CORE MANAGEMENT PLAN
INCLUDING CONSERVATION OBJECTIVES

FOR
Ynys Feurig, Cemlyn Bay and The Skerries SPA
Cemlyn Bay SAC
Ynys Feurig SSSI
The Skerries SSSI
Cemlyn Bay SSSI

Version: 3 Mannon Lewis and John Ratcliffe
Date: 31st March 2008
Approved by: N R Thomas 4th April 2008

More detailed maps of management units can be provided on request.
A Welsh version of all or part of this document can be made available on request.
CONTENTS

Preface: Purpose of this document

1. Vision for the Site

2. Site Description
   2.1 Area and Designations Covered by this Plan
   2.2 Outline Description
   2.3 Outline of Past and Current Management
   2.4 Management Units

3. The Special Features
   3.1 Confirmation of Special Features
   3.2 Special Features and Management Units

4. Conservation Objectives
   Background to Conservation Objectives
   4.1 Conservation Objective for:
      Feature 1: Arctic Tern Sterna paradisae
      Feature 2: Common Tern Sterna hirundo
      Feature 3: Roseate Tern Sterna dougallii
      Feature 4: Sandwich Tern Sterna sandvicensis
   4.2 Conservation Objective for:
      Feature 5: Coastal Lagoon and
      Feature 9: Spiral tasselweed Ruppia cirrhosa
   4.3 Conservation Objective for:
      Feature 6: Perennial Vegetation of Stony Banks
   4.4 Conservation Objective for:
      Feature 7: Rock Pools and
      Feature 8: Under Boulders

5. Assessment of Conservation Status and Management Requirements:
   5.1 Conservation Status and Management Requirements of Features 1, 2, 3 and 4
   5.2 Conservation Status and Management Requirements of Features 5 and 9
   5.3 Conservation Status and Management Requirements of Feature 6
   5.4 Conservation Status and Management Requirements of Features 7 and 8

6. Action Plan: Summary

7. Glossary
**PREFACE**

This document provides the main elements of CCW’s management plan for the site named. It sets out what needs to be achieved on the site, the results of monitoring and advice on the action required. This document is made available through CCW’s web site and may be revised in response to changing circumstances or new information. This is a technical document that supplements summary information on the web site.

One of the key functions of this document is to provide CCW’s statement of the Conservation Objectives for the relevant Natura 2000 site. This is required to implement the Conservation (Natural Habitats, &c.) Regulations 1994, as amended (Section 4). As a matter of Welsh Assembly Government Policy, the provisions of those regulations are also to be applied to Ramsar sites in Wales.
1. **VISION FOR THE SITE**

This is a descriptive overview of what needs to be achieved for conservation on the site. It brings together and summarises the Conservation Objectives (part 4) into a single, integrated statement about the site.

The site should contribute to the breeding tern population within the Irish Sea and more locally along the coast of Anglesey. Its integrity as a breeding site for Roseate tern, Sandwich Tern, Arctic Tern and Common Tern should be maintained even in years where one or more of the nesting species fails to be present.

The integrity of the tern population is dependant upon off-site factors, such as availability of food, the presence of alternative nesting sites in adverse years within the Irish Sea and the integrity of their winter migration sites. There should be opportunity for roseate terns to nest. As they tend to nest in established tern colonies, usually associated with common terns, the maintenance of a viable common and arctic tern colony is imperative.

The integrity of the shingle ridge and its associated flora, including sea kale, sea radish and yellow horned poppy, should be maintained along with the low salinity lagoon. The lagoon will support the bryozoan *Conopeum seurati*, the lagoonal cockle *Cerastoderma glaucum*, the lagoonal mud snail *Ventrosia ventrosa* and lagoonal isopod *Idotea chelipes*. The lagoon as well as areas of saltmarsh and other brackish pools should be characterised by beaked tasselweed *Ruppia maritima*, spiral tassleweed *Ruppia cirrhosa* and brackish water-crowfoot *Ranunculus baudotti*.

The site should also support wintering wildfowl including wigeon, shoveller, goldeneye, teal, mallard and tufted duck.
2. SITE DESCRIPTION

2.1 Area and Designations Covered by this Plan

Grid references: Latitude: 53 24 42 N
                Longitude: 04 30 43 W

Unitary authority: Cyngor Sir Ynys Môn/ Isle of Anglesey Council

Area (hectares): 85.66 ha

Designations covered:
- The SPA of Ynys Feurig, Cemlyn Bay and The Skerries
- Cemlyn Bay SAC
- Cemlyn Bay SSSI
- Ynys Feurig SSSI
- The Skerries SSSI

A summary map showing the coverage of this document is shown below:

Detailed maps of the designated sites are available through CCW’s web site: http://www.ccw.gov.uk/interactive-maps/protected-areas-map.aspx
Figure 1: Maps Showing Location and Boundaries of Sites
2.2 Outline Description

The SPA of Ynys Feurig, Cemlyn Bay and The Skerries is located on the north and west coast of the Isle of Anglesey, North-west Wales. The SPA comprises three separate areas. Ynys Feurig lies on Anglesey's west coast close to Valley Airfield, with Cemlyn Bay, also a SAC, situated on the north coast about 20 km away. The Skerries lie 3 km off Carmel Head to the north of Anglesey (see Figure 1).

Ynys Feurig consists of a series of low-lying islands extending about 1 km out to sea from a sandy shore. There is little vegetation, except on the highest outer islands. At Cemlyn Bay, a shingle storm beach forms a bar between a tidal lagoon and the open shore. The shingle habitats, together with saltmarsh developing around the lagoon and brackish pools further inland are an unusual combination of habitats. The Skerries are a group of sparsely vegetated islets, 17 ha in extent. They are protected by strong currents but are very exposed to strong westerly and northerly winds.

The SPA site is of importance for four species of breeding terns. The three separate areas are treated as a single site as a consequence of regular movement by birds between the component parts.

The SAC site is of importance for its lagoon and associated species and the shingle ridge and its vegetation.

Other areas of importance to the SPA and SAC sites are areas of scrub, marshy grassland, coastal grassland, saltmarsh, ditches, intertidal, maritime cliff and associated ledges and crevices.

2.3 Outline of Past and Current Management

**Skerries** - The island, associated buildings and lighthouse, are owned by Trinity house. The Royal Society for the Protection of Birds (RSPB) has had wardens present here during the nesting season since 1980’s. Their work has included visitor control, predator (gull) control, manipulation of vegetation & nest boxes, and monitoring. Disrepair to the lighthouse building used to accommodate wardening staff could jeopardise the wardening service.

**Ynys Feurig** - Historically important for roseate tern the land is in private ownership and leased to the RSPB. RSPB staff warden this site during the nesting period. Their work has included visitor control, predator (gull, fox) control, manipulation of vegetation & nest boxes, monitoring.

**Cemlyn** - The lagoon is separated from the sea by a shingle bank with a narrow channel at the western end, across which a sluice system was built in the 1930s. The shingle ridge feature has been reduced in extent in the past by the construction of a car park.

The lagoon is a partially artificial feature, augmenting what appears to have been a small lagoon and saltmarsh. Seawater exchange occurs mainly through the sluice and by percolation through the shingle bank, although in extreme storms coinciding with spring tides waves break over the top of the shingle bank. The National Trust owns the land at Cemlyn. Units 3, 4, 6 and part of unit 2 along the top of the shingle ridge have been managed as a wildlife reserve by the North Wales Wildlife Trust since 1971 Their work has included visitor control, predator (gull, mustelid etc.) control, manipulation of vegetation & nest boxes, monitoring and interpretation.
### 2.4 Management Units

The following table confirms the relationships between the management units and the designations covered:

<table>
<thead>
<tr>
<th>Unit number</th>
<th>SPA</th>
<th>SAC</th>
<th>SSSI</th>
<th>Ownership</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National Trust</td>
<td>Add columns as required, e.g. NNR, SPA, Ramsar</td>
</tr>
<tr>
<td><strong>Cemlyn</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>6</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>7</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
<tr>
<td>9</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>National Trust</td>
</tr>
</tbody>
</table>

| Skerriesx   |       |       |       |             |                                    |
| 1           | ✓     | ✓     |       |             | Trinity House                      |

| **Ynys Feurig** |       |       |       |             |                                    |
| 1             | ✓     |       | ✓     |             | Plas Lwchylched, Bryngwrn          |
| 2             | ✓     |       | ✓     |             | Plas Lwchylched, Bryngwrn          |
3. THE SPECIAL FEATURES

3.1 Confirmation of Special Features

<table>
<thead>
<tr>
<th>Designated feature</th>
<th>Relationships, nomenclature etc</th>
<th>Conservation Objective in part 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SAC features.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annex I habitats that are a primary reason for selection of this site</strong> Coastal lagoons Priority 1 feature (EU Habitat code 1150)</td>
<td>Cemlyn Bay SAC &amp; SSSI feature</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</strong> Perennial vegetation of stony banks (EU Habitat code 1220)</td>
<td>Cemlyn Bay SAC &amp; SSSI feature</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>SPA features Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arctic Tern Sterna paradisaea</td>
<td>SPA &amp; SSSI feature</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Ynys Feurig SSSI feature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cemlyn SSSI feature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Skerries SSSI feature</td>
<td></td>
</tr>
<tr>
<td>Common Tern Sterna hirundo</td>
<td>SPA feature</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Ynys Feurig SSSI feature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Skerries SSSI feature</td>
<td></td>
</tr>
<tr>
<td>Roseate Tern Sterna dougallii</td>
<td>SPA feature</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Ynys Feurig SSSI feature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Skerries SSSI feature</td>
<td></td>
</tr>
<tr>
<td>Sandwich Tern Sterna sandvicensis</td>
<td>SPA feature</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Ynys Feurig SSSI feature</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cemlyn Bay SSSI feature</td>
<td></td>
</tr>
<tr>
<td><strong>Ramsar features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cemlyn Bay additional SSSI features to those listed above:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shingle/boulders above high water</td>
<td>Covered by SAC designation</td>
<td></td>
</tr>
<tr>
<td>Standing water – brackish</td>
<td>Covered by SAC designation</td>
<td></td>
</tr>
<tr>
<td>Percolating saline lagoon</td>
<td>Covered by SAC designation</td>
<td></td>
</tr>
<tr>
<td>Spiral tasselweed Ruppia cirrhosa</td>
<td>Cemlyn Bay SSSI feature</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>The Skerries additional SSSI features to those listed above:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rock-pools</td>
<td>- Fucoids and kelps in deep eulittoral rockpools</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>- Seaweeds in sediment – sand or gravel-floored eulittoral</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>rockpools</td>
<td>- <em>Cystoseira spp.</em> In shallow eulittoral rockpools</td>
<td></td>
</tr>
<tr>
<td>Under-boulders</td>
<td>- <em>Fucus serratus</em> and under-boulder fauna on lower eulittoral boulders.</td>
<td>4.4</td>
</tr>
</tbody>
</table>

**Ynys Feurig SSSI additional SSSI features to those listed above:-**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rock Pool</td>
<td>- Seaweeds in sediment – sand or gravel-floored eulittoral rockpools</td>
<td>4.4</td>
</tr>
</tbody>
</table>
3.2 Special Features and Management Units

This section sets out the relationship between the special features and each management unit. This is intended to provide a clear statement about what each unit should be managed for, taking into account the varied needs of the different special features. All special features are allocated to one of seven classes in each management unit. These classes are:

**Key Features**
- **KH** - a ‘Key Habitat’ in the management unit, i.e. the habitat that is the main driver of management and focus of monitoring effort, perhaps because of the dependence of a key species (see KS below). There will usually only be one Key Habitat in a unit but there can be more, especially with large units.
- **KS** – a ‘Key Species’ in the management unit, often driving both the selection and management of a Key Habitat.
- **Geo** – an earth science feature that is the main driver of management and focus of monitoring effort in a unit.

**Other Features**
- **Sym** - habitats, species and earth science features that are of importance in a unit but are not the main drivers of management or focus of monitoring. These features will benefit from management for the key feature(s) identified in the unit. These may be classed as ‘Sym’ features because:
  a) they are present in the unit but may be of less conservation importance than the key feature; and/or
  b) they are present in the unit but in small areas/numbers, with the bulk of the feature in other units of the site; and/or
  c) their requirements are broader than and compatible with the management needs of the key feature(s), e.g. a mobile species that uses large parts of the site and surrounding areas.
- **Nm** - an infrequently used category where features are at risk of decline within a unit as a result of meeting the management needs of the key feature(s), i.e. under Negative Management. These cases will usually be compensated for by management elsewhere in the plan, and can be used where minor occurrences of a feature would otherwise lead to apparent conflict with another key feature in a unit.
- **Mn** - Management units that are essential for the management of features elsewhere on a site e.g. livestock over-wintering area included within designation boundaries, buffer zones around water bodies, etc.
- **x** – Features not known to be present in the management unit.
The table below sets out the relationship between the special features and management units identified in this plan:

<table>
<thead>
<tr>
<th>Management Units</th>
<th>Ynys Feurig</th>
<th>Cemlyn Bay</th>
<th>The Skerries</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>SAC</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>SSSI</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**SPA Features**

   - Arctic Tern *Sterna paradisaea*
   - Common Tern *Sterna hirundo*
   - Roseate Tern *Sterna dougallii*
   - Sandwich Tern *Sterna sandvicensis*

**SAC Features**

2. *1150 Coastal lagoons*  
   *Priority 1 feature*

3. *1220 Perennial vegetation of stony banks*

**SSSI Features**

<table>
<thead>
<tr>
<th>Rock pool</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
<th>Sym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under boulders</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
<td>Sym</td>
</tr>
<tr>
<td>Spiral Tasselweed</td>
<td>Sym</td>
<td>Sym</td>
<td>KS</td>
<td>Sym</td>
<td>KS</td>
<td>KS</td>
<td>KS</td>
<td>KS</td>
<td>Sym</td>
<td>Sym</td>
<td></td>
</tr>
</tbody>
</table>
4. CONSERVATION OBJECTIVES

Background to Conservation Objectives:

a. Outline of the legal context and purpose of conservation objectives.

Conservation objectives are required by the 1992 ‘Habitats’ Directive (92/43/EEC). The aim of the Habitats Directives is the maintenance, or where appropriate the restoration of the ‘favourable conservation status’ of habitats and species features for which SACs and SPAs are designated (see Box 1).

In the broadest terms, 'favourable conservation status' means a feature is in satisfactory condition and all the things needed to keep it that way are in place for the foreseeable future. CCW considers that the concept of favourable conservation status provides a practical and legally robust basis for conservation objectives for Natura 2000 and Ramsar sites.

---

**Box 1**

**Favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive**

“The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and areas it covers within that range are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- The conservation status of its typical species is favourable.

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as ‘favourable’ when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.”

---

Achieving these objectives requires appropriate management and the control of factors that may cause deterioration of habitats or significant disturbance to species.

As well as the overall function of communication, Conservation objectives have a number of specific roles:

- Conservation planning and management.

The conservation objectives guide management of sites, to maintain or restore the habitats and species in favourable condition.
Assessing plans and projects.

Article 6(3) of the ‘Habitats’ Directive requires appropriate assessment of proposed plans and projects against 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 sites. This role for testing plans and projects also applies to the review of existing decisions and consents.

Monitoring and reporting.

The conservation objectives provide the basis for assessing the condition of a feature and the status of factors that affect it. CCW uses ‘performance indicators’ within the conservation objectives, as the basis for monitoring and reporting. Performance indicators are selected to provide useful information about the condition of a feature and the factors that affect it.

The conservation objectives in this document reflect CCW’s current information and understanding of the site and its features and their importance in an international context. The conservation objectives are subject to review by CCW in light of new knowledge.

b. Format of the conservation objectives

There is one conservation objective for each feature listed in part 3. Each conservation objective is a composite statement representing a site-specific description of what is considered to be the favourable conservation status of the feature. These statements apply to a whole feature as it occurs within the whole plan area, although section 3.2 sets out their relevance to individual management units.

Each conservation objective consists of the following two elements:

1. Vision for the feature
2. Performance indicators

As a result of the general practice developed and agreed within the UK Conservation Agencies, conservation objectives include performance indicators, the selection of which should be informed by JNCC guidance on Common Standards Monitoring1.

There is a critical need for clarity over the role of performance indicators within the conservation objectives. A conservation objective, because it includes the vision for the feature, has meaning and substance independently of the performance indicators, and is more than the sum of the performance indicators. The performance indicators are simply what make the conservation objectives measurable, and are thus part of, not a substitute for, the conservation objectives. Any feature attribute identified in the performance indicators should be represented in the vision for the feature, but not all elements of the vision for the feature will necessarily have corresponding performance indicators.

As well as describing the aspirations for the condition of the feature, the Vision section of each conservation objective contains a statement that the factors necessary to maintain those desired conditions are under control. Subject to technical, practical and resource constraints, factors that have an important influence on the condition of the feature are identified in the performance indicators.

1 Web link: http://www.jncc.gov.uk/page-2199
4.1 Conservation Objective for Feature 1-4: Breeding population of Terns

**Feature 1:** Arctic Tern *Sterna paradisae*

**Feature 2:** Common Tern *Sterna hirundo*

**Feature 3:** Roseate Tern *Sterna dougallii*

**Feature 4:** Sandwich Tern *Sterna sandvicensis*

Vision for features 1-4

The vision for these features is for them to be in a favourable conservation status, where all the following conditions are satisfied:

- The number of breeding terns within the SPA is stable or increasing.
- The number of chicks successfully fledged in the SPA and beyond is sufficient to help sustain the population.
- The range and distribution of terns within the SPA and beyond is not constrained or hindered.
- The extent of supporting habitats used by terns is stable or increasing.
- Supporting habitats are of sufficient quality to support the requirements of terns.
- There are appropriate and sufficient food sources for terns within access of the SPA.
- Actions or events likely to impinge on the sustainability of the population are under control.

Performance indicators for Feature 1

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

<table>
<thead>
<tr>
<th>Performance indicators for feature condition</th>
<th>Attribute</th>
<th>Attribute rationale and other comments</th>
<th>Specified limits</th>
</tr>
</thead>
</table>
| **A1. Population Size** | The SPA and its number of breeding pairs should not be thought of in isolation. Terns are liable to move between regular breeding sites unpredictably and therefore require a suite of alternative nesting areas. | Lower limit:  
  - Arctic Tern *Sterna paradisae* 1,290 pairs  
  - Common Tern *Sterna hirundo* 189 pairs  
  - Roseate Tern *Sterna dougallii* 3 pairs  
  - Sandwich Tern *Sterna sandvicensis* 460 pairs |
| | In the case of Roseate Tern many of the birds have moved from UK nesting sites to the growing colony at Rockabill, South East Ireland. Productivity at this colony is good and has been a major factor in the recent increase in the northwest European population as a whole. | | Upper limit:  
  - Not required |
| | At time of designation the SPA had the following number of nesting birds:  
  - Arctic Tern *Sterna paradisae*, 1,290 pairs representing at least 2.9% of the breeding population in Great Britain (5 year mean, 1992-1996).  
  - Common Tern *Sterna hirundo*, 189 pairs representing at least 1.5% of the breeding population in Great Britain (5 year mean, | | |

Roseate Tern *Sterna dougallii*, 3 pairs representing at least 5.0% of the breeding population in Great Britain (5 year mean, 1992-1996).

Sandwich Tern *Sterna sandvicensis*, 460 pairs representing at least 3.3% of the breeding population in Great Britain (5 year mean, 1992-1996).

### A2. Productivity

The 5-year mean productivity of the breeding tern populations will be used. Productivity will be taken as mean number of chicks fledging per breeding pair per year. *The lower limit is taken from the average no. of chicks fledged from 1992 – 96 (Ynys Feurig and Skerries).*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor rationale and other comments</th>
<th>Operational Limits</th>
</tr>
</thead>
</table>
| **F1. Disturbance** | Terns do not respond well to human and predator disturbance. These sites rely heavily on wardening by RSPB (Ynys Feurig and Skerries) and North Wales Wildlife Trust at Cemlyn | **Lower limit:** Average no of chicks fledged 0.85  
- Arctic Tern *Sterna paradisae*  
- Common Tern *Sterna hirundo*  
- Roseate Tern *Sterna dougallii*  
- Sandwich Tern *Sterna* |
| **F2. Predation** | Terns require freedom from predation in order to thrive. Foxes, rats, cats, stoats, weasels, gulls, peregrines and herons can cause severe damage to tern colonies. Every effort should be made to control ground predators present. **Cemlyn** - foxes and “rogue” gulls have caused severe problems on this site. **Skerries** - As well as the tern colony the skerries has a notable breeding population of lesser black backed Gull *Larus fuscus* and herring gull *Larus argentatus*. **Ynys Feurig** – Foxes and avian predators such as peregrine or greater black-backed gulls. Predator control in these areas relies heavily on wardens taking appropriate action - RSPB (Ynys Feurig and Skerries) and North Wales Wildlife Trust at Cemlyn. | **Lower limit:** n/a  
**Upper limit:** Occasional take tolerated – up to 5% of any species |
### F3. Supporting habitat

There is adequate space and type of habitat on the islands to support the breeding colony – space for nests and normal bird behaviour. Both within the SPA and within other areas outside.

Vegetation, holes and crevices are also important to provide appropriate supporting habitat.

Some competition may occur between early nesting common and late nesting roseate terns, at sites with few crevices or long vegetation. At some sites, there is a possibility of competition between terns and gulls for nesting areas.

Nest boxes have been used to encourage terns nesting in the SPA in the past.

Historical areas previously used by terns must be kept available for future re-occupation

- Ynys Dulas
- Ynys Gorad Goch
- Rhoscolyn Beacon
- Inland Sea
- Llyn Alaw

Adequate habitat/space to support nest sites at Ynys Feurig, Cemlyn Bay, The Skerries, Ynys Dulas, Ynys Gorad Goch, Inland Sea, Llyn Alaw and Rhoscolyn Beacon.

### F2. Food Supply

Terns have a diet of predominately sandeels, sprats and whiting. Traditionally sandeels have been little exploited for human food, but are a major target of "industrial fishing" for animal feed and fertilizer, particularly in the North Sea.

Unsustainable fishing of the above mentioned fish would be detrimental to the tern population.

There is some evidence that cetaceans can be significant in driving fish to the surface where they are available to terns. Changes in cetacean numbers or behaviour might therefore have a knock-on effect on terns.

| Lower limit: | Absence of signs of under-nourishment / population collapse |
| Upper limit: | Not set |

### F3. Wintering territory

It is believed that the majority of the terns from this SPA will winter on the West Coast of Africa.

Outside the breeding season, the trapping of terns for sport or food in west Africa

| Lower limit: | To be determined |
| Upper limit: | To be determined |
has been suggested as a major cause of mortality. Also, long-term changes in sea-surface temperature may be partly responsible for the consistent and continued decline of fish stocks, e.g. Sardinella, in coastal west Africa and the Gulf of Guinea. As the winter progresses, Sardinella become less available to terns in this region and the whereabouts of roseate terns and the composition of their diet in the December to May period remain unknown.

(RSPB and Birdlife International – education programme Ghana)

<table>
<thead>
<tr>
<th>4.2 Conservation Objective for Feature 5: Coastal Lagoon and Feature 9: Spiral tasselweed Ruppia cirrhosa</th>
</tr>
</thead>
</table>

**Vision for Features 5 and 9:** The vision for these features is for them to be in a favourable conservation status, where all the following conditions are satisfied:

- There is no loss of area other than that due to natural processes.
- The specialised plant and animal communities within the lagoon remain.
- All factors affecting the achievement of these conditions are under control.

**Performance indicators for Feature 5 and 9**

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

<table>
<thead>
<tr>
<th>Performance indicators for feature condition</th>
<th>Attribute</th>
<th>Attribute rationale and other comments</th>
<th>Specified limits</th>
</tr>
</thead>
</table>
| **A1. Extent** | Extent should be assessed periodically against baseline map/aerial photo | **Lower limit:**
No reduction in extent as seen in aerals taken in 2006 (COWI-Vexcel 2006.)
**Upper limit:**
Not set |

| **A4 Species population measures** | A general range of 10% to 25% is appropriate to the survival of all the lagoon species present at Cemlyn, some of which will be selectively lost as the salinity moves away from this range. As many lagoons have a ground-freshwater input, salinity variation can result across the site and by stratification, causing localized areas of favourable or unfavourable conditions, again leading to patchiness of the species. | **Lower limit:**
| Fauna: |
Presence of at least three of the following species |
- bryozoan Conopeum seurati |
- lagoonal cockle Cerastoderma glaucumthe |
- lagoonal mud snail Ventrosia ventrosa |
- lagoonal isopod Idotea chelipes |
The lagoonal species of interest at Cemlyn which reflect the specific biological characteristics of the lagoon are:

- **Conopeum seurati** this is an encrusting bryozoan that forms small whitish colonies on seagrasses and other substrata. It has been recorded from salinities between 2 and >40‰, but the preferred salinity range appears to be between 10 and 25‰.

- Lagoonal cockle **Cerastoderma glaucum** occurs commonly at salinities between 10 and 40%, preferring levels around 35%, but will briefly tolerate a range from 2 to 60%; however, individuals observed in the field at 4‰ for over a week were found to be gaping and torpid (unpublished).

- lagoonal mud snail **Ventrosia ventrosa** is more tolerant of low salinity than many lagoonal specialists, preferring a range from 6% to 30%, but it will tolerate up to 50%.

- lagoonal isopod **Idotea chelipes** has been recorded actively swimming in waters ranging from 4 to 50%, and was once recorded in Kings Marshes lagoons up to 57% (Bamber, 1997), but prefers a range between 15 and 40%.

- tasselweed **Ruppia maritima**, is more tolerant of low salinity than **Chaetomorpha**, and tolerates a range from 0 to 44%, although tends to be replaced by **Potamogeton pectinatum** or **Zanichellia palustris** at salinities below 3‰. The preferred range is not clearly known.

- spiral tasselweed **Ruppia cirrhosa**

- brackish water-crowfoot **Ranunculus baudottii**

**Flora:**
Presence of at least 2 of the following species
- tasselweed **Ruppia maritima**
- spiral tasselweed **Ruppia cirrhosa**
- brackish water-crowfoot **Ranunculus baudottii**
<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor rationale and other comments</th>
<th>Operational Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2. Turbidity</td>
<td>Land-use change in the catchment (e.g. intensive dairy or arable farming) has the potential to influence water quality. Sediment load, chemical (nutrient) and organic pollution could affect the water quality within the lagoon.</td>
<td>Lower Limit: To be determined Upper Limit: To be determined</td>
</tr>
<tr>
<td>F3. Isolating barrier</td>
<td>Presence, nature and integrity. Key factor determining input and output of seawater is the height and the bottom of the inlet bed relative to ambient low water levels. Where changes to the barrier are due to natural processes (infilling or coastal erosion) a decision then has to be made as to its status. The feature can be in favourable condition providing that the conservation interest of the feature is not compromised. The isolating barrier would be declared unfavourable if there is loss or damage to the sluice.</td>
<td>Lower limit: No change in measures from established baseline 2006 (COWI- Vexcel 2006.) Upper limit:</td>
</tr>
<tr>
<td>F4 Salinity Regime</td>
<td>The salinity levels can fluctuate enormously within the lagoon at any one time. Salinity in the lagoons varies both spatially and seasonally. Salinity levels can vary from nearly 0‰ to 35‰.(TBC) Given that the essence of lagoonal biodiversity is its ability to tolerate wide variation in salinity (in contrast to freshwater or marine species) then no overall average limit is appropriate. It is the extreme events which determine the nature of this community Different species found in the lagoon are tolerant of varying ranges of salinity, and of brackish (hypohaline) conditions. The lagoon suffers temporary threats from shingle blockages of the outflow (inflow) stream to the beach and from low salinity periods in response to rainfall. Work has been done during 2007 to measure salinity in the lagoon using a permanent salinity data-logging station.</td>
<td>Lower limit: To be determined Upper limit: To be determined</td>
</tr>
<tr>
<td>A3 Water depth</td>
<td>In 1976 the lagoon at Cemlyn had depth ranging from 0.48m to 1.76m</td>
<td>Average water depth should not deviate significantly from an established baseline, subject to</td>
</tr>
</tbody>
</table>
Depth measurement will be taken at low tide in late winter/early spring and in late summer. It is essential that the measurements are taken at the same time of year & tide each time. The average depth within the lagoon basin (meters) should be taken at low tide and assessed at the same time of year.

The depth of the lagoon is critical to *Ruppia maritima* insofar as it requires light, while also needing to be rooted in the muddy substratum of the lagoon bed.

The other potential problem with depth in lagoons is the risk of stratification and anoxia, which is not tolerable to any of the important lagoonal species at Cemlyn. Water depth is also critical in preserving the security of islands within the lagoon during the terns’ breeding season. Too much water can flood the island and destroy the colony.

---

4.3 Conservation Objective for Feature 6: Perennial Vegetation of Stony Banks

**Vision for Feature 6:**
The vision of this feature is for it to be in a favourable conservation status, where all the following conditions are satisfied:

- The extent of the vegetation of shingle banks is maintained unless altered by natural (e.g. storm) events.
- Typical component species of vegetation of shingle banks are maintained.
- Invasive alien species (e.g. *Fallopia japonica*) are absent.
- The management of activities or operations likely to damage or degrade the population dynamics, natural range and supporting habitat of the feature is appropriate for maintaining favourable conservation status and is secure in the long-term.

**Performance indicators for feature condition**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Attribute rationale and other comments</th>
<th>Specified limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. Habitat extent</td>
<td>The feature can be found on the shingle ridge between Bae Cemlyn and the lagoon and in patches on Trwyn Cemlyn to the North. The extent of the open shingle vegetation and the extent of the Festuca grassland on the ridge should not be altered by anthropogenic activity.</td>
<td>Lower limit: To be determined Upper limit: None set</td>
</tr>
</tbody>
</table>
| A2. Habitat Quality | Good quality habitat will:  
  - Show no signs of trampling damage to *Crambe maritima* (crushed or snapped leaves) | Lower limit: At least 90% of open shingle plot points are ‘good quality’ |
• Have at least two of the following species present:
  o *Atriplex* spp
  o *Beta vulgaris*
  o *Crambe maritime*
  o *Glaucium flavum*
  o *Rumex crispus*
• Have <5% grass cover
• Not have *Crocosmia* and/or *Fallopia japonica*

Upper limit: Not set

**A3. Physical structure: functionality and sediment supply**

<table>
<thead>
<tr>
<th>Performance indicators for factors affecting the feature</th>
<th>Factor rationale and other comments</th>
<th>Operational Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1. Trampling already dealt with above?</td>
<td></td>
<td>Lower limit: Upper limit:</td>
</tr>
</tbody>
</table>

No increase in linear constraints to mobility in active foreshore zone.

**4.4 Conservation Objective for Feature 7 Rock Pools & Feature 8 Under Boulders**

**Vision for features 7 and 8**

The vision for these features is for them to be in a favourable conservation status, where all the following conditions are satisfied:

- Typical zonation of marine communities is maintained
- Typical component species of marine communities is maintained
- Alien invasive species (e.g. *Sargassum muticum*) do not attain more than occasional frequency.
- The management of activities or operations likely to damage or degrade the population dynamics, natural range and supporting habitat of the feature is appropriate for maintaining favourable conservation status and is secure in the long-term.

**Performance indicators for Features 7 and 8**

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

To be determined.
5. ASSESSMENT OF CONSERVATION STATUS AND MANAGEMENT REQUIREMENTS

This part of the document provides:

- A summary of the assessment of the conservation status of each feature.
- A summary of the management issues that need to be addressed to maintain or restore each feature.

5.1 Conservation Status and Management Requirements of Feature 1-4: Breeding population of Terns

| Feature 1: Arctic Tern *Sterna paradisae* |
| Feature 2: Common Tern *Sterna hirundo* |
| Feature 3: Roseate Tern *Sterna dougallii* |
| Feature 4: Sandwich Tern *Sterna sandvicensis* |

Conservation Status of Feature 1: Favourable maintained
Conservation Status of Feature 2: Favourable maintained
Conservation Status of Feature 3: Unfavourable, unchanged
Conservation Status of Feature 4: Favourable maintained

5.1.1 Management Requirements of Feature 1-4

5.1.1.1 Providing appropriate nest sites

Arctic terns will be the first to arrive followed closely by the common tern.

In contrast with Common Terns which usually nest in open or exposed sites, Roseate Terns usually hide their nests under some sort of protective cover such as rocks, vegetation, or when provided nest boxes. In order to provide greater nesting opportunities for roseate terns, nest shelters may be placed within the colony prior to occupation each year.

The Cemlyn nest site–island in the main body of the lagoon is particularly vulnerable to erosion and flooding; consideration needs to be given to stabilising this structure. The level of water in the lagoon can be controlled via the sluice gate, but storm surges have caused overtopping in the past and could flood the island.

Although the UK population has declined greatly (from 1000 pairs in 1969 to 210 pairs in 1989), many of the birds have moved to the growing colony at Rockabill. Productivity at this colony is good and has been a major factor in the recent increase in the northwest European population as a whole.

5.1.1.2 Competition for Nest Space

Expansion of the area occupied by breeding gulls has the potential to reduce the viability of the tern colony through direct occupation of nesting areas. Management of the gull colony (by removing gull nests and / or eggs within a specified exclusion area around the core tern breeding colony) may be necessary to maintain a viable tern nesting area.

5.1.1.3 Undertake annual counts of nesting terns

There is a requirement to maintain a record of the breeding success and number of birds present. Currently the RSPB and North Wales wildlife trust do this for their respective sites.

5.1.1.4 Undertake annual ringing of chicks

To maintain records of nest productivity and adult dispersion and mortality, annual ringing is required and records made accessible.

Current action to be confirmed.
5.1.1.5 Disturbance.
Nesting terns require freedom from human disturbance.

Cemlyn - The presence of the Coastal Footpath along the shingle ridge requires sensitive visitor management. Re-routing of the footpath below the ridge crest is essential during this period, and should be pursued through the appropriate mechanisms (by diversion or traffic regulation order as well as voluntary restraint). The North Wales Wildlife Trust employs seasonal wardens to implement this.

Ynys Feurig - During the tern-breeding season (May–Aug) there is potential for significant human disturbance from casual visitors (who access the islands by boat, canoe and jet ski) and at low tide by walkers. Control of disturbance during this period is likely to be critical in ensuring the integrity of the tern colony. At present, controls are implemented by RSPB seasonal wardens. The disturbance caused by predators (especially foxes and peregrines) may also be significant.

The Skerries - During the tern-breeding season (May–Aug) there is potential for significant human disturbance from casual visitors (who access the islands by boat, canoe and jet ski) and by Trinity House staff and contractors. Control of disturbance during this period is likely to be critical in ensuring the integrity of the tern colony. At present, controls are implemented via Trinity House’s “No Landing” policy and by seasonal wardens employed by the RSPB. The disturbance caused by predators (especially peregrines) may also be significant.

5.1.1.6 Predator control
Nesting terns require freedom from ground predators – notably foxes and stoats. At Cemlyn the maintenance of a deep-water channel between the single ridge and the nesting islands discourages access by ground predators. Pre-season trapping reduces the predator pressure on the colony. Wardening throughout the nesting season also assists in reducing predation from other bird species, such as gulls, herons and peregrines and from egg collectors. Provision of nest boxes or shelters may help reduce predation of terns by other species.

5.1.1.7 Food supply
Nesting terns require a regular supply of suitable fish predominantly sandeels, sprats and whiting. Ample food must be available to foraging birds within a short distance of the colony. Any actions or events likely to impinge on this resource should be resisted.

5.1.1.8 Alternative Sites
Cemlyn Bay is one of a suite of sites around Anglesey and other parts of the Irish Sea (including Rockabill island, Lady’s Island Lake and Dalkey Island in Ireland), which are used by nesting terns. Former sites such as Rhoscolyn Beacon and Ynys Gorad Goch may be re-occupied in the future. Actions or events likely to affect the availability of these alternative sites should be addressed through appropriate mechanisms.

5.1.1.9 Wintering territory
Terns are migratory birds and spend most of their lives away from the nesting colony. Outside the breeding season, the trapping of terns for sport or food in western Africa has been suggested as a major cause of mortality. Also, long-term changes in sea-surface temperature may be partly responsible for the consistent and continued decline of fish stocks, e.g. *Sardinella sp.*, in coastal western Africa and the Gulf of Guinea. As the winter progresses, *Sardinella sp.* become less available to terns in this region and the whereabouts of roseate terns and the composition of their diet in the December to May period remain unknown.

A colour-ringing scheme is established throughout Britain and Ireland, and a roseate tern coordinator has recently begun work in the Republic of Ireland. RSPB and Bird Life International have funded an education programme by the Government of Ghana to try to reduce the incidence of winter trapping there.
5.2 Conservation Status and Management Requirements for Feature 5: Coastal Lagoon and Feature 9: Spiral tasselweed *Ruppia cirrhosa*

Conservation Status of Feature 5 and 9 is Favourable maintained

5.2.1 Management Requirements of Feature 5

5.2.1.1 Salinity
The salinity of the lagoon is crucial to its unusual brackish water fauna, which includes an isopod *Idotea chlipes*, found nowhere else in Wales. The salinity also maintains the saltmarsh and its characteristic flora around the lagoon’s edges. The maintenance of the subtle mix of freshwater inflow, seepage through the shingle and leakage through the weir is essential to maintaining the salinity balance within the lagoon.

5.2.1.4 Water quality
Land use change in the catchment (e.g. intensive dairy or arable farming) has the potential to influence water quality. Sediment load, chemical (nutrient) and organic pollution could affect the water quality within the lagoon.

The habitat resource requirements of the nine species of concern may be summarized as permanent water cover, of low hydrodynamics, within an appropriate salinity range, a general range of 10 to 25‰ is the ideal to support all the species at Cemlyn, some of which will be selectively lost as the salinity tends away from this range.

5.3 Conservation Objective for Feature 6: Perennial Vegetation of Stony Banks

Conservation Status of Feature 6

Conservation Status of Feature 6 is Unfavourable
*This is thought to be due to trampling of the vegetation and is currently subject to investigation.*

5.3.1 Management Requirements of Feature 6

5.3.1.1 Shingle supply and mobility
The shingle ridge is maintained through a dynamic and generally cyclic process of deposition and erosion of the shingle. Structures or other intervention that interfere with this natural movement should be resisted. Although the ridge consists of a large volume of shingle, the overall resource may be limited. Removal of shingle to provide building material has occurred in the past but must be resisted. Rising sea levels and storm events due to global warming make this even more important.

5.3.1.2 Trampling
Although subject to movement during winter storms, the shingle vegetation may be susceptible to trampling pressure. Recreational use and walking should therefore avoid the vegetated areas of the shingle ridge.

5.4 Conservation Objective for Feature 7: Rock Pools and Feature 8: Under Boulders

Conservation Status of Feature 7 and 8
To be determined
This section takes the management requirements outlined in Section 5 a stage further, assessing the specific management actions required on each management unit. This information is a summary of that held in CCW’s Actions Database for sites, and the database will be used by CCW and partner organisations to plan future work to meet the Wales Environment Strategy targets for sites.

<table>
<thead>
<tr>
<th>Unit</th>
<th>CCW Database Number</th>
<th>Unit Name</th>
<th>Summary of Conservation Management Issues</th>
<th>Action needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>s 1</td>
<td>000425</td>
<td>The Skerries</td>
<td>The Tern colonies are the key species in this unit. The Skerries are owned by Trinity house and the tern colony is managed by the RSPB. The building used to house the RSPB wardens during the summer is in a state of disrepair. This issue needs to be resolved quickly to ensure that a wardening presence is kept at the site. During the breeding season potential for disturbance from human disturbance - currently controlled by RSPB wardens and Trinity House &quot;no landing policy&quot;. Predation by gulls and peregrine can also be an issue on this site.</td>
<td>Yes</td>
</tr>
<tr>
<td>yf 1</td>
<td>000426</td>
<td>Beach</td>
<td>During the tern-breeding season (May-Aug) there is potential for significant human disturbance from casual visitors (who access the islands by boat, canoe and jet ski) and at low tide by walkers. Control of disturbance during this period is likely to be critical in ensuring the integrity of the tern colony. At present, controls are implemented by RSPB seasonal wardens.</td>
<td>Yes</td>
</tr>
<tr>
<td>yf 2</td>
<td>000427</td>
<td>Island</td>
<td>The Tern colonies are the key species in this unit. Ynys Feurig is privately owned. The tern colony is managed by the RSPB. During the tern-breeding season (May-Aug) there is potential for significant human disturbance from casual visitors (who access the islands by boat, canoe and jet ski) and at low tide by walkers. Control of disturbance during this period is likely to be critical in ensuring the integrity of the tern colony. At present, controls are implemented by RSPB seasonal wardens. The disturbance caused by predators (especially foxes, gulls and peregrines) may also be significant. Pest control is also managed by the RSPB.</td>
<td>Yes</td>
</tr>
<tr>
<td>c 1</td>
<td>000428</td>
<td>Trwyn Cemlyn</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Unit Number</td>
<td>CCW Database Number</td>
<td>Unit Name</td>
<td>Summary of Conservation Management Issues</td>
<td>Action needed?</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------</td>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>c 2</td>
<td>000429</td>
<td>Shingle ridge and beach</td>
<td>The shingle ridge is maintained through a dynamic and generally cyclic process of deposition and erosion of the shingle. Structures or other intervention that interfere with this natural movement should be resisted. Although the ridge consists of a large volume of shingle, the overall resource may be limited. Removal of shingle to provide building material has occurred in the past but must be resisted. Rising sea levels and storm events due to global warming make this even more important. Trampling of perennial vegetation: Although subject to movement during winter storms, the shingle vegetation may be susceptible to trampling pressure. Recreational use and walking should therefore avoid the vegetated areas of the shingle ridge. CCW is currently monitoring the situation. Direct visitor management is undertaken during the tern breeding season by the North Wales Wildlife Trust. The vegetation is also vulnerable to trampling pressure outside this season. Repositioning of the footpath is necessary both for the conservation of the vegetation and to avoid disturbance of the tern colony.</td>
<td>Yes</td>
</tr>
<tr>
<td>c 3</td>
<td>000430</td>
<td>Lagoon</td>
<td>The maintenance of the subtle mix of freshwater inflow, seepage through the shingle and leakage through the weir is essential to maintaining the salinity levels within the lagoon.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Water quality - Changes of land use in the catchment (e.g. intensive dairy or arable farming) have had the potential to influence water quality. Sediment load, chemical (nutrient) and organic pollution could affect the water quality within the lagoon.

The salinity levels can fluctuate enormously within the lagoon at any one time, varying both spatially and seasonally. Different species found in the lagoon are tolerant of varying salinity, and of brackish (hypohaline) conditions. The lagoon suffers temporary threats from shingle blockages of the outflow (inflow) stream to the beach and from low salinity periods in response to rainfall. A general range of 10° to 25° is appropriate to the survival of all the lagoon species present at Cemlyn, some of which will be selectively lost as the salinity moves away from this range.
<table>
<thead>
<tr>
<th>Unit Number</th>
<th>CCW Database Number</th>
<th>Unit Name</th>
<th>Summary of Conservation Management Issues</th>
<th>Action needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>c 4</td>
<td>000431</td>
<td>Islands</td>
<td>The island in the main body of the lagoon is particularly vulnerable to erosion and flooding - consideration needs to be given to stabilising this structure. The level of water in the lagoon can be controlled via the sluice gate. But storm surges have caused overtopping in the past and could flood the island. Nesting terns require freedom from ground predators notably foxes and stoats. At Cemlyn the maintenance of a deep-water channel between the shingle ridge and the nesting islands discourages access by ground predators. Pre-season trapping reduces the predator pressure on the colony. Wardening throughout the nesting season also assists in reducing predation from other bird species, such as gulls, herons and peregrines and from egg collectors. Provision of nest boxes or shelters may help reduce predation of terns by other species.</td>
<td>Yes</td>
</tr>
<tr>
<td>c 5</td>
<td>000432</td>
<td>Tyn Llan west</td>
<td>This unit is believed to be in appropriate management status.</td>
<td>No</td>
</tr>
<tr>
<td>c 6</td>
<td>000433</td>
<td>Tyn Llan east</td>
<td>This unit is believed to be in appropriate management status.</td>
<td>No</td>
</tr>
<tr>
<td>c 7</td>
<td>000434</td>
<td>Small Pond</td>
<td>This unit is believed to be in appropriate management status.</td>
<td>No</td>
</tr>
<tr>
<td>c 8</td>
<td>000435</td>
<td>Road</td>
<td>This unit is believed to be in appropriate management status.</td>
<td>No</td>
</tr>
<tr>
<td>c 9</td>
<td>000436</td>
<td>Plas Cemlyn</td>
<td>This unit is believed to be in appropriate management status.</td>
<td>No</td>
</tr>
</tbody>
</table>
7. GLOSSARY

This glossary defines the some of the terms used in this Core Management Plan. Some of the definitions are based on definitions contained in other documents, including legislation and other publications of CCW and the UK nature conservation agencies. None of these definitions is legally definitive.

**Action**
A recognisable and individually described act, undertaking or project of any kind, specified in section 6 of a Core Management Plan or Management Plan, as being required for the conservation management of a site.

**Attribute**
A quantifiable and monitorable characteristic of a feature that, in combination with other such attributes, describes its condition.

**Common Standards Monitoring**
A set of principles developed jointly by the UK conservation agencies to help ensure a consistent approach to monitoring and reporting on the features of sites designated for nature conservation, supported by guidance on identification of attributes and monitoring methodologies.

**Condition**
A description of the state of a feature in terms of qualities or attributes that are relevant in a nature conservation context. For example the condition of a habitat usually includes its extent and species composition and might also include aspects of its ecological functioning, spatial distribution and so on. The condition of a species population usually includes its total size and might also include its age structure, productivity, relationship to other populations and spatial distribution. Aspects of the habitat(s) on which a species population depends may also be considered as attributes of its condition.

**Condition assessment**
The process of characterising the condition of a feature with particular reference to whether the aspirations for its condition, as expressed in its conservation objective, are being met.

**Condition categories**
The condition of feature can be categorised, following condition assessment as one of the following²: 

- Favourable: maintained;
- Favourable: recovered;
- Favourable: un-classified
- Unfavourable: recovering;
- Unfavourable: no change;
- Unfavourable: declining;
- Unfavourable: un-classified
- Partially destroyed;
- Destroyed.

² See JNCC guidance on Common Standards Monitoring [http://www.jncc.gov.uk/page-2272](http://www.jncc.gov.uk/page-2272)
Conservation management
Acts or undertaking of all kinds, including but not necessarily limited to actions, taken with the aim of achieving the conservation objectives of a site. Conservation management includes the taking of statutory and non-statutory measures, it can include the acts of any party and it may take place outside site boundaries as well as within sites. Conservation management may also be embedded within other frameworks for land/sea management carried out for purposes other than achieving the conservation objectives.

Conservation objective
The expression of the desired conservation status of a feature, expressed as a vision for the feature and a series of performance indicators. The conservation objective for a feature is thus a composite statement, and each feature has one conservation objective.

Conservation status
A description of the state of a feature that comprises both its condition and the state of the factors affecting or likely to affect it. Conservation status is thus a characterisation of both the current state of a feature and its future prospects.

Conservation status assessment
The process of characterising the conservation status of a feature with particular reference to whether the aspirations for it, as expressed in its conservation objective, are being met. The results of conservation status assessment can be summarised either as ‘favourable’ (i.e. conservation objectives are met) or unfavourable (i.e. conservation objectives are not met). However the value of conservation status assessment in terms of supporting decisions about conservation management, lies mainly in the details of the assessment of feature condition, factors and trend information derived from comparisons between current and previous conservation status assessments and condition assessments.

Core Management Plan
A CCW document containing the conservation objectives for a site and a summary of other information contained in a full site Management Plan.

Factor
Anything that has influenced, is influencing or may influence the condition of a feature. Factors can be natural processes, human activities or effects arising from natural process or human activities. They can be positive or negative in terms of their influence on features, and they can arise within a site or from outside the site. Physical, socio-economic or legal constraints on conservation management can also be considered as factors.

Favourable condition
See condition and condition assessment

Favourable conservation status
See conservation status and conservation status assessment.

Feature
The species population, habitat type or other entity for which a site is designated. The ecological or geological interest which justifies the designation of a site and which is the focus of conservation management.

Integrity
See site integrity

---

3  A full definition of favourable conservation status is given in Section 4.
Key Feature
The habitat or species population within a management unit that is the primary focus of conservation management and monitoring in that unit.

Management Plan
The full expression of a designated site’s legal status, vision, features, conservation objectives, performance indicators and management requirements. A complete management plan may not reside in a single document, but may be contained in a number of documents (including in particular the Core Management Plan) and sets of electronically stored information.

Management Unit
An area within a site, defined according to one or more of a range of criteria, such as topography, location of features, tenure, patterns of land/sea use. The key characteristic of management units is to reflect the spatial scale at which conservation management and monitoring can be most effectively organised. They are used as the primary basis for differentiating priorities for conservation management and monitoring in different parts of a site, and for facilitating communication with those responsible for management of different parts of a site.

Monitoring
An intermittent (regular or irregular) series of observations in time, carried out to show the extent of compliance with a formulated standard or degree of deviation from an expected norm. In Common Standards Monitoring, the formulated standard is the quantified expression of favourable condition based on attributes.

Operational limits
The levels or values within which a factor is considered to be acceptable in terms of its influence on a feature. A factor may have both upper and lower operational limits, or only an upper limit or lower limit. For some factors an upper limit may be zero.

Performance indicators
The attributes and their associated specified limits, together with factors and their associated operational limits, which provide the standard against which information from monitoring and other sources is used to determine the degree to which the conservation objectives for a feature are being met. Performance indicators are part of, not the same as, conservation objectives. See also vision for the feature.

Plan or project
Project: Any form of construction work, installation, development or other intervention in the environment, the carrying out or continuance of which is subject to a decision by any public body or statutory undertaker.
Plan: a document prepared or adopted by a public body or statutory undertaker, intended to influence decisions on the carrying out of projects.
Decisions on plans and projects which affect Natura 2000 and Ramsar sites are subject to specific legal and policy procedures.

Site integrity
The coherence of a site’s ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it is designated.

Site Management Statement (SMS)
The document containing CCW’s views about the management of a site issued as part of the legal notification of an SSSI under section 28(4) of the Wildlife and Countryside Act 1981, as
substituted.

**Special Feature**
See feature.

**Specified limit**
The levels or values for an attribute which define the degree to which the attribute can fluctuate without creating cause for concern about the condition of the feature. The range within the limits corresponds to favourable, the range outside the limits corresponds to unfavourable. Attributes may have lower specified limits, upper specified limits, or both.

**Unit**
See management unit.

**Vision for the feature**
The expression, within a conservation objective, of the aspirations for the feature concerned. See also performance indicators.

**Vision Statement**
The statement conveying an impression of the whole site in the state that is intended to be the product of its conservation management. A 'pen portrait' outlining the conditions that should prevail when all the conservation objectives are met. A description of the site as it would be when all the features are in favourable condition.