3) o Reoliadau Cadwraeth 2017. Sef amcanion cadwraeth a chyngor ar weithrediadau.

Mae Adran 1 yn cyflwyno'r safle, pwrpas y cyngor a strwythur yr amcanion cadwraeth. Mae Adran 2 yn cynnwys esboniad o'r rolau a'r cyfrifoldebau, ac mae Adran 3 yn amlinellu amcanion cadwraeth pob nodwedd a gwybodaeth ategol. Mae cyngor ar weithrediadau mewn perthynas â'r safle hwn i'w gael yn Adran 4. Mae rhagor o wybodaeth am yr AGA wedi'i chynnwys yn Atodiad 1.

Isod mae rhestr o nodweddion dynodedig yr AGA hon a dolen uniongyrchol i'r amcanion cadwraeth, ond mae'n bwysig darllen pob adran yn llawn.

Enw'r AGA	Nodweddion Dynodedig	Cysylltiad â'r Amcanion Cadwraeth
Cilfach Tywyn	 Pioden fôr Haematopus ostralegus Pibydd yr aber Calidris canutus Hwyaden lostfain Anas acuta Pibydd coesgoch Tringa totanus Gylfinir Numenius arquata Pibydd y mawn Calidris alpina Cwtiad llwyd Pluvialis squatarola Hwyaid yr eithin Tadorna tadorna Hwyaden lydanbig Anas clypeata Corhwyaden Anas crecca Cwtaid y traeth Arenaria interpres Chwiwell Mareca penelope Cynulliad Adar Dŵr 	Amcanion cadwraeth

Tabl 1. Crynodeb o nodweddion yr AGA a'r ddolen i'r amcanion cadwraeth.

Executive Summary

This document contains NRW's advice for the Burry Inlet special protection area (SPA) issued under Regulation 37(3) of the Conservation Regulations 2017.

Section 1 introduces the SPA, the purpose of the advice and the structure of the conservation objectives. Section 2 includes an explanation of the roles and responsibilities, before Section 3 outlines each feature's conservation objectives and supporting information. Advice on operations in relation to this SPA is found in Section 4.

Table 1 lists the designated features of this SPA and provides a direct link to the conservation objectives, but it is important that all sections are read in full.

SPA Name	Designated Features	Link to Conservation Objectives
Burry Inlet	 Curlew Numenius arquata Dunlin Calidris alpina Grey plover Pluvialis squatarola Knot Calidris canutus Oystercatcher Haematopus ostralegus Pintail Anas acuta Redshank Tringa totanus Shelduck Tadorna tadorna Shoveler Anas clypeata Teal Anas crecca Turnstone Arenaria interpres Wigeon Mareca penelope Waterbird assemblage 	Conservation objectives

Table 1. Summary of SPA features and link to conservation objectives.

1. Introduction

The ardal gwarchodaeth arbennig Cilfach Tywyn / Burry Inlet special protection area (SPA) is a large estuarine complex located between the Gower peninsula and Llanelli in South Wales. It includes extensive areas of intertidal sand and mudflats, together with large sand dune systems, at the mouth of the estuary, and the largest continuous area of saltmarsh in Wales (2,200ha). The range of habitats in the site provide important feeding grounds and resting areas. The extensive mud and sandflats support substantial populations of marine invertebrates, which provide an important food source for the large numbers of overwintering waterfowl found there.

The SPA was classified in 1992 qualifying under Article 4.2 of the Conservation of Wild Birds Directive (2009/147/EC), for regularly supporting at least 1% of the non-breeding population of the following regularly occurring migratory species,

- 2,199 curlew Numenius arquata
- 6,311 dunlin Calidris alpina
- 344 grey plovers Pluvialis squatarola
- 2,153 knot Calidris canutus
- 13,685 oystercatchers Haematopus ostralegus
- 1791 pintail Anas acuta
- 877 redshank *Tringa totanus*
- 972 shelduck Tadorna tadorna
- 356 shoveler Anas clypeata
- 477 teal Anas crecca
- 343 turnstone *Arenaria interpres*
- 1,837 wigeon Anas penelope

The site also qualified under Article 4.2 by supporting an internationally important assemblage of 34,962 birds over the winter. Waterfowl assemblage species include curlew, dunlin grey plover, knot, oystercatcher, pintail, redshank, shelduck, shoveler, teal, turnstone, and wigeon.

This SPA is also a wetlands of international importance (Ramsar) designated under the <u>Convention on Wetlands</u>. This Ramsar site qualifies under criteria 3c for the following,

- knot Calidris canutus
- oystercatchers Haematopus ostralegus
- pintail Anas acuta
- redshank Tringa totanus
- waterbird bird assemblage

All the SPA reference populations are 5-year peak means from winter counts between 1991/92-1995/96 as used in the review of the UK SPA network (Stroud et al., 2001). The 5-year peak mean is the peak number of birds in a winter season averaged across 5 years. The bullet points below detail how this mean is reached.

- Each winter (Oct -March), counts are made every month by British Trust of Ornithology (BTO) volunteers in count sectors in estuaries for the Wetland Bird Survey (WeBs) data base on behalf of the all the Statutory Nature Conservation Bodies (SNCBs).
- The figures from each count sector are added together to give a total figure for an estuary in a winter month.
- The highest figure during the winter months is the peak count for that winter.
- These peak counts are then averaged across 5 winters to give a 5-year peak mean.
- Estuarine SPAs were designated under the Birds Directive using a 5-year peak mean from these counts.

There will be inaccuracies in these whole estuarine counts due to different counters, varying weather conditions, missed counts, spring tides etc. This means these counts are estimates. However, as the same methods and techniques are used each time, the inaccuracies should be consistent, allowing estimates to be compared across 5-year periods. This enables SNCBs, such as NRW, to use 5-year peak means in condition assessments and when considering how a proposed development may affect the designated bird species of a site.

The Burry Inlet is the most important estuary situated entirely in Wales for overwintering waterfowl and is particularly significant for oystercatcher. Specialist feeders such as oystercatcher and knot that feed mainly on shellfish such as the cockle *Cerastoderma edulis* and mussels *Mytilus edulis* while in the site can be vulnerable if in competition with the commercial exploitation of these resources. There is a well-established licenced cockle and seed mussel fishery in the site . Unregulated adult mussel fisheries also exist on the site.

The Burry Inlet overlaps partially or wholly with several other protected sites. Three SACs and three Sites of Special Scientific Interest (SSSIs) also intersect with the SPA. The conservation objectives for these protected sites can be found on the <u>NRW</u> <u>website</u>. The boundaries and geographical extents of these sites can be seen on the <u>JNCC MPA mapper</u>. A list of all protected sites partly or wholly in the SAC can be found in Appensix 1.

1.1. SPA Map

A map of the boundary of the Burry Inlet SPA can be seen in Figure 1.

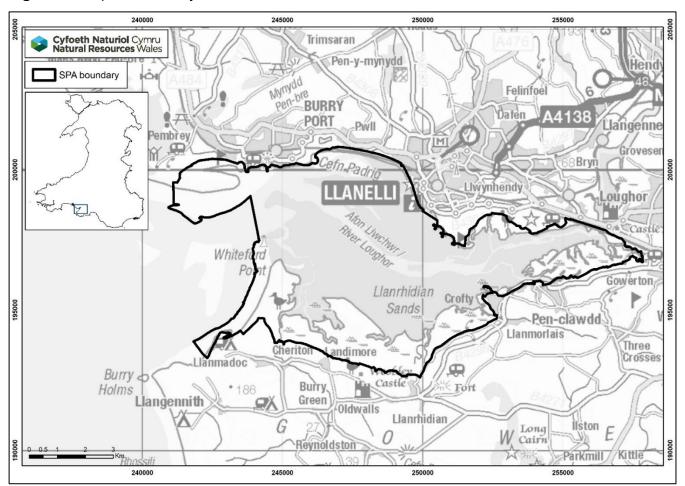


Figure 1. Map of the Burry Inlet SPA.

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1.2. The purpose of conservation advice

Conservation advice provides a framework for assessing developments and activities with the potential to affect the features for which a European marine site (EMS) is designated. An EMS is a SAC or SPA which consists of marine areas. Conservation advice presents site specific information, in addition to highlighting activities that are potentially capable of having an impact on the site and its designated species (known as a feature).

This SPA is an EMS subject to protection under the <u>Conservation of Habitats and</u> <u>Species Regulations 2017, as amended</u> (referred to in this document as the 'Habitats Regulations'). Under the Habitats Regulations, relevant and competent authorities with functions in relation to an EMS must exercise those functions to comply with the requirements of the 1992 European Commission (EC) Habitats and Species Directive and the 2009 EC Wild Birds Directive. The key requirements of these Directives include the conservation of the features (habitat types or species) for which SACs or SPAs are designated. This requires taking appropriate steps to avoid deterioration or disturbance of SAC or SPA features and carrying out appropriate assessment of any plan or project likely to have a significant effect on a SAC or SPA.

This document contains the conservation advice for the Burry Inlet SPA. It is prepared by Natural Resources Wales (NRW) and given under our duty in <u>Regulation</u> 37(3) of the Habitats Regulations (see Section 2.1).

This advice is based on the best available evidence and information at the time of writing. In some cases, evidence can be limited. It will be kept under review by NRW and updated as and when appropriate.

1.3. Conservation objective structure

The conservation objectives for the designated features in this site are underpinned by conservation objective attributes. These attributes describe the ecological characteristics (e.g. population), and the ecological requirements that allow the conservation objectives for each feature to be met.

Conservation objective attributes have a target which is either quantified or qualified depending on the available evidence. The target identifies, as far as possible, the desired state to be achieved for the attribute. In many cases, the attribute targets show if the current objective is to either 'maintain' or 'restore' the attribute and are based on the latest condition assessment for the feature. Some aspects of feature condition may be assessed as unknown. In these cases, a maintain target will be set as necessary. For attributes that have been assigned 'unknown' in the condition assessment, further information on feature condition and/or activities impacting the feature will be required to inform further advice. Each attribute target will need to be assessed on a case-by-case basis using the most current information available.

The conservation objective attributes that underpin the conservation objectives are used to measure if the objective is being met. This in turn can be used to see if site integrity is being maintained. Failure to meet any attribute means that the conservation objective is not being met and thus site integrity is not being maintained. Below is an example of a conservation objective and associated conservation objective attributes and targets.

Example Objective 1: The wintering population of the feature is stable or increasing relative to the SPA target population.

Example Objective attribute	Example Site specific target
Wintering population	Maintain/restore the wintering population of feature at or above X individuals (mean peak population year- year).

The conservation objectives for Burry Inlet SPA are set out in Section 3. As noted in Section 1.2. NRW may refine these in the future as further information becomes available and increases our understanding of the feature.

The feature's conservation objective section provides:

- 1. A clear statement of each conservation objective for the feature.
- 2. A table summarising the attributes, and the targets for those attributes.
- 3. Supporting information that underpins the selection of the attributes and targets.

2. Roles and responsibilities

2.1. NRW's role

Under Regulation 5 of the Habitats Regulations, NRW is a Nature Conservation Body and, in relation to Wales, is the Appropriate Nature Conservation Body (ANCB).

In its role as the ANCB, NRW has a duty under Regulation 37(3) of the Habitats Regulations to advise relevant authorities in respect of a EMS as to:

the conservation objectives for that site

any operations which may cause deterioration of natural habitats or the habitats of species, or disturbance of species, for which that site has been designated (see Section 1.1).

Advice on operations which may cause deterioration, together with the conservation objectives, is designed to assist relevant authorities and other decision-makers in complying with their statutory duties under the Habitats Regulations. The advice on operations which may cause deterioration given in this document is without prejudice to other advice given. This includes the conservation objectives themselves, and other advice which may be given by NRW from time to time in relation to any specific operations.

"Operations" is taken to cover all types of human activity, irrespective of whether they are under any form of regulation or management. Thus, the advice contains reference to operations which may not be the responsibility of any of the relevant authorities.

NRW will provide additional advice for the site to relevant authorities and competent authorities to allow them to fulfil their duties under the Habitats Regulations. For example, by providing advice to a competent authority assessing the implications of plans or projects on the features of the EMS. Each plan or project will be judged on its own merits, and this will determine the nature of any additional advice required.

2.2. The role of competent and relevant authorities

The expressions used in this advice of "relevant authority" and "competent authority" are as defined in Regulation 3 of the Habitats Regulations. Relevant authorities are specified in Regulation 6 of the Habitats Regulations. Competent Authorities are specified in Regulation 7 of the <u>Habitats Regulations</u>.

Under Part 6 of the Habitats Regulations, all competent authorities must undertake a formal assessment of the implications that any new plans or projects may have on the designated features of a protected site. The implications must be assessed in the context of other plans and projects affecting the same site. Activities outside the site

may also affect the features of the site, therefore, plans and projects located outside of a designated site may still need to be assessed.

In respect of the assessment provisions in Part 6 (assessment of plans or projects) of the Habitats Regulations, NRW is also the ANCB in relation to Wales.

The assessment provisions comprise several distinct stages which are collectively described as a Habitats Regulations Assessment (HRA), for which <u>guidance is</u> <u>available</u>. Before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and is not directly connected with or necessary to the management of that site, the competent authority must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives.

In light of the conclusions of the HRA and subject to derogation under Regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the EMS. In considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given.

Carrying out the HRA process is the responsibility of the decision maker as the competent authority. However, it is the responsibility of the applicant to provide the competent authority with the information that they require for this purpose.

The competent authority has a duty to consult the ANCB for the purposes of the assessment. <u>Under Regulation 63(3)</u> of the Habitats Regulations the competent authority must have regard to any representations made by the ANCB when reaching its decision.

Under <u>Regulation 38(1)</u> of the Habitats Regulations it states that, "the relevant authorities, or any of them, may establish for a European marine site a management scheme under which their functions (including any power to make byelaws) are to be exercised so as to secure compliance with the requirements of the Directives in relation to that site".

In other words, a group of relevant authorities, or any individual relevant authority, may create a management plan for an EMS. Management plans should be used to help relevant authorities carry out their duties to secure compliance with the Habitats Regulations. Only one management scheme may be made for each EMS. A management scheme may be amended. An authority which has established a management scheme must as soon as practicable thereafter send a copy of it to the ANCB. Any management plans created on this site should be guided by the advice in this package. Within their areas of jurisdiction relevant authorities must have regard to both direct and indirect effects of an activity on the designated features of the site. This may include consideration of issues outside the boundary of the site. Nothing within a Regulation 37(3) package will require relevant authorities to undertake any actions to maintain or improve the condition of designated features if it is shown that the changes result wholly from natural causes.

NRW will continue to review any new evidence or information about this site and will provide further advice as appropriate. This does not stop relevant authorities from taking any appropriate conservation measures to prevent deterioration to the designated features. Such actions should be undertaken when required.

2.3. The purpose of conservation objectives

The purpose of the conservation objectives for an EMS is to help meet the obligations of the Habitats Regulations in relation to that site. They do this by supporting:

- **Communication**. The conservation objectives help convey to stakeholders what is needed to maintain or restore a feature in/to favourable condition.
- **Site planning and management**. The conservation objectives guide the development of management measures for sites. Achievement of conservation objectives may require management action to be taken inside or outside the site boundary.
- Assessment of plans and projects. The Habitats Regulations require the assessment of plans and projects in view of a site's conservation objectives. Subject to certain exceptions, plans or projects may not proceed unless it is established that they will not adversely affect the integrity of a site. Conservation objectives can help develop suitable compensatory measures.
- **Monitoring and reporting**. Conservation objectives provide the basis for defining the evidence that will be used for assessing the condition of a feature.

This document includes both a statement of the conservation objectives and explanatory text on their intent and interpretation specific to the site (supporting information).

2.4. The purpose of advice on operations

NRW must provide advice to relevant authorities about operations that may cause,

- deterioration of designated natural habitats
- deterioration of the habitats of designated species
- the disturbance of designated species

This is statutory advice required by <u>Regulation 37(3)(b)</u> of the Habitats Regulations when considering operations which may cause impacts to designated features. These are operations which could take place within or outside the boundary of the Burry Inlet SPA.

NRW can provide specific advice on existing activities and management, advising on the extent to which activities are consistent with the conservation objectives. This advice, together with the list of activities in Section 4 and the <u>latest condition</u> <u>assessments</u> should direct required management measures within a site.

2.5. When to use this advice

This advice should be used together with case-specific advice issued by NRW when developing, proposing or assessing an activity, plan or project that may affect the features of the site. Any proposal or operation that has the potential to affect a site must not prevent the achievement of the feature's conservation objectives. Any such prevention would amount to an adverse effect on the integrity of the site.

The advice given here is without prejudice to any advice which may be provided by NRW in relation to the consideration of individual plans or projects in the carrying out of the assessment provisions as defined in <u>Part 6 of the Habitat Regulations</u>.

2.6. Feature condition

NRW has a dedicated condition assessment process to assess feature condition. Each feature designated in Welsh EMS have their own set of performance indicators. These indicators have targets which are assessed with the most up to date evidence available. When all required indicator targets are met a feature is in favourable condition.

The condition assessment of a feature helps to determine if its conservation objectives are being achieved. Results determine if maintain or restore conservation objectives are needed. Appropriate management must be in place to enable conservation objectives to continue being met and for feature condition to be maintained or restored as required. The conservation objectives cannot be achieved if a feature is in unfavourable condition.

Feature condition is recorded in condition assessment documents. These are available on the <u>NRW website</u>. NRW will update this advice package when new condition assessment information is available.

2.6.1. Favourable conservation status and National Site Network

If features are in favourable condition, it is likely they are making an appropriate contribution to Favourable Conservation Status (FCS) of the feature at the UK level. A feature cannot make an appropriate contribution to FCS without meeting its

conservation objectives. More information on FCS can be found in the joint statement from the UK Statutory Nature Conservation Bodies.

<u>Regulation 16A</u> of the Habitats Regulations creates the National Site Network on land and at sea, including both the inshore and offshore marine areas in the UK, and sets out the powers and duties of the appropriate authority (Welsh Government).

Information on how features in a site are meeting their conservation objectives will feed into the assessment of the National Site Network management objectives. The management objectives for the National Site Network are to maintain or restore designated SAC and SPA features to favourable conservation status across their natural range. More information on the UK National Site Network and its management objectives can be found on the <u>gov.uk website</u>.

3. Conservation objectives for the Burry Inlet SPA

The conservation objectives for each designated feature are outlined in the sections below. Each objective is accompanied by objective attributes and targets (see Section 1.3) and supporting information specific to each objective.

The following terms are used in the conservation objectives.

Anthropogenic: In this document anthropogenic specifically relates to environmental changes caused or influenced by people, either directly or indirectly. NRW consider human influences to include climate change.

Maintain: Where existing evidence from the most recent condition assessment suggests the feature to be in favourable condition, the conservation objective is for the feature to remain in favourable condition.

Natural change: This is defined as species or habitat changes which are not a result of human influences. NRW consider human influences to include climate change.

Natural variability: This is defined as species or habitat variability, which are not a result of human influences. NRW consider human influences to include climate change.

Restore: Where existing evidence from the most recent condition assessment suggests the feature, or part of the feature, to be in unfavourable condition the conservation objective is to return the feature to favourable condition. As the feature is being returned to favourable condition, further decline in the aspects of condition that are causing it to be unfavourable should be prevented. The ability to achieve favourable condition should not be inhibited.

Significant anthropogenic disturbance: For anthropogenic disturbance on a species feature to be significant an action must impact on the species in such a way as to be likely to cause negative effects on the population associated with the site. For example, through changes to behaviour, distribution, or abundance.

3.1. Feature 1: Curlew Numenius arquata

NRW published the <u>latest condition assessment</u> for Curlew *Numenius arquata* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The population of wintering curlew is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of curlew to a minimum 5-year peak mean of 2,199 individuals across the SPA.

Supporting Information

1a. Wintering population

In winter, curlews migrate from their breeding grounds in upland areas of rough pasture, heather moorland and wetland to gather in groups on tidal mudflats, saltmarshes and nearby farmland (<u>RSPB bird facts</u>).

The 5-year peak mean number of curlew between 1991/92 and 1995/96 was 2,199. The latest condition assessment showed the 5-year peak mean of the curlew population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering curlew that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering curlew population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering curlew population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that curlew can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Curlew feed in groups on the mudflats and saltmarsh of the Burry Inlet and roost above the high tide mark. The ability of curlew to freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by curlew or restricted their movements. The population distribution attribute is being met, allowing a maintain target to be set for objective 2a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al., 2016 and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat, narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Curlews are thought to be moderately to highly sensitive to disturbance (Cutts et al., 2013; Goodship and Furness, 2022). Evidence indicates curlew are an extremely wary species that does not habituate to works rapidly (Cutts et al., 2013). They are highly sensitive to people and aircraft (Cutts et al., 2013; Goodship and Furness, 2022).

There are no known anthropogenic activities that would have caused significant disturbance to curlew in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering curlew that use the SPA to favourable condition.

Objective Attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering curlew population of 2,199 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas
3b. Food availability	Maintain the abundance and distribution of curlew prey at levels sufficient to support a wintering curlew population of 2,199 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

In winter curlews need to maintain an unobstructed line of sight (sightlines) within feeding and roosting habitat. Good sightlines (i.e. open spaces where the birds can see any potential predators) are a defining characteristic of roosting sites. Any

significant obstruction to sightlines could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts, which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the target population. Therefore, the supporting habitat attribute is being met, allowing a maintain target to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Curlew feed on a wide variety of invertebrate species including worms, shrimps, crabs, and shellfish.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may negatively affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of curlew food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.2. Feature 2: Dunlin Calidris alpina

NRW published the <u>latest condition assessment</u> for dunlin *Calidris alpina* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information

Objective 1: The population of wintering dunlin is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of dunlin to a minimum 5- year peak mean of 6,311 individuals across the SPA.

Supporting Information

1a. Wintering population

In the winter, dunlin feed in large flocks on estuaries and roosts in nearby fields and saltmarshes (<u>The Wildlife Trusts</u>).

The 5-year peak mean number of dunlin between 1991/92 and 1995/96 was 6,311. The latest condition assessment showed the 5-year peak mean of the dunlin population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025). **Objective 2:** Wintering dunlin that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering dunlin population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering dunlin population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

This objective attribute seeks to ensure that dunlin can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Dunlin feed in groups on the mudflats of the Burry Inlet and roost above high tide mark. The ability of dunlin to move freely between feeding and roosting sites is critical to their fitness and survival. As roosting can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by dunlin or restricted their movements. The population distribution attribute is being met, allowing a maintain target to be set for objective 2a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity (impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures. Dunlin is assessed to have a medium sensitivity to human disturbance (Goodship and Furness, 2022).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering dunlin that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering dunlin population of 6,331 individuals
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas
3b. Food availability	Maintain the abundance and distribution of dunlin food supply at levels sufficient to support a wintering dunlin population of 6,331 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

In winter, dunlin favour estuaries and tidal mudflats. They need to maintain an unobstructed line of sight (sightlines) within feeding and roosting habitat. Good sightlines (i.e. open spaces where the birds can see any potential predators) are a defining characteristic of roosting sites. Any significant obstruction to sightlines could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts, which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or

quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Dunlin feed mainly in the intertidal on marine worms, shrimps, crabs, shellfish and gastropods.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of dunlin food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. However, it cannot be ruled out that a decline in food availability is contributing to the decline in dunlin numbers within the SAC. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.3. Feature 3: Grey plover *Pluvialis* squatarola

NRW published the <u>latest condition assessment</u> for Grey plover *Pluvialis squatarola* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information

Objective 1: The population of wintering grey plover is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of grey plover to a minimum 5-year peak mean of 344 individuals across the SPA.

Supporting Information

1a. Wintering population

The grey plover is found along the coast in the winter months, preferring sandy and muddy estuaries. The number of birds peaks in the autumn, and leave for breeding grounds from April (<u>The Wildlife Trust</u>).

The 5-year peak mean number of grey plover between 1991/92 and 1995/96 was 344. The latest condition assessment showed the 5-year peak mean of the grey plover population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering grey plover that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering grey plover population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering grey plover population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that grey plover can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Grey plover feed on the mudflat and sandflat of the Burry Inlet mainly during the day but occasionally at night. They roost above high tide, often in large groups.

The ability of grey plover to move freely between feeding and roosting sites is critical to their fitness and survival. As roosting can be outside of the SPA boundary movement of the birds inside and outside of the SPA must not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by grey plover or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering grey plover that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering grey plover population of 344 individuals
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of grey plover food supply at levels sufficient to support a wintering grey plover population of 344 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Grey plovers favour sandy and muddy estuaries. They need to maintain an unobstructed line of sight (sightlines) within feeding and roosting habitat. Good sightlines (i.e. open spaces where the birds can see any potential predators) are a defining characteristic of roosting sites. Any significant obstruction to sightlines could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts, which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Grey plover feed mainly in the intertidal in winter. Main food supply include polychaete worms, small crustaceans, and gastropods (Snow and Perrins, 1998).

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the

distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of grey plover food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. However, it cannot be ruled out that a decline in food availability is a contributing to the decline in grey plover numbers within the SAC. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.4. Feature 4: Knot Calidris canutus

NRW published the <u>latest condition assessment</u> for Knot *Calidris canutus* in the Burry Inlet SPA in June 2025. They were assessed to be in **favourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting informatio

Objective 1: The population of wintering knot is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Maintain the wintering population of knot at a minimum 5-year peak mean of 2,153 individuals across the SPA.

Supporting Information

1a. Wintering population

Knots form huge flocks in winter, with many using UK estuaries as feeding grounds, both over winter and on migration to their Arctic breeding grounds (<u>RSPB</u>).

The 5-year peak mean number of knot between 1991/92 and 1995/96 was 2,153. The latest condition assessment showed the 5-year peak mean of the knot population to be above the required target. Therefore the wintering population attribute is being met, allowing a maintain target to be set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering knot that use the SPA continue to have access to, and can utilise, habitats necessary to maintain the population in favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering knot population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering knot population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that knot can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Knot feed in large groups on the mudflats and sandflats of the Burry Inlet and roost above high tide mark. The ability of knot to move freely between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by knot or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and /or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Knot is thought to have medium sensitivity to disturbance, being particularly sensitive to human disturbance whilst roosting (Goodship and Furness, 2022). While they have been shown to be relatively tolerant to visual disturbance, they are quite sensitive to noise disturbance, especially so when in conjunction with visual stimuli (i.e. low flying aircraft) (Cutts et al., 2013).

There are no known anthropogenic activities that would have caused significant disturbance to knot in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to maintain the population of wintering knot that use the SPA in favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering knot population of 2,153 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of knot food supply at levels sufficient to support a wintering knot population of 2,153 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Knot favour large areas of open terrain in winter and need to maintain an unobstructed line of sight (sightlines) within feeding and roosting habitat. Good sightlines (i.e. open spaces where the birds can see any potential predators) are a

defining characteristic of roosting sites. Any significant obstruction to sightlines could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts, which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Knot feed mainly in the intertidal in winter. Main food supply include molluscs, polychaete worms and small crustaceans (Snow and Perrins, 1998).

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of knot food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.5. Feature 5: Oystercatcher Haematopus ostralegus

NRW published the <u>latest condition assessment</u> for oystercatcher *Haematopus ostralegus* in the Burry Inlet SPA in June 2025. They were assessed to be in **favourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information

Objective 1: The population of wintering oystercatcher is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Maintain the wintering population of oystercatcher at a minimum 5-year peak mean of 13,685 individuals across the SPA.

Supporting Information

1a. Wintering population

In winter, oystercatcher gather in large flocks, with resident UK birds joined by birds migrating to the UK for the winter.

The 5-year peak mean number of oystercatcher between 1991/92 and1995/96 was 13,685. The latest condition assessment showed the 5-year peak mean of the oystercatchers population to be above the required target. Therefore the wintering population attribute is being met, allowing a maintain target to be set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering oystercatcher that use the SPA continue to have access to, and can utilise, habitats necessary to maintain the population in favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering oystercatcher population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering oystercatcher population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that oystercatcher can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Oystercatchers gather in large flocks to feed on the mudflat and sandflat throughout the Burry Inlet SPA. They roost above high water in groups.

The ability of oystercatcher to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by oystercatchers or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either,

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and /or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Oystercatchers are moderately sensitivity to potential disturbance (Cutts et al., 2013; Goodship and Furness, 2022). A study showed numbers of roosting oystercatchers declined after increases in human activity following redevelopment, but other studies suggest oystercatchers are less sensitive than other waders (Goodship and Furness, 2022). There is some evidence they tolerate activity better in more disturbed locations compared to undisturbed (Cutts et al., 2013).

There are no known anthropogenic activities that would have caused significant disturbance to oystercatchers in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to maintain the population of wintering oystercatcher that use the SPA in favourable condition.

Site specific target(s)
Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering oystercatcher population of 13,685 individuals. Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
Maintain the abundance and distribution of oystercatcher food supply at levels sufficient to support a wintering oystercatcher population of 13,685 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (moulting, roosting, loafing, feeding) should be maintained.

Oystercatchers favour large areas of open terrain, largely free of obstructions, in and around its roosting and feeding areas. High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Oystercatchers in the Burry Inlet feed predominately on cockles and mussels. There is a commercial cockle fishery in the SPA that can cause declines in the availability of cockles if improperly managed. They do feed on other molluscs, as well as worms.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of oystercatcher food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.6. Feature 6: Pintail Anas acuta

NRW published the <u>latest condition assessment</u> for Pintail *Anas acuta* in the Burry Inlet SPA in June 2025. They were assessed to be in **favourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information

Objective 1: The population of wintering pintail is stable or increasing relative to the SPA reference population

Objective attribute	Site specific target
1a. Wintering population	Maintain the wintering population of pintail at a minimum 5- year peak mean of 1,791 individuals across the SPA.

Supporting Information

1a. Wintering population

In winter, pintails can be found with other ducks in large numbers gathered on sheltered estuaries such as the Burry Inlet (<u>The Wildlife Trust</u>).

The 5-year peak mean number of pintail between 1991/92 and 1995/96 was 1,791. The latest condition assessment showed the 5-year peak mean of the pintail population to be above the required target. Therefore the wintering population attribute is being met, allowing a maintain target to be set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025). **Objective 2:** Wintering pintail that use the SPA continue to have access to, and can utilise, habitats necessary to maintain the population in favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering pintail population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering pintail population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that pintail can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Pintail feed in the estuary and saltmarsh of the Burry Inlet. Unlike most ducks, pintail have more nocturnal habits and tend to forage in the evenings or at night and they spend much of the day resting or roosting (Goodship and Furness, 2022).

The ability of pintail to move freely between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by pintail or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and / or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the birds' distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Pintail are thought to have medium sensitivity to disturbance and studies have shown tolerance to some human disturbance (Goodship and Furness, 2022 and references there in). However, evidence is limited.

There are no known anthropogenic activities that would have caused significant disturbance to pintail in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to maintain the population of wintering pintail that use the SPA in favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering pintail population of 1,791 individuals.
	Maintain existing unrestricted bird sightlines in every direction around roosting and feeding areas.
3b. Food availability	Maintain the abundance and distribution of pintail food at levels sufficient to support a wintering pintail population of 1,791 individuals.

Supporting information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Pintail favour large areas of open terrain, largely free of obstructions, in and around its roosting and feeding areas. Often there is a need to maintain an unobstructed line of sight (sighlines) within feeding or roosting habitat.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Pintail feed predominantly on aquatic vegetation, dabbling and upending to feed just below the water's surface. Food is mainly obtained in depths 10–30cm. Pintail also feed on land, picking up grain and digging out rhizomes and tubers with their beak (Snow et al., 1998).

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of pintail food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.7. Feature 7: Redshank Tringa totanus

NRW published the <u>latest condition assessment</u> for Redshank *Tringa totanus* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information

Objective 1: The population of wintering redshank is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of redshank to a minimum 5- year peak mean of 877 individuals across the SPA.

Supporting Information

1a. Wintering population

During the winter redshank are largely coastal, occupying rocky, muddy and sandy beaches and estuaries as well as coastal wetlands (<u>The Wildlife Trusts</u>).

The 5-year peak mean number of redshank between 1991/92 and 1995/96 was 877. The latest condition assessment showed the 5-year peak mean of the redshank population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering redshank that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target(s)
2a. Wintering population distribution	The distribution of the wintering redshank population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering redshank population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that redshank can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Redshank feed in groups on the mudflats and saltmarsh of the Burry Inlet and roost above high tide mark.

The ability of redshank to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by redshank or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

• changing local distribution on a continuing basis; and/or

• changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering redshank that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support an redshank population of 877 individuals
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of redshank prey at levels sufficient to maintain the population size.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Redshank favour large areas of open terrain, largely free of obstructions, in and around its roosting and feeding areas. Often there is a need to maintain an unobstructed line of sight (sighlines) within feeding or roosting habitat.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. While is no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the redshank population, the declines seen at the site level have not been reflected at the national level. This has led to the supporting habitat attribute being assessed as unknown. Therefore, a default maintain target has been set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

In estuaries redshank feed mainly on crustaceans, molluscs and polychaete worms (Snow and Perrins, 1998).

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is uncertainty over the distribution and abundance of redshank food supply and whether it is sufficient to support the population, as declines seen at the site are not reflected at the national level. The attribute has been assessed as unknown. Therefore, a default maintain target has been set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.8. Feature 8: Shelduck Tadorna tadorna

NRW published the <u>latest condition assessment</u> for Shelduck *Tadorna tadorna* in the Burry Inlet SPA in June 2025. They were assessed to be in **favourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The population of wintering shelduck is stable or increasing relative to the SPA reference population

Objective attribute	Site specific target
1a. Wintering population	Maintain the wintering population of shelduck at a minimum 5- year peak mean of 972 individuals across the SPA.

Supporting Information

1a. Wintering population

In the winter, shelduck move from inland breeding grounds to gather on muddy estuaries and inland coastal marshes (\underline{BTO}).

The 5-year peak mean number of shelduck between 1991/92 and 1995/96 was 972. The latest condition assessment showed the 5-year peak mean of the shelduck population to be above the required target. Therefore the wintering population attribute is being met, allowing a maintain target to be set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering shelduck that use the SPA continue to have access to, and can utilise, habitats necessary to maintain the population in favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering shelduck population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering shelduck population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that shelduck can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

Shelduck feed in groups predominately on intertidal mudflats. They have shown a preference for roosting on open water at some sites though will roost above the high tide mark (Toomer and Clark, 1994). They favour areas, largely free of obstructions, in and around roosting and feeding areas. Therefore, the ability to move freely between feeding and roosting sites is relevant. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted. Often there is a need to maintain an unobstructed line of sight within feeding or roosting habitat to detect approaching predators.

There are no known anthropogenic activities that have impeded the use of the whole SPA by shelduck or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Shelduck are thought to be highly sensitive to disturbance (Cutts et al., 2013; Goodship and Furness, 2022). They have been shown to be extremely sensitive to moderate and high-level visual disturbance, as well as being sensitive to noise stimulus (Cutts et al., 2013). On English estuaries count sectors close to footpaths had lower number of shelduck than those further away as did those closer to railways (Burton et al. 2002).

There are no known anthropogenic activities that would have caused significant disturbance to shelduck in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to maintain the population of wintering shelduck that use the SPA in favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering shelduck population of 972 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of shelduck food at levels sufficient to support a wintering shelduck population of 972 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Shelduck favour estuaries and mudflats with few obstructions in and around its roosting and feeding areas. High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Shelducks mainly eat molluscs when by the coast, but this species will also feed on aquatic invertebrates and plant material (Snow and Perrins, 1998). They forage in

shallow water by upending and head-dipping, and by digging and dabbling on mud flats.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of shelduck food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.9. Feature 9: Shoveler Anas clypeata

NRW published the <u>latest condition assessment</u> for shoveler *Anas clypeata* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The population of wintering shoveler is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of shoveler at a minimum 5- year peak mean of 356 individuals across the SPA.

Supporting Information

1a. Wintering population

Shoveler are widely distributed around the UK in winter, with the majority of birds arriving from overseas to join the small resident breeding population.

The 5-year peak mean number of shoveler between 1991/92 and 1995/96 was 356. The latest condition assessment showed the 5-year peak mean of the shoveler population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering shoveler that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering shoveler population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering shoveler population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that shoveler can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

The ability of shoveler to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by shoveler or restricted their movements. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Shoveler are thought to have medium sensitivity to disturbance, with evidence that they favour undisturbed areas and are sensitive to recreational disturbance (Goodship and Furness, 2022 and references therein).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering shoveler that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering shoveler population of 356 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of shoveler food supply at levels sufficient to support a wintering shoveler population of 356 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Shovelers need to maintain an unobstructed line of sight (sighlines) within feeding or roosting habitat.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to

sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. While is no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the shoveler population, the declines seen at the site level have not been reflected at the national level. This has led to the supporting habitat attribute being assessed as unknown. Therefore, a default maintain target has been set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Shovelers are dabbling ducks that feed near the water's surface. In the winter shovelers eat mainly plant matter such as seeds, grasses, sedges and pondweeds.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is uncertainty over the distribution and abundance of shoveler food supply and whether it is sufficient to support the population, as declines seen at the site are not reflected at the national level. The attribute has been assessed as unknown. Therefore, a default maintain target has been set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.10. Feature 10: Teal Anas crecca

NRW published the <u>latest condition assessment</u> for Teal *Anas crecca* in the Burry Inlet SPA in June 2025. They were assessed to be in **favourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The population of wintering teal is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Maintain the wintering population of teal at a minimum 5-year peak mean of 477 individuals across the SPA.

Supporting Information

1a. Wintering population

In the winter, teal gather in large numbers on low lying coastal areas and wetlands.

The 5-year peak mean number of teal between 1991/92 and 1995/96 was 477. The latest condition assessment showed the 5-year peak mean of the teal population to be above the required target. Therefore the wintering population attribute is being met, allowing a maintain target to be set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering teal that use the SPA continue to have access to, and can utilise, habitats necessary to maintain the population in favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering teal population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering teal population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that teal can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

The ability of teal to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by teal or restricted their movements. The population distribution attribute is being met, allowing a maintain target to be set for objective 2a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Teal have been shown to be somewhat sensitive to human disturbance (Pease et al., 2005) and one study showed teal were displaced significantly further by human disturbance compared to natural disturbance (Bregnballe et al., 2017). However, information is lacking. A precautionary approach is needed.

There are no known anthropogenic activities that would have caused significant disturbance to teal in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to maintain the population of wintering teal that use the SPA in favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering teal population of 477 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of teal food supply at levels sufficient to support a wintering teal population of 477 individuals.

Supporting information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Teal dabble in shallow water and often need to maintain an unobstructed line of sight (sightlines) within feeding or roosting habitat.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to

sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore the supporting habitat attribute is being met, allowing maintain targets to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

In winter teal feed mainly on seeds of aquatic plants and grasses, including sedges and grains.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of teal food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.11. Feature 11: Turnstone Arenaria interpres

NRW published the <u>latest condition assessment</u> for turnstone *Arenaria interpres* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium condition) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The population of wintering turnstone is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of turnstone at a minimum 5- year peak mean of 343 individuals across the SPA.

Supporting Information

1a. Wintering population

Turnstone are primarily a winter visitor; migrating from their breeding grounds in the Arctic. While primarily preferring rocky habitat, the species can be found in any coastal habitat (<u>BTO</u>).

The 5-year peak mean number of turnstone between 1991/92 and 1995/96 was 343. The latest condition assessment showed the 5-year peak mean of the turnstone population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering turnstone that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering turnstone population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering turnstone population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that turnstone can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

The ability of turnstone to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by turnstone or restricted their movements. The population distribution attribute is being met, allowing a maintain target to be set for objective 2a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

Turnstone are thought to be an extremely tolerant species that habituates rapidly. There is no published evidence with regard to their reaction to noise or works, but direct observation of disturbance effects from works found turnstone responses to be consistent with the expected high tolerance (Cutts et al., 2013).

There are no known anthropogenic activities that would have caused significant disturbance to turnstone in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering turnstone that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering turnstone population of 343 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of turnstone food supply at levels sufficient to support a wintering turnstone population of 343 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Turnstone are found in a variety of coastal habitats in winter. Often there is a need to maintain an unobstructed line of sight (sightlines) within feeding or roosting habitat.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the population. Therefore, the supporting habitat attribute is being met, allowing a maintain target to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

In winter turnstone eat crustaceans, molluscs, worms and small fish. They will also frequently scavenge and eat carrion and birds' eggs.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of turnstone food is not sufficient to support the target population. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. However, it cannot be ruled out that a decline in food availability is a contributing to the decline in turnstone numbers within the SAC. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.12. Feature 12: Wigeon Mareca penelope

NRW published the <u>latest condition assessment</u> for Wigeon *Anas penelope* in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The population of wintering wigeon is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering population of wigeon to a minimum 5- year peak mean of 1,837 individuals across the SPA.

Supporting Information

1a. Wintering population

In the winter, wigeon are found throughout the UK, with large numbers congregating in coastal areas (<u>Wigeon | The Wildlife Trusts</u>).

The 5-year peak mean number of wigeon between 1991/92 and 1995/96 was 1,837. The latest condition assessment showed the 5-year peak mean of the wigeon population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: Wintering wigeon that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering wigeon population that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering wigeon population that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that wigeon can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

The ability of wigeon to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by wigeon or restricted their movements. The population distribution attribute is being met, allowing a maintain target to be set for objective 2a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and / or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the bird's distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

It is thought that wigeon are likely to be highly sensitive to disturbance (Goodship and Furness, 2022). A study found a single disturbance event could result in wigeon not feeding again until the next tidal cycle. Another study in Scotland attributed human disturbance as playing a part in the large-scale decline in wigeon at the site (Goodship and Furness, 2022).

There are no known anthropogenic activities that would have caused significant disturbance to wigeon in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the population of wintering wigeon that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering wigeon population of 1,837 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of wigeon food supply at levels sufficient to support a wintering wigeon population of 1,837 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

Wigeon favour estuaries and saltmarsh habitats in winter. They graze the saltmarsh and often there is a need to maintain an unobstructed line of sight (sighlines) within feeding or roosting habitat.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. While is no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the wigeon population, the declines seen at the site level have not been reflected at the national level. This has led to the supporting habitat attribute being assessed as unknown. Therefore, a default maintain target has been set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

Wigeon are vegetarian feeding on a diet of leaves, stems and roots (Snow and Perrins, 1998), predominately feed at the water's edge and on the saltmarsh. Though they do dabble and feed on aquatic plants in shallow water.

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is uncertainty over the distribution and abundance of wigeon food supply and whether it is sufficient to support the population, as declines seen at the site are not reflected at the national level. The attribute has been assessed as unknown. Therefore, a default maintain target has been set for objective 3b. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3.13. Feature 13: Waterbird assemblage

NRW published the <u>latest condition assessment</u> for the wintering waterbird assemblage in the Burry Inlet SPA in June 2025. They were assessed to be in **unfavourable** condition (medium confidence) at that time. NRW will review these conservation objectives when necessary.

Below are the attributes and targets for each conservation objective alongside supporting information.

Objective 1: The wintering waterbird assemblage is stable or increasing relative to the SPA target population.

Objective attribute	Site specific target
1a. Wintering population	Restore the wintering waterbird assemblage to a minimum 5- year peak mean of 34,962 individuals across the SPA.

Supporting Information

1a. Wintering population

The wintering waterfowl assemblage species include curlew, dunlin, grey plover knot, oystercatcher, pintail, redshank, shelduck, shoveler, teal, turnstone, and wigeon.

The 5-year peak mean number of birds in the assemblage between 1991/92 and 1995/96 was 34,962. The latest condition assessment showed the 5-year peak mean of the wintering waterbird assemblage population to be below the required target. Therefore the wintering population attribute is not being met and a restore target has been set for objective 1a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 2: The wintering waterbird assemblage that use the SPA continue to have access to, and can utilise, habitats necessary to restore the population to favourable condition.

Objective attribute	Site specific target
2a. Wintering population distribution	The distribution of the wintering waterbird assemblage that use the SPA should not be significantly impacted by anthropogenic activity.
2b. Wintering population disturbance (by human activity)	The wintering waterbird assemblage that use the SPA should not be subject to significant anthropogenic disturbance.

Supporting Information

2a. Wintering population distribution

This objective attribute seeks to ensure that the waterbird assemblage can continue to use and access all areas within the Burry Inlet SPA needed for feeding, moulting, roosting, loafing, shelter and any other activities necessary to support their survival.

The ability of birds to move freely move between feeding and roosting sites is critical to their fitness and survival. As roosting and feeding can be outside of the SPA boundary movement of the birds inside and outside of the SPA must also not be significantly impacted or restricted.

There are no known anthropogenic activities that have impeded the use of the whole SPA by the wintering waterbird assemblage or restricted their movements. The population distribution attribute is being met, allowing a maintain target to be set for objective 2a. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

2b. Wintering population disturbance (by human activity)

Human activity is classed as disturbance when the activity is sufficient to disrupt normal behaviours and / or the distribution of the bird species.

Disturbance should be judged as significant if a human activity impacts on the feature in such a way as to be likely to cause impacts on the population in the long-term by either

- changing local distribution on a continuing basis; and/or
- changing local abundance on a sustained basis.

Examples of disturbing effects are, changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, and desertion of supporting habitat (Collop et al. (2016) and references therein).

These impacts can occur within and outside the designated site boundary. The result of disturbance induced behaviour may reduce successful feeding and /or roosting. Disturbance may also reduce the availability of suitable habitat narrowing the birds' distribution within the site.

Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling, presence of people, animals, vehicles and structures.

There are no known anthropogenic activities that would have caused significant disturbance to the wintering waterbird assemblage in this SPA. For more information see the latest condition assessment (Hatton-Ellis et al., 2025).

Objective 3: The quality of habitat and abundance of food supply is sufficient to restore the wintering waterbird assemblage that use the SPA to favourable condition.

Objective attribute	Site specific target(s)
3a. Supporting habitat	Maintain sufficient extent, distribution, function and quality of habitats needed to support a wintering waterbird assemblage of 34,962 individuals.
	Maintain existing unrestricted bird sightlines in every direction around both roosting sites and feeding areas.
3b. Food availability	Maintain the abundance and distribution of wintering waterbird assemblage food supply at levels sufficient to maintain the population of 34,962 individuals.

Supporting Information

3a. Supporting habitat

The extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (roosting, loafing, feeding) should be maintained.

High tide roosting sites are characterised by having good sightlines (i.e. open spaces where the birds can see any potential predators). Any significant changes to sightlines e.g. installation of tall structures or planting of trees, could impact on use of

the roosts. If line of sight becomes obstructed birds may abandon their roosts which could consequently have a negative impact on the population.

There has been no loss in extent or distribution of supporting habitat in the SPA and no issues with sightlines. There is also no evidence to suggest that the functioning or quality of the supporting habitat is not sufficient to support the waterbird assemblage. Therefore, the supporting habitat attribute is being met, allowing a maintain target to be set for objective 3a. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

3b. Food availability

The availability of an abundant food supply is critically important for successful fitness, survival and the overall sustainability of the population. As a result, inappropriate management and direct or indirect impacts which may affect the distribution, abundance and availability of food may adversely affect the population and alter the distribution of birds.

There is no reason to believe the distribution and abundance of food is not sufficient to support the waterbird assemblage. The food availability attribute is being met, allowing a maintain target to be set for objective 3b. However, it cannot be ruled out that a decline in food availability is a contributing to the decline in wigeon numbers within the SAC. For more information see the latest condition assessment (Hatton-Ellis et. al., 2025).

4. Advice on operations

NRW must provide advice to relevant authorities about operations that may cause,

- deterioration of designated natural habitats
- deterioration of the habitats of designated species
- the disturbance of designated species

This is statutory advice required by regulation 37(3b) of the Habitats Regulations.

This advice is to help relevant authorities direct and prioritise their management of activities that are of greatest threat to the features of the site. The advice given here is without prejudice to any advice provided in relation to the consideration of plans or projects within the meaning of <u>Part 6 of the Habitat Regulations</u>.

Activities operating at distance from the site may cause pressures that travel into the site. These external pressures may affect features within the site.

4.1. Operations which may cause deterioration or disturbance to the features of the site

Table 2 lists activities that have the potential to deteriorate or disturb the designated features of Burry Inlet Special Protection Area SPA and if they are known to occur within the SPA.

This list of operations is not exhaustive. If an operation or activity is not listed in Table 2 it may still have the potential to deteriorate the features of the site. Activities occurring outside if the site may still have the potential to impact the features within the site. The occurrence information was correct at time of publication, but activities may have ceased or started since. Advice on individual operations should be sought on a case-by-case basis.

Additional information can be found on the <u>Natural England's designated sites</u> <u>website</u> and Marine Scotland's <u>Feature Activity Sensitivity Tool (FEAST)</u>. It is important to note that NRW has not agreed sensitivity thresholds with either Natural England or Nature Scot and the information should be used as a general guide. Specific advice on operations should be sought from NRW on a case-by-case basis. Table 2. Advice on operations for Burry Inlet SPA.

Operation/Activity	Occurrence in SPA
Dredging: Construction and maintenance	There are small to medium-scale harbour facilities at Llanelli and Burry Port, with some approaches and navigations channels being maintenance-dredged intermittently.
Shipping: Vessel traffic and maintenance (including antifouling)	Commercial boats include fishing vessels and tourist boats.
Shipping: anchoring (commercial)	Not currently occurring in the SPA.
Shipping: Conventional and accidental discharges (including ballast water discharge, refuse, sewage, operational, petrochemical,	Possibly occurs in the waters adjacent to SPA, likely low level in site as not on main shipping routes. Ballast water convention now in force.
cargo losses and salvage)	
Coast protection: Hard defences (including sea walls, breakwaters, railways and foreshore deposit of rock, rubble etc.)	Present in the site, including sea walls, rock armour, gabions and groynes. Protection of coastal railway tracks that straddle the north coast of the Burry Inlet between Llanelli and Burry Port, and between Kidwelly and Ferryside. These also act as coastal defences.
Coast protection: Soft defences (including groynes, beach replenishment etc)	Present in the site though activity is minor.
Coast protection: Barrages (including storm surge, tidal and amenity)	Not currently present in the SPA.
Artificial reef	Not currently present in the SPA.
Power station	Non-operational fly ash power station.
Pipelines	Likely to be present. No information available.
Power / communication cables	Likely to be present. No information available.
Effluent disposal: disposal of sewage, chemical, thermal and	NRW and DCWW datasets available on locations and inputs on the coast adjacent to the SPA.

Operation/Activity	Occurrence in SPA
sludge dumping (not including combined sewage overflows)	No thermal or sludge disposal.
Miscellaneous wastes and debris	Litter present in the sea from various sources
Run-off: Agricultural, urban and industrial run-off	Urban and industrial run-off is widespread and common around coastal populations and industry.
Fishing: All trawling (Including beam, otter, toothed and any trawled gear)	Occurs within the SPA. Local restrictions apply.
Fishing: All dredging (including toothed, bladed, mechanical, hydraulic and any other gear not listed)	May occur within the SPA. Location and intensity information is unknown.
Fishing: All netting (including gill, tangle, trammel, seine, fyke and any other fishing with netted gear)	Occurs within the SPA. Location and intensity information is unknown. abandoned, lost or discarded fishing nets seen occasionally as evidence.
Fishing: All potting (including lobster, crab, prawn, and any other fishing with pots)	Not currently ocurring in the SPA.
Fishing: All line fishing (including long-line and handline)	May occur within the SPA. Location and intensity information is unknown.
Fishing: All methods of hand gathering (including cockles, mussels, mussel seed, razor clam, winkles, algae and plants four human consumption and chemical extraction and biomass (excluding access issues)	A regulated cockle fishery operates within the boundary of the SPA. Cockles also gathered outside regulating order.
	Mussel fishery and mussel seed collection, both in and around Whiteford.
	Razor clams and laverbread are gathered intertidally.
Fishing: Bait collection commercial and recreational (including digging, pump, boulder turning etc)	May occur within the SPA. Location and intensity information is unknown.

Operation/Activity	Occurrence in SPA
Aquaculture: All forms of aquaculture (includes sea weed and shellfish).	Not currently present in the SPA. Interest in seaweed aquaculture which maybe within the SPA boundary.
Aggregate extraction (including mineral and biogenic sands and gravels)	Occurs adjacent to SPA.
Oil and gas exploration: All oil and gas exploration activity (including seismic survey, drilling and discharges both operational and accidental)	Not currently present in the SPA.
Renewable energy generation: All forms of renewable energy (including tidal barrage and impoundments, tidal and wave energy, offshore wind both fixed and floating).	Not currently present in the SPA.
Oil spill response: All activities of responding to oil spills at sea and on shore (including chemical, physical and access).	Reactive in case of emergencies.
Recreation: Fishing (e.g. angling and spearfishing).	Widespread throughout the SPA.
Recreation: Boating (e.g. power craft, sailing, canoeing, surfing, kite surfing, paddle boarding, Scuba diving, snorkelling etc).	Widespread throughout the SPA. Jet skis have been reported disturbing and deliberately targeting birds on the Burry Inlet side of Carmarthen Bay.
Recreation: Coastal access	Potential for disturbance to the features of the SPA through anglers accessing the shore with vehicles. Dog walking is popular and also has potential to cause disturbance.
Recreation: Light aircraft	Numerous airstrips in the surrounding area, light aircraft flying over the SPA. Drones possible.

Operation/Activity	Occurrence in SPA
Recreation: Wildfowling	Occurs within the site but location and intensity information are unknown. There is information on shootings for North Gower saltmarsh
Recreation: Marine wildlife watching / eco-tourism	Birdwatching is common.
Military activity: All forms of military activity (including ordnance ranges, marine exercises, aircraft etc)	Pendine Ministry of Defence firing range is outside the boundary of the SPA. There are also regular visits by the MoD to remove UXOs in the area, not sure if this is a disturbance issue or not?
Marine archaeology and salvage	No data available. Potential to occur in the SPA.
Science and outreach: Education	Occurs within the site but location and intensity information are unknown
Science and outreach: Animal welfare operations and sanctuaries	Occurs within the site but location and intensity information are unknown
Science and outreach: Science research	Occurs within the site but location and intensity information are unknown

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Appendix 1: Additional conservation interest

SACs partially or wholly within the SPA

- Twyni Bae Caerfyrddin/ Carmarthen Bay Dunes
- Bae Caerfyrddin ac Aberoedd / Carmarthen Bay and Estuaries
- Dynesfeydd Môr Hafren / Bristol Channel Approaches

SSSIs partially or wholly within the SPA

- Twyni Chwitffordd, Morfa Landimor a Bae Brychdwn / Whiteford Burrows, Landimore Marsh and Broughton Bay
- Burry Inlet and Loughor Estuary
- Arfordir Pen-bre / Pembrey Coast

Ramsar sites partially or wholly within the SPA

Burry Inlet