

**APPROPRIATE ASSESSMENT SCREENING**

**MATERIALS RECOVERY FACILITY**

**SARFIELD COURT**

**GLANMIRE**

**(W0136-02)**

**Prepared For: -**

Greenstar Recycling (Munster) Limited (In Receivership),  
Sarsfieldcourt,  
Glanmire,  
County Cork.

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Project		Stage 1 Screening Assessment Sarsfieldcourt (W0136-02)		
Client		GES		
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# 1. INTRODUCTION

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Greenstar Recycling (Munster) Ltd (In Receivership) has applied for a review of its Waste Licence (W0136-02) at its materials recovery and transfer (MRTF) facility in Sarsfieldcourt, Glanmire. The objective of the review is to increase the quantity of wastes that can be accepted at the facility, change the waste acceptance hours and operate a Civic Amenity Area.

The Environmental Protection Agency (the Agency) has requested that a Screening Assessment be prepared to inform the Appropriate Assessment of the application and, in particular, to determine if the proposed changes is likely to have a significant effect on a European Site.

The European Union (EU) Habitats Directive (92/43/EC) and the EU Birds Directive (2009/147/EC) identify designated areas (Special Areas of Conservation (SAC) and Special Protection Areas (SPA) respectively), are collectively known as European Sites and otherwise as Natura 2000 Sites.

The Habitats Directive, which is implemented under the European Communities Birds and Natural Habitats) Regulations 2011 (S.I. No 477 of 2011), requires an “appropriate assessment” of the potential impacts any proposed development that may have an impact on the conservation objectives of any Natura 2000 site.

Article 6(3) of the Directive stipulates that *any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but likely to have a significant effect thereon...shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives.*

Guidance documents issued by Department of Environment, Heritage and Local Government (DEHLG) and the National Parks and Wildlife Services (NPWS) recommend that the assessment be completed in a series of Stages, which comprise:

### *Stage 1: Screening*

The purpose of this Stage is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in respect of the site's conservation objectives.

### *Stage 2: Appropriate Assessment*

This Stage is required if the Stage 1 Screening exercise identifies that the project is likely to have a significant impacts on a Natura 2000 site.

### *Stage 3 : Assessment of Alternative Solutions.*

If Stage 2 determines that the project will have an adverse impact upon the integrity of a Natura 2000 site, despite the implementation of mitigation measures, it must be objectively concluded that no alternative solutions exist before the plan can proceed.

### *Stage 4 : Compensatory Measures:*

Where no alternative solutions are feasible and where adverse impacts remain but imperative reasons of overriding public interest require the implementation of a project an assessment of compensatory measures that will effectively offset the damage to the Natura site 2000 is required.

## **1.1 Methodology**

The Screening Assessment was based on a site inspection and the proposed changes to facility operations. It followed the guidance presented The DEHLG (2009, revised February 2010) Appropriate Assessment of Plans and Projects in Ireland and the NPWS (2010) Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

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## 2. DESCRIPTION OF PROJECT

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### 2.1 Site Location

The site, which encompasses 1.56 hectares (ha), is located in the Sarsfieldcourt Industrial Estate, approximately 5 miles north of Glanmire Village (Figure 2.1). The Industrial Estate is accessed off the R616, which connects with the N8 and the M8 approximately 2km north east of the site.

### 2.2 Site Layout

The facility comprises one main building, two weighbridges, a vehicle wash, paved open yards and parking areas (Figure 2.2). Rainwater run off from the roof areas, yard areas, car-park and hard standing areas is collected in the facility's surface water drainage system and is discharged to one of the storm sewers that serves the industrial estate. This sewer, along with a second storm sewer that also serves the estate, outfalls to an unnamed stream 100m to the east of the estate.

### 2.3 Surrounding Landuse

The industrial estate is in a rural area and the surrounding land use is primarily agricultural, with some low density residences. There are approximately sixteen lots of varying sizes in the Industrial Estate.

The Greenstar facility is bounded to the north by haulage contractor's yards and associated warehouses, with a truck crash repair operation and farm supplies store further north; to the east by the estate access road, with storage warehousing and manufacturing businesses further east; to the west by a local road, on the far side of which is agricultural lands (pasture) and to the south by a dry recyclables recovery facility.

## 2.4 Site Operations

The current Licence allows the acceptance of 99,017 tonnes annually and the facility currently accepts and processes source separated and mixed non-hazardous solid wastes. The waste types include Household, Commercial & Industrial (C&I) and Construction & Demolition (C&D).

Waste processing involves on-site mechanical and manual sorting, compacting, baling and transfer off-site to recycling/treatment facilities and residual landfill. The facility is authorised to compost biodegradable wastes, but the compost plant has not yet been built. This plant may be provided at some stage in the future.

### 2.4.1 Operating Hours

The current operational hours set in the Licence are between 07:00-20:00 Monday to Friday and 07:00 – 15:00 on Saturdays

## 2.5 Emissions

Potential and actual emissions from the facility include noise, odour, dust and rainwater run-off from the building roofs and paved yards. Sanitary wastewater and wash water from cleaning the building floor down are collected and stored in an underground before being sent off-site for treatment in a municipal wastewater treatment plant.

The routine monitoring carried out in accordance with the Licence conditions has established that noise, dust and odour emissions generally comply with the emission limit values set in the Licence and are not a cause of nuisance or impairment outside the facility boundary.

Rainwater run off from the roof areas, yard areas, car-park and hard standing areas is collected in the facility's surface water drainage system and is discharged to one of the storm sewers that serves the industrial estate. This sewer, along with a second storm sewer that also serves the estate, outfalls to the unnamed tributary of the Glashaboy River, approximately 100m to the south east of the Greenstar site.

The unnamed tributary joins the Glashaboy River approximately 1 km to the south of the site. The Glashaboy flows south and enters Cork Harbour near Dunkettle, approximately 6 km south of the site.

The quality of surface water run-off from the Greenstar facility and the quality in the receiving surface water course is monitored quarterly at three monitoring locations (SW-1, SW-2 and SW-3). SW-3 is on the facility's storm sewer upstream of the connection to the storm sewer serving the industrial estate. SW-2 is to the north and upstream of the outfalls (s) from the estate drainage system and SW-1 is south and downstream of both discharge points. The monitoring results for 2012 and Q1 of 2013 are shown in Table 2.1

Emission Limit Value (ELV) for Mineral Oil and Trigger Levels (BOD and TSS) are set in Waste Licence, but only apply to the discharge (SW-3). For those parameters for which ELVs have not been established the Environmental Quality Standards (EQS) specified for 'Good Status' in the Environmental Objectives (Surface Water) Regulations 2009 (S.I. No.272 of 2009) are provided. The EQS are not emission limit values, but are the concentrations that must be achieved in a water body, taking into consideration the available assimilative capacity, if the water body is to meet the objectives set for the water body.

**Table 2.1 Water Quality 2012/2013**

Parameter	Units	SW-1	SW-2	SW-3	ELV Trigger Level	EQS*
pH	pH units	7.09-8.24	6.72-8.55	8.24-8.50	-	
BOD	mg/l	<1-10	<1	1-3	25	1.5
COD	mg/l	2-12	<7-51	8-9	-	
Ammonia	mg/l	0.02-0.28	0.22-0.42	0.30-0.51	-	0.065
Dissolved Oxygen	mg/l	10-11	9-11	5-8	-	-
TOC	mg/l	<2-15	<2-6	<2-7	-	
TSS	mg/l	<10-28	<10-12	<10-27	35	-
Oils Fats Grease	mg/l	<0.01	<0.01	<0.01		
Nitrate as NO <sub>3</sub>	mg/l	8.2-25.8	7.2-24.2	0.8-16.8	-	
Nitrite as NO <sub>2</sub>	mg/l	<0.02	<0.02-0.06	>0.02-0.25	-	



Mineral Oils	mg/l	<0.0.1	<0.0.1	<0.01	5	
Total Coliforms	cfu/100ml	150-11000	93-1100	43,000-46,000	-	
Faecal Coliform	cfu/100ml	150-4600	43-1100	4600-43,000	-	

\* Good Status For River Water Body

The ELV and Trigger Levels were not exceeded in 2012 and 2013 and the quality of the water in the stream is generally good. There is no evidence that the discharge from the Greenstar facility is impacting on the water quality in the stream.

## 2.6 Proposed Development

Greenstar intends to increase the amount of waste that can be accepted to 200,000 tonnes/year, which will have consequent changes to the waste acceptance and operational hours from the current 12-13 hours daily to 24 hours, seven days per week.

It is not intended to accept waste continually over 24 hours seven days a week and the majority of waste inputs will be during normal business hours from Monday to Saturday. However, due to the nature of the waste recycling business, it is on occasion necessary to accept waste outside the normal hours, for example to meet customer demands and regulatory requirements in relation to the collection of wastes in urban areas.

There will be no change to either the types of waste accepted, or the way the waste is handled, processed and stored. The only change will be an increase in the number of vehicles that bring the unprocessed waste to the site and remove the processed materials.

It is proposed to provide a Civic Amenity Area where members of the public can drop off waste. The Civic Amenity Area will be in an area currently used for parking and the storage of empty skips and bins. It will be fenced off from the remainder of the site and will include a portakabin type office and a range of different waste receptacles.

The proposed changes will not result in any disturbance to the ground, the construction of any new permanent buildings, alteration to the drainage system or the provision of any new items of plant or equipment. The only new structure will be a small portakbin type office at the Civic Amenity Area.

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### 3. NATURA 2000 SITES

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SACs are selected for the conservation and protection of habitats listed on Annex I and species (other than birds) listed on Annex II of the Habitats Directive, and their habitats. The habitats listed in Annex I require special conservation measures. SPAs are selected for the conservation and protection of bird species listed on Annex I of the Birds Directive and regularly occurring migratory species, and their habitats, particularly wetlands. The selected habitats and species are termed Qualifying Interests

A statement of Conservation Objectives is prepared for each designated site which identifies the qualifying interests or conservation features. The Conservation Objectives are intended to ensure that the relevant habitats and species present on a site are maintained, and where necessary restored, at a Favourable Conservation Status.

Favourable Conservation Status of a habitat, as defined in 2011 Birds and Natural Habitats Regulations, is 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

Conservation Status of a species is when:

- the Favourable 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,
- 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.

The designated SACs and SPAs within 15km of the site that could potentially be affected by the proposed changes are listed in Table 3.1 and shown on Figure 3.1. Both of the Sites are in Cork Harbour and were selected on the basis that that rainwater run-off from the facility discharges to a tributary of the Glashaboy River, which flows into Cork Harbour near Dunkettle.

**Table 3.1.** Natura 2000 Sites Within 15 km of the Greenstar Facility

Site	Code	Distance
<b>SAC</b>		
Great Island Channel	001058	10km Southeast
<b>SPA</b>		
Cork Harbour	004030	6 km South

### 3.1 Cork Harbour SPA

Cork Harbour SPA is a large, sheltered bay system surrounded by the River Lee, Douglas, Owenboy and Owenacurra estuaries. The SPA comprises most of the main intertidal areas of Cork Harbour, including the North Channel, the Douglas River Estuary, Inner Lough Beg, the Owenboy River Estuary, Whitegate Bay and the Rostellan and Poul nabibe inlets.

The Site Synopsis for the SPA, listing the Qualifying Interests, and the Conservation Objectives are in Appendix 1 and the information is summarised below.

#### *Qualifying Interests*

The listed species are; Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Pintail, Shoveler, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Blacktailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Black-headed Gull, Common Gull, Lesser Black-backed Gull and Common Tern.

The site is also of special conservation interest for over 20,000 wintering waterbirds. The Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the

site and its associated water birds are of special conservation interest for Wetland & Waterbirds.

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CLIENT  
**Greenstar Recycling (Munster)Ltd**

TITLE  
**Natura 200 Sites**

- Details
-  SPA Cork Harbour
  -  SAC Great Island Channel
  -  Rivers
  -  Site Location

Figure 3.1  
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### *Conservation Objectives*

The conservation objective is to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA and also the wetlands.

### **3.2 Great Island Channel SAC**

The Great Island Channel stretches from Little Island to Middleton, with its southern boundary formed by Great Island. It is an integral part of Cork Harbour, which contains several other sites of conservation interest.

Cork Harbour consists of two large areas of open water in a limestone basin, separated from each other and the open sea by ridges of Old Red Sandstone. The Great Island Channel forms the eastern stretch of the river basin and, compared to the rest of Cork Harbour, is relatively undisturbed. Within the site is the estuary of the Owennacorra and Dungourney Rivers which provide the main source of freshwater to the North Channel.

The Site Synopsis, which lists the full Qualifying Interests, and the Conservation Objectives are in Appendix 2 and the information is summarised below.

#### *Qualifying Interests*

The Great Island Channel; is selected for the following Annex 1 habitats: Sheltered tidal sand and mudflats and Atlantic salt meadows. The site is an integral part of Cork Harbour, which is a wetland of international importance, and is extremely important for wintering waterfowl, containing three of the top five areas within Cork Harbour, namely North Channel, Harper's Island and Belvelly-Marino Point.

#### *Conservation Objectives*

The conservation objectives are to maintain or restore the favorable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

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## 4. LIKELY EFFECTS

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### 4.1 Proposed Development

It is proposed to increase the amount of waste that can be accepted to 200,000 tonnes/year, with consequent changes to the waste operational hours from the current 12-13 hours daily to 24 hours, seven days per week. It is also proposed to provide a Civic Amenity Area where members of the general public can drop off wastes.

The proposed changes will not require the expansion of the site, the construction/provision of any new buildings/structures, with the exception of a small portakabin at the Civic Amenity Area, or any alteration to the existing site layout and operations.

The changes will not require the use of any new raw materials that have the potential to cause contamination. They will not result in any new or additional abstraction from groundwater or surface water. They will not give rise to any new emissions to surface water or sewer, nor will it contribute to increased noise, dust and odour emissions. The changes to operational hours will result in an extension of the time the area lighting will be on, but this will be directed in towards the site.

### 4.2 Direct Impacts

The Greenstar facility is not located within any designated Natura 2000 Site and therefore the proposed changes will not result in any direct habitat loss or fragmentation of any SPA or SAC

### 4.3 Indirect Impacts

There is the potential for indirect impacts on the Natura 2000 Sites in Cork Harbour, as surface water run-off from the yards and roofs discharges to an unnamed tributary of the Glashaboy River, which flows into the Harbour at a point 6km south of the site.

However, as the proposed changes will not result in any alteration to either the volume or quality of the surface water run-off from the facility they will have no impact on the Natura 2000 Sites in Cork Harbour.

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## 5. SCREENING CONCLUSION & STATEMENT

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The proposed changes will not result in any new or additional emissions that could present a significant risk to the Qualifying Interests and Conservation Objectives of either the Lower Channel SAC or the Cork Harbour SPA. Therefore a Natura Impact Statement is not required.

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# **APPENDIX 1**



## Conservation Objectives for Cork Harbour SPA [004030]

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.

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.

Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

◆ <i>Tachybaptus ruficollis</i>	[wintering]
◆ <i>Podiceps cristatus</i>	[wintering]
◆ <i>Phalacrocorax carbo</i>	[wintering]
◆ <i>Ardea cinerea</i>	[wintering]
◆ <i>Tadorna tadorna</i>	[wintering]
◆ <i>Anas penelope</i>	[wintering]
◆ <i>Anas crecca</i>	[wintering]
◆ <i>Anas acuta</i>	[wintering]
◆ <i>Anas clypeata</i>	[wintering]
◆ <i>Mergus serrator</i>	[wintering]
◆ <i>Haematopus ostralegus</i>	[wintering]
◆ <i>Pluvialis apricaria</i>	[wintering]
◆ <i>Pluvialis squatarola</i>	[wintering]
◆ <i>Vanellus vanellus</i>	[wintering]
◆ <i>Calidris alpina</i>	[wintering]

### Citation:

NPWS (2011) Conservation objectives for Cork Harbour SPA [004030]. Generic Version 4.0. Department of Arts, Heritage & the Gaeltacht.

For more information please go to: [www.npws.ie/protectedsites/conservationmanagementplanning](http://www.npws.ie/protectedsites/conservationmanagementplanning)



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◆ <i>Limosa limosa</i>	[wintering]
◆ <i>Limosa lapponica</i>	[wintering]
◆ <i>Numenius arquata</i>	[wintering]
◆ <i>Tringa totanus</i>	[wintering]
◆ <i>Chroicocephalus ridibundus</i>	[wintering]
◆ <i>Larus canus</i>	[wintering]
◆ <i>Larus fuscus</i>	[wintering]
◆ <i>Sterna hirundo</i>	[breeding ]
◆ Wetlands	[]

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**Citation:**

NPWS (2011) Conservation objectives for Cork Harbour SPA [004030]. Generic Version 4.0. Department of Arts, Heritage & the Gaeltacht.

For more information please go to: [www.npws.ie/protectedsites/conservationmanagementplanning](http://www.npws.ie/protectedsites/conservationmanagementplanning)

## SITE SYNOPSIS

**SITE NAME: CORK HARBOUR SPA**

**SITE CODE: 004030**

Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay and the Rostellan and Poul nabibe inlets.

Owing to the sheltered conditions, the intertidal flats are often muddy in character. These muds support a range of macro-invertebrates, notably *Macoma balthica*, *Scrobicularia plana*, *Hydrobia ulvae*, *Nephtys hombergi*, *Nereis diversicolor* and *Corophium volutator*. Green algae species occur on the flats, especially *Ulva lactuca* and *Enteromorpha* spp. Cordgrass (*Spartina* spp.) has colonised the intertidal flats in places, especially where good shelter exists, such as at Rossleague and Belvelly in the North Channel. Salt marshes are scattered through the site and these provide high tide roosts for the birds. Salt marsh species present include Sea Purslane (*Halimione portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Lax-flowered Sea-lavender (*Limonium humile*) and Sea Arrowgrass (*Triglochin maritima*). Some shallow bay water is included in the site. Cork Harbour is adjacent to a major urban centre and a major industrial centre. Rostellan Lake is a small brackish lake that is used by swans throughout the winter. The site also includes some marginal wet grassland areas used by feeding and roosting birds.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Pintail, Shoveler, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Black-headed Gull, Common Gull, Lesser Black-backed Gull and Common Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Cork Harbour is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl, for which it is amongst the top five sites in the country. The two-year mean of summed annual peaks for the entire harbour complex was 55,401 for the period 1995/96 and 1996/97. Of particular note is that the site supports internationally important populations of Black-tailed Godwit (905) and Redshank (1,782) - all figures given are average winter means for the two winters 1995/96 and 1996/97. At least 18 other species have populations of

national importance, as follows: Little Grebe (51), Great Crested Grebe (204), Cormorant (705), Grey Heron (63), Shelduck (2,093), Wigeon (1,852), Teal (922), Pintail (66), Shoveler (57), Red-breasted Merganser (88), Oystercatcher (1,404), Golden Plover (3,653), Grey Plover (84), Lapwing (7,688), Dunlin (10,373), Bar-tailed Godwit (417), Curlew (1,325) and Greenshank (26). The Shelduck population is the largest in the country (over 10% of national total). The site has regionally or locally important populations of a range of other species, including Whooper Swan (10), Pochard (145) and Turnstone (79). Other species using the site include Gadwall (13), Mallard (456), Tufted Duck (113), Goldeneye (31), Coot (53), Mute Swan (38), Ringed Plover (34) and Knot (38). Cork Harbour is a nationally important site for gulls in winter and autumn, especially Black-headed Gull (4,704), Common Gull (3,180) and Lesser Black-backed Gull (1,440).

A range of passage waders occurs regularly in autumn, including such species as Ruff (5-10), Spotted Redshank (1-5) and Green Sandpiper (1-5). Numbers vary between years and usually a few of each of these species over-winter.

The wintering birds in Cork Harbour have been monitored since the 1970s and are counted annually as part of the I-WeBS scheme.

Cork Harbour has a nationally important breeding colony of Common Tern (3-year mean of 69 pairs for the period 1998-2000, with a maximum of 102 pairs in 1995). The birds have nested in Cork Harbour since about 1970, and since 1983 on various artificial structures, notably derelict steel barges and the roof of a Martello Tower. The birds are monitored annually and the chicks are ringed.

Extensive areas of estuarine habitat have been reclaimed since about the 1950s for industrial, port-related and road projects, and further reclamation remains a threat. As Cork Harbour is adjacent to a major urban centre and a major industrial centre, water quality is variable, with the estuary of the River Lee and parts of the Inner Harbour being somewhat eutrophic. However, the polluted conditions may not be having significant impacts on the bird populations. Oil pollution from shipping in Cork Harbour is a general threat. Recreational activities are high in some areas of the harbour, including jet skiing which causes disturbance to roosting birds.

Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, there are at least 18 wintering species that have populations of national importance, as well as a nationally important breeding colony of Common Tern. Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Golden Plover, Bar-tailed Godwit, Ruff and Common Tern. The site provides both feeding and roosting sites for the various bird species that use it.

26.2.2008

# APPENDIX 2

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## Conservation Objectives for Great Island Channel SAC [001058]

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.

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.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:

- ◆ [1140] Mudflats and sandflats not covered by seawater at low tide
- ◆ [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

### Citation:

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For more information please go to: [www.npws.ie/protectedsites/conservationmanagementplanning](http://www.npws.ie/protectedsites/conservationmanagementplanning)



## SITE SYNOPSIS

**SITE NAME: GREAT ISLAND CHANNEL**

**SITE CODE: 001058**

The Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. It is an integral part of Cork Harbour which contains several other sites of conservation interest. Geologically, Cork Harbour consists of two large areas of open water in a limestone basin, separated from each other and the open sea by ridges of Old Red Sandstone. Within this system, Great Island Channel forms the eastern stretch of the river basin and, compared to the rest of Cork Harbour, is relatively undisturbed. Within the site is the estuary of the Owennacurra and Dungourney Rivers. These rivers, which flow through Midleton, provide the main source of freshwater to the North Channel.

The main habitats of conservation interest are the sheltered tidal sand and mudflats and Atlantic salt meadows, both habitats listed on Annex I of the EU Habitats Directive. Owing to the sheltered conditions, the intertidal flats are composed mainly of soft muds. These muds support a range of macro-invertebrates, notably *Macoma balthica*, *Scrobicularia plana*, *Hydrobia ulvae*, *Nephtys hombergi*, *Nereis diversicolor* and *Corophium volutator*. Green algal species occur on the flats, especially *Ulva lactuca* and *Enteromorpha* spp. Cordgrass (*Spartina* spp.) has colonised the intertidal flats in places, especially at Rossleague and Belvelly. The salt marshes are scattered through the site and are all of the estuarine type on mud substrate. Species present include Sea Purslane (*Halimione portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Common Saltmarsh-grass (*Puccinellia maritima*), Sea Plantain (*Plantago maritima*), Greater Sea-spurry (*Spergularia media*), Sea Lavender (*Limonium humile*), Sea Arrowgrass (*Triglochin maritimum*), Mayweed (*Matricaria maritima*) and Red Fescue (*Festuca rubra*).

The site is extremely important for wintering waterfowl and is considered to contain three of the top five areas within Cork Harbour, namely North Channel, Harper's Island and Belvelly-Marino Point. Shelduck are the most frequent duck species with 800-1000 birds centred on the Fota/Marino Point area. There are also large flocks of Teal and Wigeon, especially at the eastern end. Waders occur in the greatest density north of Rosslare, with Dunlin, Godwit, Curlew and Golden Plover the commonest species. A population of about 80 Grey Plover is a notable feature of the area. All the mudflats support feeding birds; the main roost sites are at Weir Island and Brown Island and to the north of Fota at Killacloyne and Harper's Island. Ahanesk supports a roost also but is subject to disturbance. The numbers of Grey Plover and Shelduck, as given above, are of national importance.

The site is an integral part of Cork Harbour which is a wetland of international importance for the birds it supports. Overall, Cork Harbour regularly holds over 20,000 waterfowl and contains Internationally important numbers of Black-tailed Godwit (1,181) and Redshank (1,896) along with Nationally important numbers of

nineteen other species. Furthermore, it contains the large Dunlin (12,019) and Lapwing (12,528) flocks. All counts are average peaks, 1994/95 – 1996/97. Much of the site forms part of Cork Harbour Special Protection Area, an important bird area designated under the EU Birds Directive.

While the main land use within the site is aquaculture (Oyster farming), the greatest threats to its conservation significance come from road works, infilling, sewage outflows and possible marina developments.

The site is of major importance for the two habitats listed on the EU Habitats Directive that it contains, as well as for its important numbers of wintering waders and wildfowl. It also supports a good invertebrate fauna.

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