

# National Parks and Wildlife Service

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## *Conservation Objectives Series*

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Kilmuckridge-Tinnaberna Sandhills SAC 001741



*An Roinn*  
*Ealaíon, Oidhreachta agus Gaeltachta*  

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*Department of*  
*Arts, Heritage and the Gaeltacht*



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## Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area 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 favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned 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.

### Notes/Guidelines:

1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.
2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.
3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.
4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.
5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

## Qualifying Interests

*\* indicates a priority habitat under the Habitats Directive*

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001741 Kilmuckridge-Tinnaberna Sandhills SAC

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2120 Shifting dunes along the shoreline with ~~Cl { [ ] @ ^ } a e~~ (white dunes)

2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)E

## Supporting documents, relevant reports & publications

*Supporting documents, NPWS reports and publications are available for download from: [www.npws.ie/Publications](http://www.npws.ie/Publications)*

### NPWS Documents

**Year :** 2009

**Title :** Coastal Monitoring Project 2004-2006

**Author :** Ryle, T.; Murray, A.; Connolly, K.; Swann, M.

**Series :** Unpublished report to NPWS

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**Year :** 2014

**Title :** Kilmuckridge-Tinnaberna Sandhills SAC (site code: 1741) Conservation objectives supporting document- coastal habitats V1

**Author :** NPWS

**Series :** Conservation objectives supporting document

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### Other References

**Year :** 2008

**Title :** The phytosociology and conservation value of Irish sand dunes

**Author :** Gaynor, K.

**Series :** Unpublished PhD thesis, National University of Ireland, Dublin

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## Spatial data sources

**Year :** 2009

**Title :** Coastal Monitoring Project 2004-2006. Version 1

**GIS Operations :** QIs selected; clipped to SAC boundary; overlapping regions with Saltmarsh CO data investigated and resolved with expert opinion used

**Used For :** 2120, 2130 (map 2)

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**2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')**

**To maintain the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') in Kilmuckridge-Tinnaberna Sandhills SAC, which is defined by the following list of attributes and targets:**

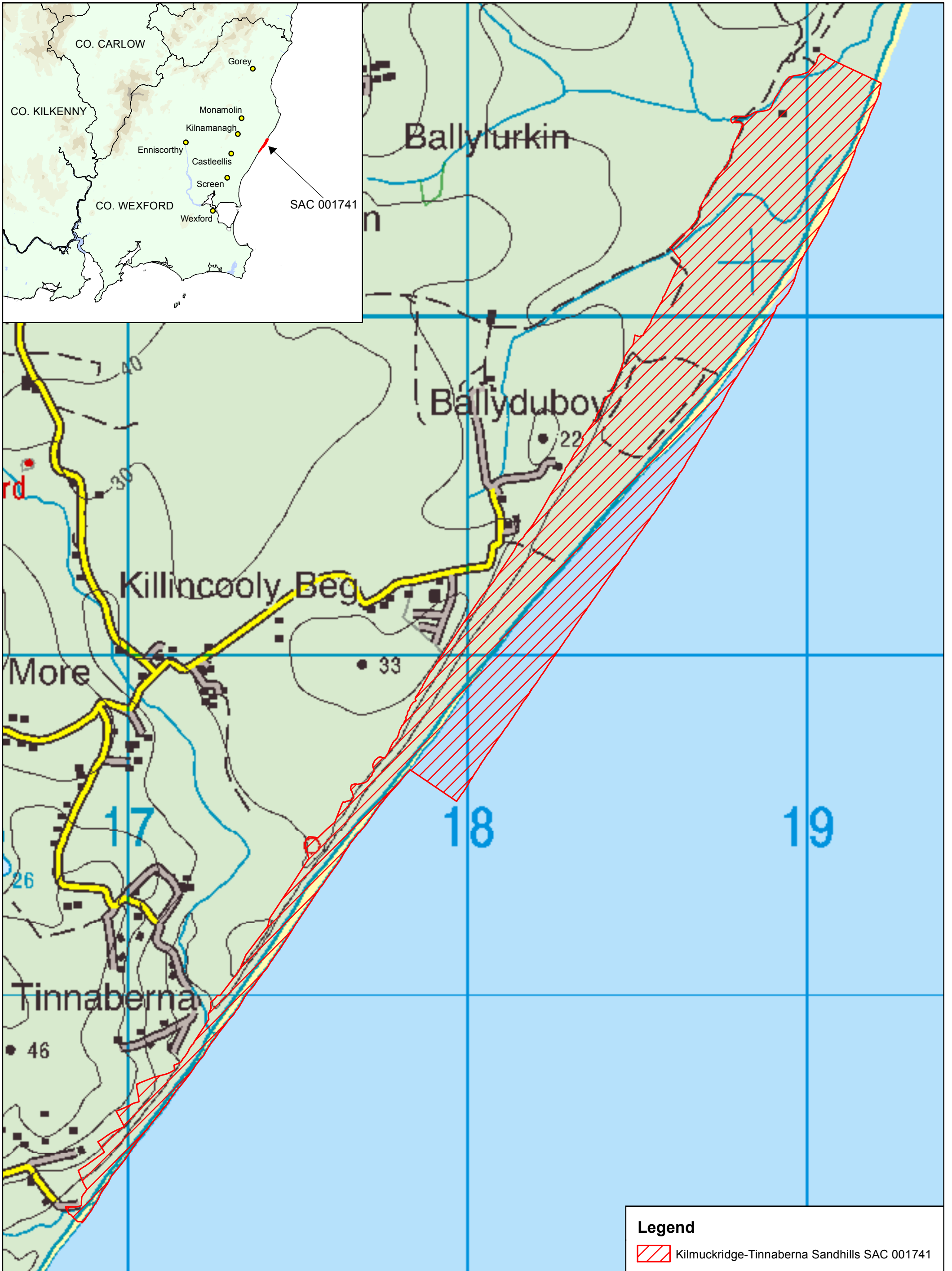
Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For sub-sites mapped: Kilmuckridge - 1.98ha; Tinnaberna - 0.04ha. See map 2	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Marram dunes were surveyed and mapped at two sub-sites, giving a total estimated area of 2.02ha. Habitat is very difficult to measure in view of its dynamic nature. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 2 for known distribution	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Dunes are naturally dynamic systems that require continuous supply and circulation of sand. Marram grass ( <i>Ammophila arenaria</i> ) reproduces vegetatively and requires constant accretion of fresh sand to maintain active growth encouraging further accretion. The coastline at Kilmuckridge is currently actively accreting. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: plant health of dune grasses	Percentage cover	95% of marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities dominated by marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> )	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. Sea-buckthorn ( <i>Hippophae rhamnoides</i> ) occurs in the SAC. See coastal habitats supporting document for further details

**2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)**


**To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation ('grey dunes') in Kilmuckridge-Tinnaberna Sandhills SAC, which is defined by the following list of attributes and targets:**

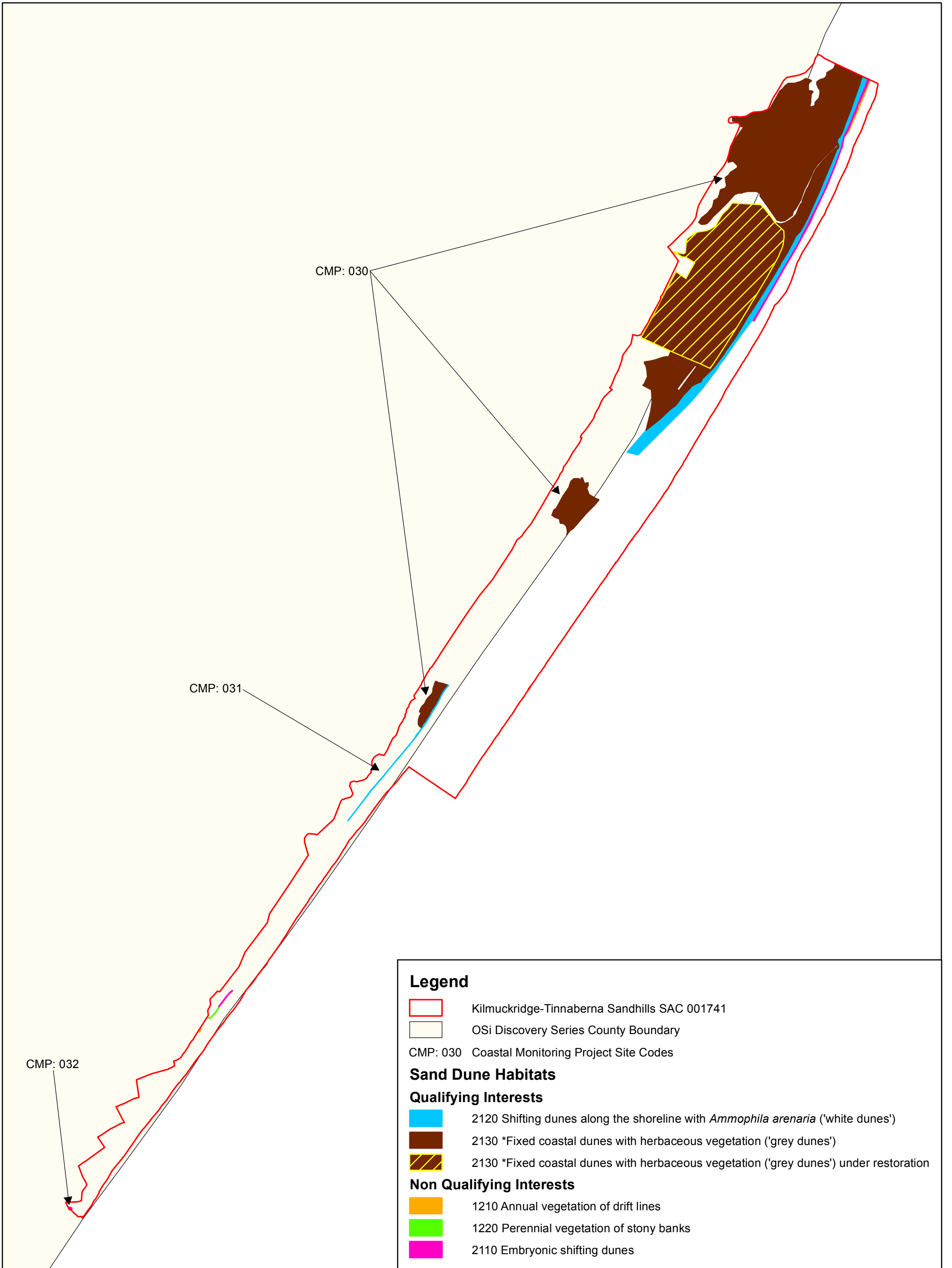
<b>Attribute</b>	<b>Measure</b>	<b>Target</b>	<b>Notes</b>
Habitat area	Hectares	Area increasing, subject to natural processes including erosion and succession. For sub-sites mapped: Kilmuckridge - 26.24ha; Tinnaberna - 0ha. See map 2	Based on data from the Coastal Monitoring Project (CMP) (Ryle et al., 2009). Habitat was surveyed and mapped at one of the two sub-sites to give a total estimated area of 26.24ha. The target area includes 10.9ha currently under restoration. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes. See map 2 for known distribution	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions	Based on data from Ryle et al. (2009). Physical barriers can lead to fossilisation or over-stabilisation of dunes, as well as beach starvation resulting in increased rates of erosion. The coastline at Kilmuckridge is currently actively accreting. See coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation structure: sward height	Centimetres	Maintain structural variation within sward	Based on data from Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub-communities with typical species listed in Ryle et al. (2009)	Based on data from Gaynor (2008) and Ryle et al. (2009). See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Ryle et al. (2009). Negative indicators include non-native species, species indicative of changes in nutrient status and species not considered characteristic of the habitat. Sea-buckthorn ( <i>Hippophae rhamnoides</i> ) is present in the SAC. Under the restoration plan, weedy species are removed before they set seed. See coastal habitats supporting document for further details
Vegetation composition: scrub/trees	Percentage cover	No more than 5% cover or under control	Based on data from Ryle et al. (2009). Areas of woodland and scrub occur at the margins of the open fixed dune habitat. See coastal habitats supporting document for further details





**Legend**

 Kilmuckridge-Tinnaberna Sandhills SAC 001741



**Legend**

- Kilmuckridge-Tinnaberna Sandhills SAC 001741
- OSi Discovery Series County Boundary
- CMP: 030 Coastal Monitoring Project Site Codes

**Sand Dune Habitats**

**Qualifying Interests**

- 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')
- 2130 \*Fixed coastal dunes with herbaceous vegetation ('grey dunes')
- 2130 \*Fixed coastal dunes with herbaceous vegetation ('grey dunes') under restoration

**Non Qualifying Interests**

- 1210 Annual vegetation of drift lines
- 1220 Perennial vegetation of stony banks
- 2110 Embryonic shifting dunes

