

National Parks and Wildlife Service

Conservation Objectives Series

Great Island Channel SAC 001058



*An Roinn
Ealaíon, Oidhreachta agus Gaeltachta*

*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*

| | |
|--------|--|
| 001058 | Great Island Channel SAC |
| <hr/> | |
| 1140 | Mudflats and sandflats not covered by seawater at low tide |
| 1330 | Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) |

Please note that this SAC overlaps with Cork Harbour SPA (004030). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate.

Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: www.npws.ie/Publications

NPWS Documents

| | |
|-----------------|---|
| Year : | 2006 |
| Title : | A survey of intertidal mudflats and sandflats in Ireland |
| Author : | Aquafact |
| Series : | Unpublished report to NPWS |
| Year : | 2009 |
| Title : | Saltmarsh monitoring project 2007-2008 |
| Author : | McCorry, M.; Ryle, T. |
| Series : | Unpublished report to NPWS |
| Year : | 2014 |
| Title : | Great Island Channel SAC (site code:1058) Conservation objectives supporting document-coastal habitats V1 |
| Author : | NPWS |
| Series : | Conservation objectives supporting document |
| Year : | 2014 |
| Title : | Great Island Channel SAC (site code:1058) Conservation objectives supporting document-marine habitats V1 |
| Author : | NPWS |
| Series : | Conservation objectives supporting document |

Other References

| | |
|-----------------|--|
| Year : | 1998 |
| Title : | The saltmarshes of Ireland: an inventory and account of their geographical variation |
| Author : | Curtis, T.G.F.; Sheehy Skeffington, M.J. |
| Series : | Biology and Environment, Proceedings of the Royal Irish Academy 98B: 87-104 |
| Year : | 2012 |
| Title : | Benthic sampling of water bodies of County Cork under the Water Framework Directive |
| Author : | EcoServe |
| Series : | Report to the Marine Institute |
| Year : | 2012 |
| Title : | Intertidal benthic survey of Great Island Channel SAC and Cork Harbour SPA |
| Author : | MERC |
| Series : | Unpublished report to the Marine Institute and NPWS |

Spatial data sources

| | |
|-------------------------|--|
| Year : | Interpolated 2014 |
| Title : | Intertidal surveys 2006, 2011; subtidal survey 2011 |
| GIS Operations : | Polygon feature classes from marine community types base data sub-divided based on interpolation of marine survey data. Expert opinion used as necessary to resolve any issues arising |
| Used For : | 1140, Marine community types (maps 3 and 4) |
| Year : | 2005 |
| Title : | OSi Discovery series vector data |
| GIS Operations : | High water mark (HWM) and low water mark (LWM) polyline feature classes converted into polygon feature classes and combined; EU Annex I Saltmarsh and Coastal data erased out if present |
| Used For : | Marine community types base data (map 4) |
| Year : | Revision 2010 |
| Title : | Saltmarsh Monitoring Project 2007-2008. Version 1 |
| GIS Operations : | QIs selected; clipped to SAC boundary; overlapping regions with Coastal CO data investigated and resolved with expert opinion used |
| Used For : | 1330 (map 5) |

Conservation Objectives for : Great Island Channel SAC [001058]

1140 Mudflats and sandflats not covered by seawater at low tide

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Great Island Channel SAC, which is defined by the following list of attributes and targets:

| Attribute | Measure | Target | Notes |
|------------------------|----------|--|--|
| Habitat area | Hectares | The permanent habitat area is stable or increasing, OSi data subject to natural processes. See map 3 | Habitat area was estimated using as 723ha using |
| Community distribution | Hectares | Conserve the following community type in a natural condition: Mixed sediment to sandy mud with polychaetes and oligochaetes community complex. See map 4 | Based on intertidal and subtidal surveys undertaken in 2006 (Aquafact, 2007) and 2011 (EcoServe, 2012; MERC, 2012). See marine supporting document for further information |

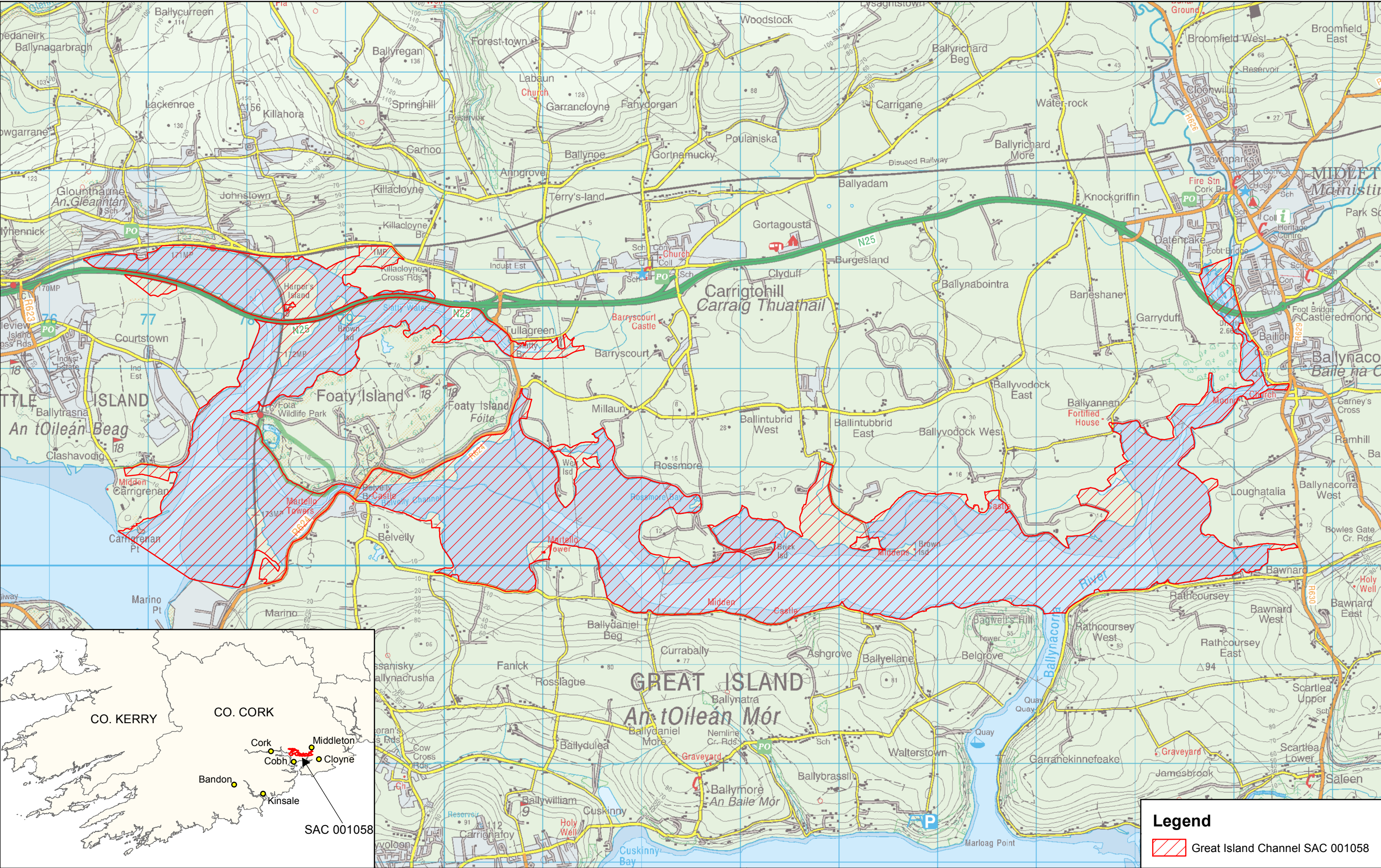
Conservation Objectives for : Great Island Channel SAC [001058]

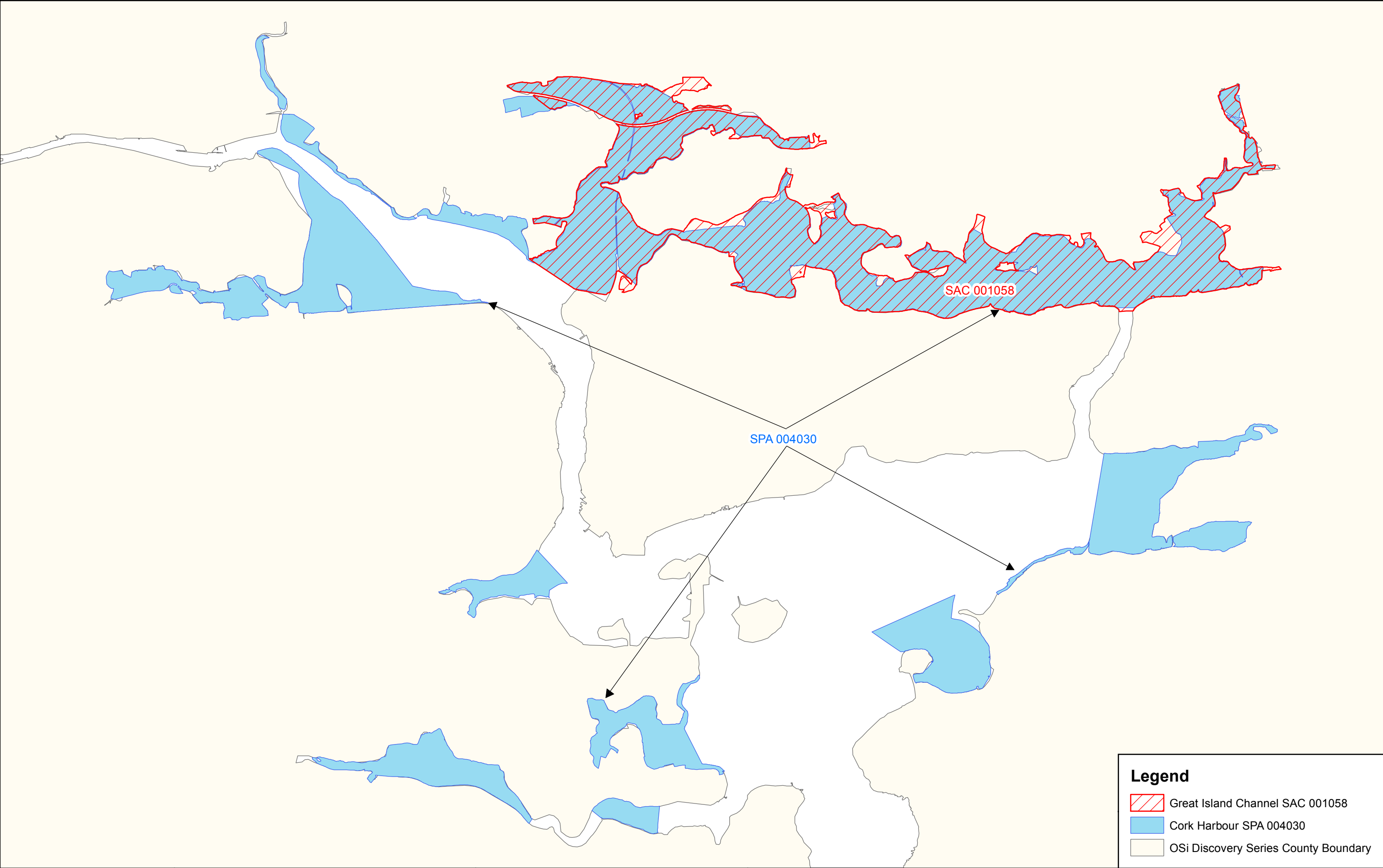
1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

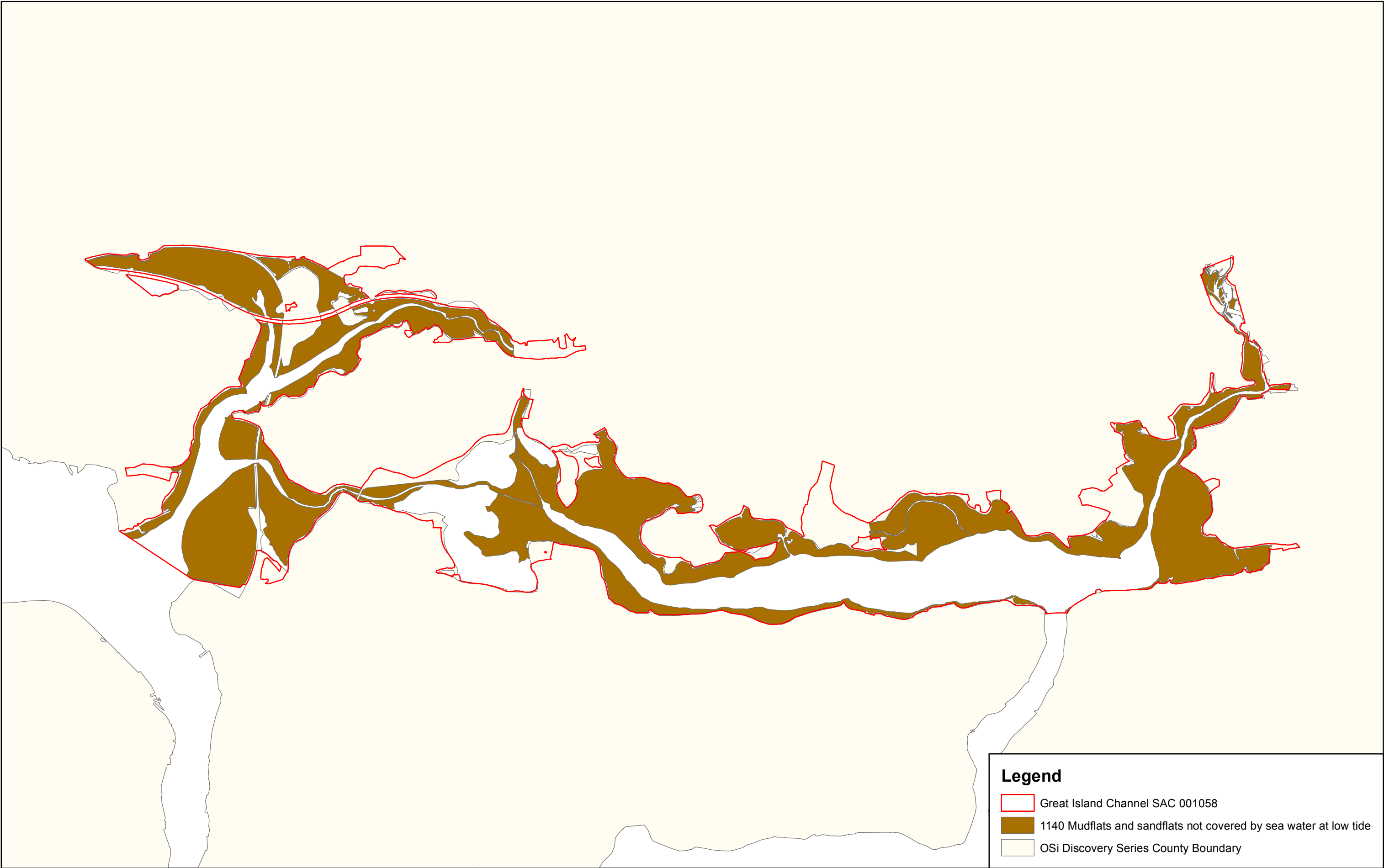
To restore the favourable conservation condition of Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) in Great Island Channel SAC, which is defined by the following list of attributes and targets:

| Attribute | Measure | Target | Notes |
|---|---|---|--|
| Habitat area | Hectares | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-sites mapped: Bawnard - 0.29ha; Carrigatohil - 1.01ha. See map 5 | Based on data from Saltmarsh Monitoring Project (SMP) (McCorry and Ryle, 2009). Two sub-sites that supported Atlantic salt meadow were mapped (1.30ha) and additional areas of potential saltmarsh (17.60ha) were identified from an examination of aerial photographs, giving a total estimated area of 18.90ha. Saltmarsh habitat has also been recorded at two other sub-sites within the SAC (Curtis and Sheehy Skeffington, 1998). NB further unsurveyed areas maybe present within the SAC. See coastal habitats supporting document for further details |
| Habitat distribution | Occurrence | No decline or change in habitat distribution, subject to natural processes. See map 5 for known distribution | Based on data from McCorry and Ryle (2009). Within the sites surveyed by the SMP, estuary type saltmarsh over a mud substrate is most common and ASM is the dominant saltmarsh habitat. NB further unsurveyed areas maybe present within the SAC. See coastal habitats supporting document for further details |
| Physical structure: sediment supply | Presence/ absence of physical barriers | Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions | Based on data from McCorry and Ryle (2009). At Bawnard there is a seawall that was constructed in the 18th-19th centuries. At Carrigatohil the northern and eastern shorelines have been significantly modified by road construction. Part of the saltmarsh has also been infilled. See coastal habitats supporting document for further details |
| Physical structure: creeks and pans | Occurrence | Maintain/restore creek and pan structure, subject to natural processes, including erosion and succession | Based on data from McCorry and Ryle (2009). The ASM at Carrigatohil is poorly developed, though some of the larger sections contain salt pans. The smaller sections, however, tend to be quite uniform in topography. The saltmarsh topography at Bawnard is poorly developed with few typical saltmarsh features. See coastal habitats supporting document for further details |
| Physical structure: flooding regime | Hectares flooded; frequency | Maintain natural tidal regime | Based on data from McCorry and Ryle (2009). At Bawnard, the entire bay empties at low tide to expose soft intertidal mudflats. See coastal habitats supporting document for further details |
| Vegetation structure: zonation | Occurrence | Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession | Based on data from McCorry and Ryle (2009). Zonations to <i>Salicornia</i> flats and intertidal mudflats occurs at Carrigatohil. At Bawnard, there is succession from saltmarsh to brackish saltmarsh and wet grassland as well as zonation to intertidal mudflats at the lower saltmarsh boundary. See coastal habitats supporting document for further details |
| Vegetation structure: vegetation height | Centimetres | Maintain structural variation within sward | Based on data from McCorry and Ryle (2009). At Carrigatohil, the sward height is quite tall due to lack of grazing. At Bawnard only part of the site is grazed. See coastal habitats supporting document for further details |
| Vegetation structure: vegetation cover | Percentage cover at a representative number of monitoring stops | Maintain more than 90% area outside creeks vegetated | Based on data from McCorry and Ryle (2009). Some poaching was noted in places at Bawnard. 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 SMP (McCorry and Ryle, 2009) | See coastal habitats supporting document for further details |

| | | | |
|---|----------|--|--|
| Vegetation structure: negative indicator species - <i>Spartina anglica</i> | Hectares | No significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1% where it is known to occur | Based on data from McCorry and Ryle (2009). <i>Spartina</i> occurs at both sub-sites in this SAC. See coastal habitats supporting document for further details |
|---|----------|--|--|

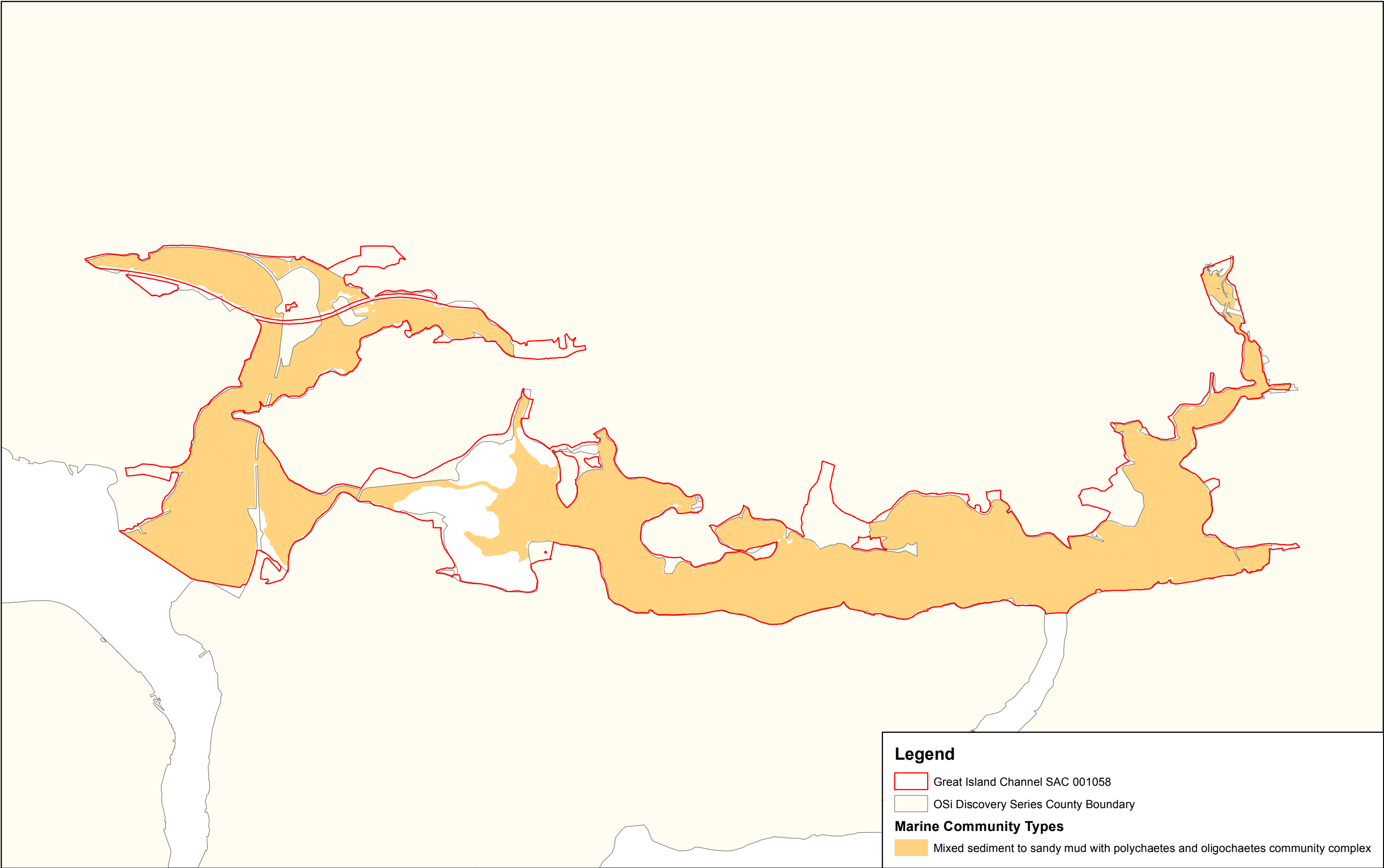


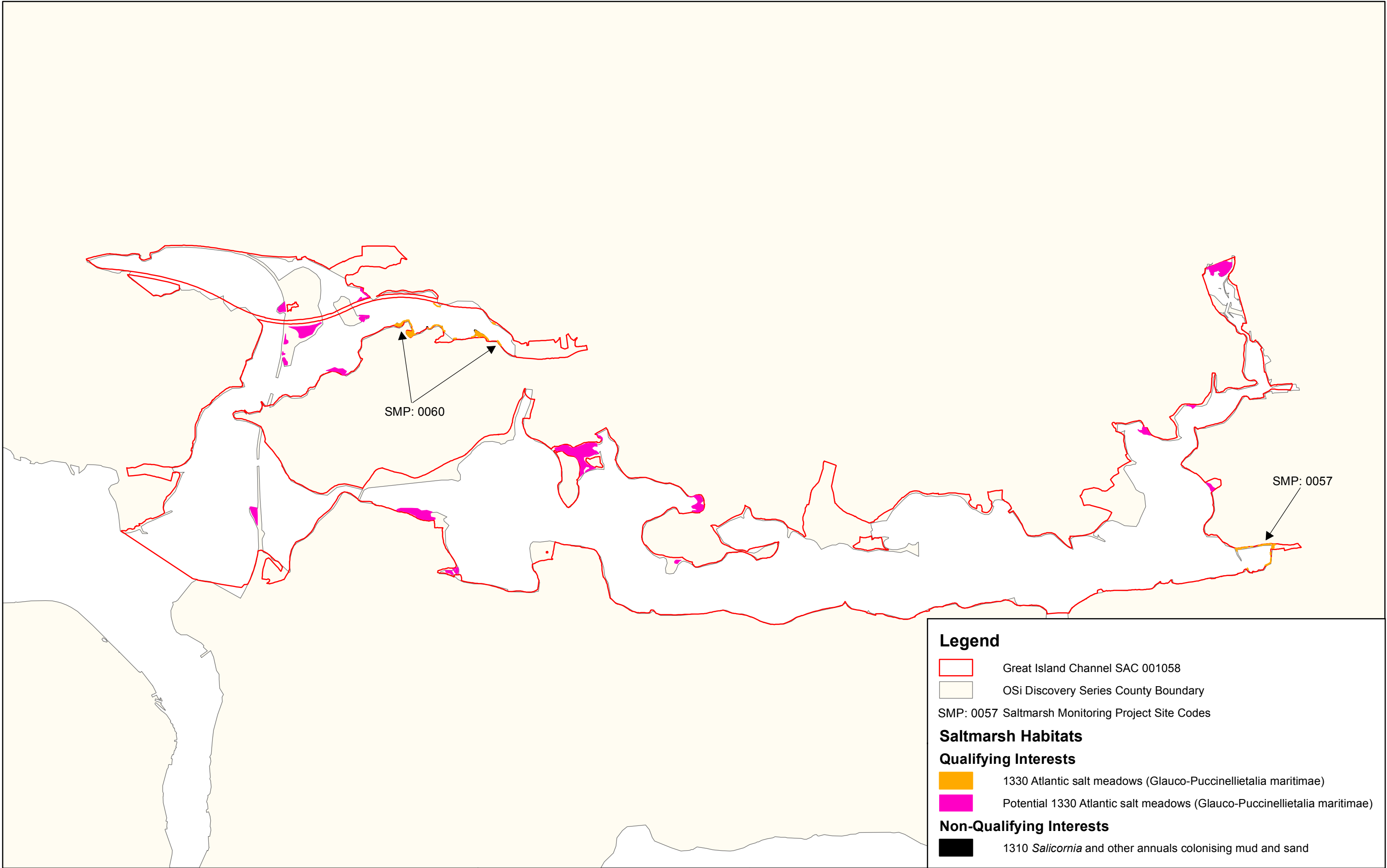




Legend

- Great Island Channel SAC 001058
- 1140 Mudflats and sandflats not covered by sea water at low tide
- OSI Discovery Series County Boundary





Legend

- Great Island Channel SAC 001058
- OSi Discovery Series County Boundary
- SMP: 0057 Saltmarsh Monitoring Project Site Codes

Saltmarsh Habitats

Qualifying Interests

- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Potential 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

Non-Qualifying Interests

- 1310 *Salicornia* and other annuals colonising mud and sand