NPWS

Blackwater Bank SAC

(site code: 002953)

Conservation objectives supporting document -

Marine Habitats

Version 2

March 2023

Contents

Please note that this document should be read in conjunction with the following report: NPWS (2023) Conservation Objectives: Blackwater Bank SAC 002953. Version 2.0. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Introduction

Blackwater 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**).

Benthic surveys were undertaken here in 2005 (Roche et al., 2007) and 2012 (Aquafact, 2012); these data were used to determine the physical and biological nature of this SAC.

Aspects of the 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/EEC) (as amended), and the preservation or restoration of the integrity of the Natura 2000 site.

Ireland also has an obligation to ensure that consent decisions concerning operations/activities planned for Natura 2000 sites (also known as European sites) are informed by an appropriate assessment of the likelihood that such operations or activities are having a significant effect on the site, or adversely affecting site integrity. Further ancillary information concerning the practical application of the site-specific conservation objective and its associated targets in the completion of such assessments is provided in **Section 2**.

Section 1

Principal Benthic Communities

Within the Blackwater Bank SAC a single community type is recorded within the Annex I habitat; 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 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 Blackwater 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

With the exception of the south-eastern margins of the SAC where the sediment is coarser, this community complex occurs throughout this site; it is recorded in depths of between 0m and 30m (**Figure 2**). It is to be noted that as the 20m depth contour was used to delineate the Annex I habitat in this SAC (as per the interpretation manual of EU habitats (European Commission (2013)), only the area of Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex occurring to a depth of 20m is considered to be Annex I habitat.

The sediment within this complex shows a great deal of temporal and spatial variability reflecting the strong currents and hydrodynamic conditions that occur here. In 2005, the sediment was predominantly that of fine sand (65.6% to 91.2%) while in 2012 medium sand (8.0% to 88.0%) constituted the greater proportion of the sediment fractions. There are some localised areas of coarse sediment on the northeast area of the sandbank and in an area on the western margins of the site.

The distinguishing species of this community complex are the polychaetes *Nephtys cirrosa*, *Nephtys* sp., *Nephtys longosetosa* and *Scolelepis* (*Scolelepis*) *squamata* and the amphipods *Bathyporeia*

elegans and *Pontocrates altamarinus*. *Bathyporeia elegans* is recorded in high abundances on the bank itself and also in deeper waters in the north eastern and western margins of the site; elsewhere it occurs in low abundances. *N. cirrosa* occurs in low abundances throughout this community complex. Where fine sand is the prevailing sediment type, *Nephtys* sp., *Nephtys longosetosa* and *Scolelepis* (*Scolelepis*) *squamata* are recorded in low abundances. *Pontocrates altamarinus* occurs in low abundances on the sandbank feature (**Table 1**).

Distinguishing species of Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex	
Bathyporeia elegans	*Nephtys longosetosa*
Nephtys cirrosa	*Pontocrates altamarinus*
Nephtys sp.	*Scolelepis (Scolelepis) squamata*

Table 1. Distinguishing species of the Sand with *Nephtys cirrosa* and *Bathyporeia elegans* community complex.

COBBLES WITH EPIFAUNA COMMUNITY

To the south-east of the sandbank, in depths of between 30m to 40m, the substrate is primarily that of cobbles and pebbles (**Figure 2**). This reflects the strong currents (2-10kts) which occur here. It is not considered to be part of the Annex I habitat.

Here, the fauna comprise serpulid polychaetes, including *Spirobranchus* sp. and *Spirobranchus lamarcki*. The polychaetes *Eumida sanguinea*, *Sphaerosyllis* sp. and *Nicolea zostericola*, unidentified nemerteans and the echinoderm *Ophiothrix fragilis* are also recorded here. These species are typical of cobble substrates where strong currents occur (**Table 2**).

Distinguishing species of Cobbles with epifauna community	
Serpulidae spp.	*Sphaerosyllis* sp.
Spirobranchus sp.	*Nicolea zostericola*
Spirobranchus lamarcki	Nemertea indet.
Eumida sanguinea	*Ophiothrix fragilis*

Table 2. Distinguishing species of the Cobbles with epifauna community**.**

Section 2

Appropriate Assessment Notes

Many plans and projects of a particular nature and/or size require the preparation of an environmental impact assessment of the likely effects of their planned development. While smaller operations/activities (i.e. sub-EIA-threshold developments) may not require EIA, an appropriate assessment is required of any project that may significantly affect the integrity of a Natura 2000 site. The appropriate assessment is to be used as part of the decision-making process, as to whether or not the project proceeds. The assessment should be recorded in a transparent manner, and should assess, in a reasoned manner, the likely effects on a Natura 2000 site of a proposed plan or project. General guidance on the completion of such assessments has been prepared and is available at www.npws.ie and at https://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm.

Annex I Habitats

It is worth considering at the outset that 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; 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, the following must be considered:
    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 the cumulative area of continuous disturbance of each community type should not exceed an approximate area of 15%. Thereafter, an increasingly cautious approach is advocated. Prior to any consent being granted for any project or activities that would result in more than 15% of any Annexed marine habitat community type within a Natura site being disturbed on a cumulative basis, 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 objectives and targets for the identified Annex I habitat below in order to facilitate the analysis required for the appropriate assessment process and overall site planning and management:

Objective **To maintain the favourable conservation condition of Sandbanks which are slightly covered by sea water all the time in Blackwater 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 area of this community within the Annex I Sandbanks habitat (i.e. within the 20m contour) given below is based on spatial interpolation and therefore should be considered indicative:

  - Sand with *Nephtys cirrosa and Bathyporeia elegans* community complex - 7310ha.

- 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 (2012). Subtidal Benthic Investigations of the Blackwater Sandbank. Produced by Aquafact International Services Ltd on behalf of the Marine Institute in partnership with National Parks & Wildlife Service.

EU Commission (2013) Interpretation Manual of European Union Habitats - EUR28. DG Environment, Nature ENV B.3, Brussels

Roche, C., Lyons, D.O., Farinas Franco, J. & O'Connor, B. (2007). Benthic surveys of sandbanks in the Irish Sea. Irish Wildlife Manuals, No. 29. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

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

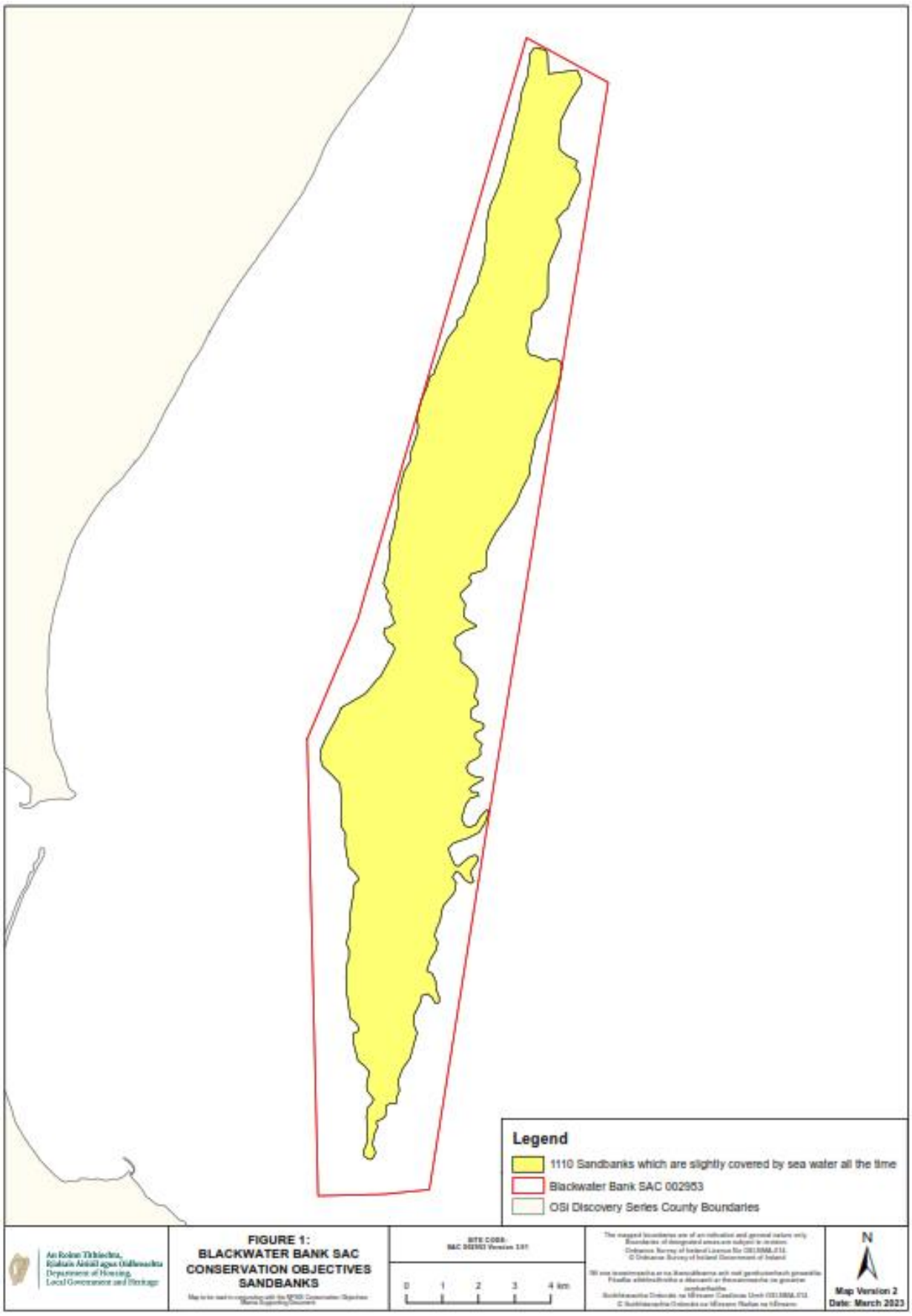

Figure 2. Distribution of community types in Blackwater Bank SAC.