

NPWS

**Inisheer Island SAC
(site code: 1275)**

**Conservation objectives supporting document -
Marine Habitats**

**Version 1
July 2014**

Introduction

Inisheer Island SAC is designated for the marine Annex I qualifying interest of Reefs (Figure 1).

An intertidal survey was undertaken in 2012 (MERC, 2012) and these data were used to determine the physical and biological nature of this SAC.

Aspects of the biology and ecology of the Annex I habitat are provided in Section 1. The corresponding site-specific conservation objective will facilitate Ireland delivering on its surveillance and reporting obligations under the EU Habitats Directive (92/43/EC).

Ireland also has an obligation to ensure that consent decisions concerning operations/activities planned for Natura 2000 sites are informed by an appropriate assessment where the likelihood of such operations or activities having a significant effect on the site cannot be excluded. Further ancillary information concerning the practical application of the site-specific objective and targets in the completion of such assessments is provided in Section 2.

Section 1

Principal Benthic Communities

Within Inisheer Island SAC, two marine community types are recorded. Their occurrence in the Annex I habitat is presented in table 1; a description of the community types is given below.

	Habitat
	Reefs (1170)
Exposed intertidal reef community complex	✓
Sand community complex	

Table 1 The community types recorded in Inisheer Island SAC and their occurrence the Annex I habitat for which the site is designated.

Estimated area of the community type within the Annex I habitat, based on interpolation, is given in the objective targets in Section 2.

The development of a community complex target arises when an area possesses similar abiotic features but records a number of biological communities that are not regarded as being sufficiently stable and/or distinct temporally or spatially to become the focus of conservation efforts. In this case, examination of the available data from Inisheer Island identified a number of biological communities whose species composition overlapped significantly. Such biological communities are grouped together into what experts consider are sufficiently stable units (i.e. a complex) for conservation targets.

EXPOSED INTERTIDAL REEF COMMUNITY COMPLEX

This reef community is recorded extensively on all shores throughout this site (Figure 1). It largely occurs on a wave cut platforms with crevices and ledges. Areas of vertical cliff wall do occur on the south and west shores of the island. The exposure regime is that of exposed reef.

The community complex is dominated by the bivalve *Mytilus edulis* and barnacles. A band of *Laminaria digitata* typically occurs at extreme low water where the reef drops off at a 90 degree angle. Other characteristic algal species for the community complex include *Fucus vesiculosus* and *Fucus serratus*. Yellow and grey lichens on rock form a distinctive splash zone on the high shore.

Species associated with the Exposed intertidal reef community complex	
<i>Fucus vesiculosus</i>	Barnacles indet.
<i>Mytilus edulis</i>	<i>Laminaria digitata</i>
<i>Fucus serratus</i>	Lichens

Table 2 Species associated with the Exposed intertidal reef community complex.

SAND COMMUNITY COMPLEX

This intertidal complex (which is not part of the Annex I habitat for which the SAC is selected) is recorded on the sandy shore on the north of the island, east of Ballyhees. The shore is north-east facing, exposed and flanked by reefs.

The exposed and open nature of the complex is expected to result in a barren habitat with a low diversity with the characteristic species associated with it being polychaetes and/or amphipod species.

Section 2

Appropriate Assessment Notes

Many operations/activities of a particular nature and/or size require the preparation of an environmental impact statement of the likely effects of their planned development. While smaller operations/activities (i.e. sub threshold developments) are not required to prepare such statements, an appropriate assessment and Natura Impact Statement is required to inform the decision-making process in or adjacent to Natura 2000 sites. The purpose of such an assessment is to record in a transparent and reasoned manner the likely effects on a Natura 2000 site of a proposed development. General guidance on the completion of such assessments has been prepared and is available at www.npws.ie.

Annex I Habitats

It is worth considering at the outset that in relation to Annex I habitat structure and function, the extent and quality of all habitats varies considerably in space and time and marine habitats are particularly prone to such variation. Habitats which are varying naturally, i.e. biotic and/or abiotic variables are changing within an envelope of natural variation, must be considered to have favourable conservation condition. Anthropogenic disturbance may be considered significant when it causes a change in biotic and/or abiotic variables in excess of what could reasonably be envisaged under natural processes. The capacity of the habitat to recover from this change is obviously an important consideration (i.e. habitat resilience) thereafter.

This Department has adopted a prioritized approach to conservation of structure and function in marine Annex I habitats.

1. Those communities that are key contributors to overall biodiversity at a site by virtue of their structure and/or function (keystone communities) and their low resilience should be afforded the highest degree of protection and any significant anthropogenic disturbance should be avoided.
2. In relation to the remaining constituent communities that are structurally important (e.g. broad sedimentary communities) within an Annex I marine habitat, there are two considerations.
 - 2.1. Significant anthropogenic disturbance may occur with such intensity and/or frequency as to effectively represent a continuous or ongoing source of disturbance over time and space (e.g. effluent discharge within a given area). Drawing from the principle outlined in the European Commission's Article 17 reporting framework that disturbance of greater than 25% of the area of an Annex I habitat represents unfavourable conservation status, this Department takes the view that licensing of activities likely to cause continuous disturbance of each community type should not exceed an approximate area of 15%. Thereafter, an increasingly cautious approach

is advocated. Prior to any further licensing of this category of activities, an inter-Departmental management review (considering *inter alia* robustness of available scientific knowledge, future site requirements, etc) of the site is recommended.

- 2.2. Some activities may cause significant disturbance but may not necessarily represent a continuous or ongoing source of disturbance over time and space. This may arise for intermittent or episodic activities for which the receiving environment would have some resilience and may be expected to recover within a reasonable timeframe relative to the six-year reporting cycle (as required under Article 17 of the Directive). This Department is satisfied that such activities could be assessed in a context-specific manner giving due consideration to the proposed nature and scale of activities during the reporting cycle and the particular resilience of the receiving habitat in combination with other activities within the designated site.

The following technical clarification is provided in relation to specific conservation objective and targets for Annex I habitat to facilitate the appropriate assessment process:

Objective **To maintain the favourable conservation condition of Reefs in Inisheer Island SAC, which is defined by the following list of attributes and targets**

Target 1	The permanent area is stable or increasing, subject to natural processes.
-----------------	---

- The area of this habitat represents the minimum estimated area of reef at this site and underestimates the actual area due to the many areas of sheer and steeply sloping rock within the reef habitat.
- This target refers to activities or operations that propose to permanently remove habitat from the site, thereby reducing the permanent amount of habitat area. It does not refer to long or short term disturbance of the biology of a site.
- Early consultation or scoping with the Department in advance of formal application is advisable for such proposals.

Target 2	The distribution of reefs is stable or increasing, subject to natural processes.
-----------------	--

- The likely distribution of reef habitat in this SAC is indicated in figure 1.
- This target refers to activities or operations that propose to permanently remove reef habitat, thus reducing the range over which this habitat occurs within the site. It does not refer to long or short term disturbance of the biology of reef habitats.
- Early consultation or scoping with the Department in advance of formal application is advisable for such proposals.

Target 3	Conserve the following community type in a natural condition: Exposed intertidal reef community complex
-----------------	---

- A semi-quantitative description of the community has been provided in Section 1.
- An interpolation of its likely distribution is provided in figure 2.
- The estimated area of the community within the Reefs habitat given below is based on spatial interpolation and therefore should be considered indicative. In addition, as this habitat contains areas of sheer and steeply sloping rock, the mapped community extent will be underestimated:
 - Exposed intertidal reef community complex - 70ha
- This target relates to the structure and function of the reef and therefore it is of relevance to those activities that may cause disturbance to the ecology of the habitat.
- Significant continuous or ongoing disturbance of the community should not exceed an approximate area of 15% of the interpolated area of the community type, at which point an inter-Departmental management review is recommended prior to further licensing of such activities.
- Proposed activities or operations that cause significant disturbance to the community but may not necessarily represent a continuous or ongoing source of disturbance over time and space may be assessed in a context-specific manner giving due consideration to the proposed nature and scale of activities during the reporting cycle and the particular resilience of the receiving habitat in combination with other activities within the designated site.

Bibliography:

MERC (2012). Intertidal survey of Inisheer Island SAC. Carried out by MERC on behalf of the Marine Institute in partnership with National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Figure 1. Extent of Reefs in Inisheer Island SAC

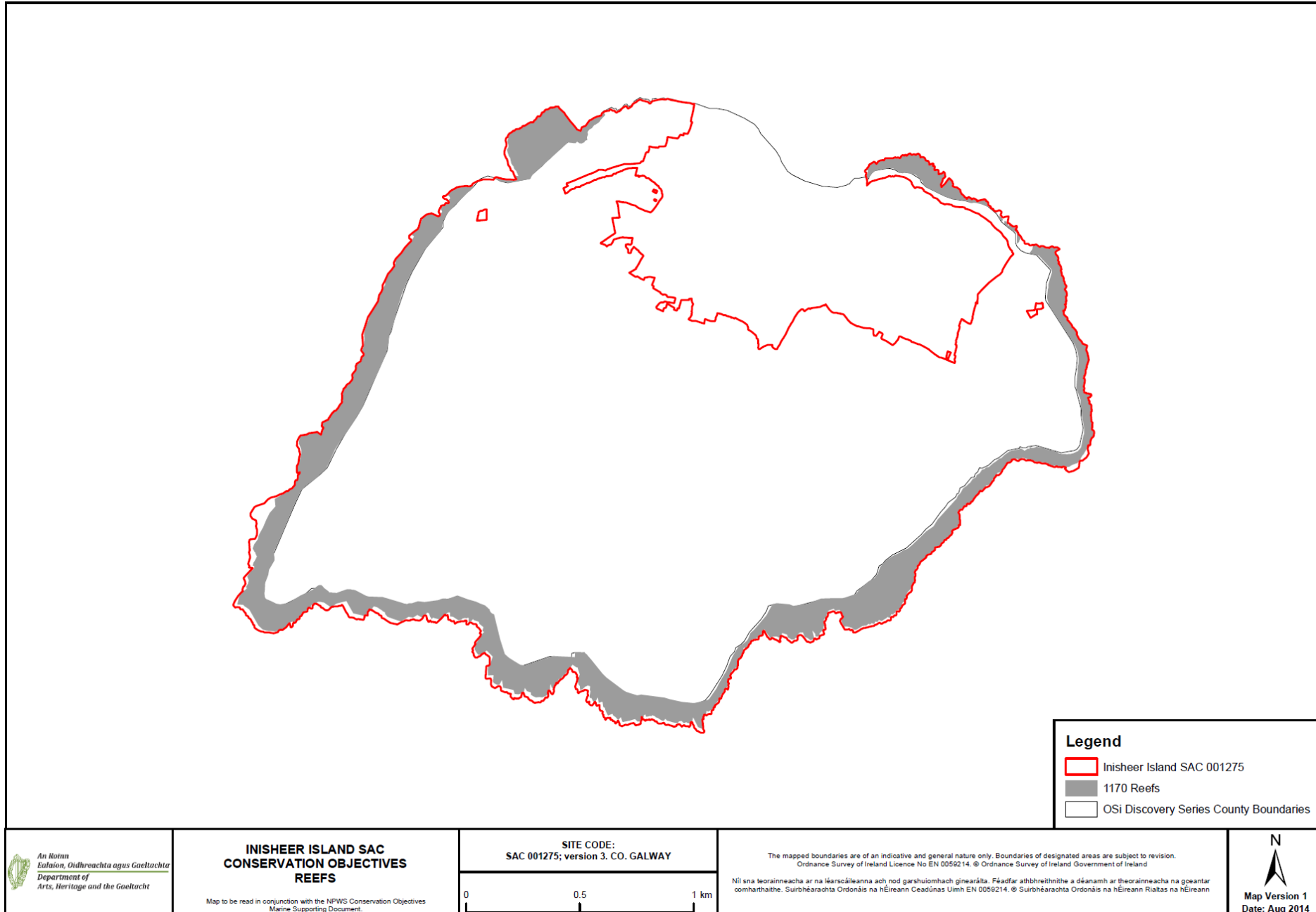


Figure 2. Distribution of community types in Inisheer Island SAC

