

**NPWS**

**Long Bank SAC (site code: 2161)**

**Conservation objectives supporting document -  
Marine Habitat**

**Version 1  
February 2013**

## **Introduction**

Long Bank SAC is designated for the marine Annex I qualifying interest of Sandbanks which are slightly covered by sea water all the time (Figure 1).

A subtidal survey was undertaken in 2007 (Aquafact, 2007) 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 the Long Bank SAC a single community type is recorded; namely Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex. A description of this community type is given below.

The estimated area of this community type within 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 Long Bank SAC identified a number of biological communities whose species composition overlapped significantly. Such biological communities are grouped together into what experts consider is a sufficiently stable unit (i.e. a complex) for conservation targets.

### **SAND WITH *NEPHTYS CIRROSA* AND *BATHYPOREIA ELEGANS* COMMUNITY COMPLEX**

This community complex occurs throughout this site at depths of between 7m and 25m (Figure 2).

The sediment is largely that of medium to fine sand with an area of mixed sediment in the northern reaches of the site. Coarse sand ranges from 0.5% to 27.9%, medium sand from 20.2% to 82.9% and fine sand from 0.3% to 77.8% while gravel varies from 0% to 11.5%. Amounts of silt-clay are negligible (<3%) and with the exception of the northern area of the site (where it ranges from 4.4% to 20.8%) very fine sand is also small (<1%); this reflects the high hydrodynamic conditions which occur here.

This community complex is distinguished by the polychaete *Nephtys cirrosa* and the amphipod *Bathyporeia elegans*. These species are recorded throughout the complex with the highest abundances recorded in the centre of Long Bank. The crustaceans *Urothoe brevicornis* and *Gastrosaccus spinifer* are recorded in moderate abundances in the south of the site and occur in low numbers or are absent elsewhere. In general, the polychaete *Spio filicornis* is recorded in low numbers throughout the complex (Table 1).

Distinguishing species of Sand with <i>Nephtys cirrosa</i> and <i>Bathyporeia elegans</i> community complex	
<i>Bathyporeia elegans</i>	<i>Spio filicornis</i>
<i>Nephtys cirrosa</i>	<i>Gastrosaccus spinifer</i>
<i>Urothoe brevicornis</i>	

**Table 2** Distinguishing species of the Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex.

For the most part, this complex is that of a low species number and densities community. However, in the northern reaches of the site where the sediment is more mixed, a small area of increased numbers of species and individuals occurs. These include the polychaetes *Pisione remota*, *Eumida bahusiensis*, *Sphaerosyllis bulbosa*, *Scoloplos (Scoloplos) armiger*, *Paradoneis lyra*, *Spiophanes bombyx*, *Polygordius appendiculatus*, *Polygordius lacteus*, *Saccocirrus papillocercus*, *Pectinaria sp.*, *Lanice conchilega* and the bivalves *Modiolula phaseolina* and *Donax vittatus*.

# 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](http://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 the specific conservation objective and targets for the Annex I habitat to facilitate the appropriate assessment process:

**Objective**      **To maintain the favourable conservation condition of Sandbanks which are slightly covered by sea water all the time in Long Bank SAC, which is defined by the following list of attributes and targets.**

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

- 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 sandbanks is stable or increasing, subject to natural processes.

- The likely distribution of sandbank habitat in this SAC is indicated in figure 1.
- This target refers to activities or operations that propose to permanently remove sandbank 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 sandbank 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: Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex.

- A semi-quantitative description of this community has been provided in Section 1.
- An interpolation of its likely distribution is provided in figure 2.
- The estimated areas of this community within the Sandbanks habitat given below is based on spatial interpolation and therefore should be considered indicative:
  - Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex - 1319ha
- Significant continuous or ongoing disturbance of the community should not exceed an approximate area of 15% of the interpolated area of this 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:**

Aquafact (2007). Marine Surveys of Two Irish Sandbank cSACs. Carried out by Aquafact International Services Ltd. on behalf of National Parks and Wildlife Service, Department of Environment, Heritage and Local Government.

Figure 1. Extent of Sandbanks which are slightly covered by seawater all the time in Long Bank SAC.





Figure 2. Distribution of community types in Long Bank SAC.

