

southern scientific services Itd

APPROPRIATE ASSESSMENT

Screening Report

Seaweed Harvesting

at Dromatoor Pier, Ballyheigue, Co. Kerry

Requested By:	
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TABLE OF CONTENTS

1 Intro	oduction2
1.1	Background 2
1.2	Brief Description of the Project and Site
1.3	Desktop Review 4
1.4	Field Survey
1.5	Regulatory Context 5
2 Met	hodology6
3 Scr	eening7
3.1	Description of the Project
3.2	Identification of Natura 2000 sites8
3.5	Conservation Objectives 11
3.6	Natura 2000 sites potentially impacted by the development11
3.7	Identification of potential impacts11
3.9	Screening Assessment Conclusion
4 Ref	erences
Appendix	۲۱ 16
Appendix	< III 17

1 Introduction

1.1 Background

Southern Scientific Services Ltd. was commissioned by prepare an Appropriate Assessment (AA) Screening Report, which would identify potential impacts, if any, arising on nearby Natura 2000 sites from the proposed harvesting of seaweed at Dromatoor pier, Ballyheigue, Co Kerry. This report will investigate the impact that seaweed harvesting will have on protected bird species in the area.

An Appropriate Assessment is an assessment of the potential impacts of a project or plan on the conservation objectives of a Natura 2000 site and the development where necessary of mitigation and /or avoidance measures to preclude negative effects. The impacts assessed must include the indirect and cumulative impacts of approving the project, together with any current or proposed activities and developments impacting on the site. The potential impacts of projects/developments outside the Natura 2000 sites, but potentially impacting upon them must also be included in the assessment.

1.2 Brief Description of the Project and Site

1.2.1 Description of the project

wishes to apply for a foreshore licence to manually harvest seaweed from an area 500m east and west of Dromatoor Pier, Ballyheigue, Co Kerry. A screening report is required to accompany the licence application. This report will investigate if there will be any impacts on protected bird species in the area. It is proposed that seaweed will be harvested using a scissors and that 2/3 of the seaweed will be harvested, leaving 1/3 of the seaweed to recolonise the site ensuring that there will be continued seaweed on the site. Seaweed will be harvested at the low tide and will only occur 1 to 2 days per month.

1.2.2 Site Location

The proposed site is located at Dromatoor Pier, approximately 2km west of Ballyheigue, Co Kerry (10km² National Grid Square Q72) (See Figure 1). This is a busy fishing location and a base for Ballyheigue Search and Rescue.



Figure 1: Site Location

1.2.3 Site Description

The site is located adjacent to Dromatoor Pier. To the east and west of the pier there is shelf of rock extending into the intertidal zone. The adjacent cliffs are made up of sedimentary materials. The cliffs to the east of the site have been reinforced with rock armour to reduce the effect of coastal erosion (See figure 2 and 3).



Figure 2. View looking west from site.



Figure 3. View looking east from site.

1.3 Desktop Review

To carry out the screening report it was essential to gather information on the existing environment. A desktop review was performed to identify features of ecological importance within the study area and surrounding region. Information was sourced from a number of online sources which included:

- Kerry County Council
- OSI Aerial photography and 1:50000 mapping
- National Parks and Wildlife Service (NPWS) Maps & Databases
- National Biodiversity Data Centre (NBDC) (on-line map-viewer)
- Environmental Protection Agency (EPA) (on-line map-viewer)
- Water Framework Directive (<u>www.catchments.ie</u>)

1.4 Field Survey

A site visit was carried out on the 22nd July 2020. The purpose of the visit was:

- To identify potential impacts on protected species which are designated in the area.
- To identify habitats within and surrounding the application site.

1.5 Regulatory Context

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora – Habitats Directive – provides a legal framework for the legal protection of habitats and species of European importance. Articles 3 to 9 of this Council Directive provides the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. Natura 2000 sites are those identified as sites of community importance, namely Special Areas of Conservation (SACs), under the habitats directive or classified as Special Protection Areas (SPAs) under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive outlines the decision-making tests for projects/plans likely to affect Natura 2000 sites. Article 6(3) establishes the requirement for appropriate assessment:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent National Authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".

The Commission's methodological guidance (EC, 2002) promotes a four-stage process to complete the AA. Stages 1-2 deal with the main requirements for assessment under Article 6(3), namely, 'Screening' and 'Natura Impact Statement'. Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4). Article 6(4) of the Directive deals with alternative solutions, the test of "imperative reasons of overriding public interest" and compensatory measures.

Stage 3 and Stage 4 of the AA are carried out by the appropriate authority if deemed necessary in Stages 1 & 2.

2 Methodology

This assessment has been undertaken in accordance with the European Commission "*Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC*" and the European Commission Guidance on "*Managing Natura 2000 Sites*".

In complying with the obligations under Article 6(3) and following the above guidelines, this assessment has been prepared using the following structure:

Stage 1: Screening

This includes:

- Description of the proposed development/project (and if the plan/project is necessary for the management of the Natura 2000 site(s)).
- Identification of all Natura 2000 sites potentially affected by the plan/project.
- Identification and description of individual and cumulative impacts likely to result from the plan/project.
- Assessment of the significance of the impacts identified above, on site integrity.
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.
- Determination of the necessity or otherwise for a NIS.

Screening for AA examines the likely effects of a project or plan, alone and in combination with other projects or plans, upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. If it is determined during screening that the development may have a significant effect on a Natura 2000 site, then a NIS will need to be prepared. This assessment concluded at Stage 1 as a Stage 2 AA (NIS) was not considered necessary. The methodology therefore concluded at Stage 1.

3 Screening

3.1 Description of the Project

This assessment relates to the harvesting of seaweed at a site adjacent to Dromatoor pier, Ballyheigue, Co Kerry. The area where harvesting will take place is in an area approximately 500m east and west of the pier (figure 4). The site is partially located within the Kerry Head SPA and therefore is a protected site for certain bird species, namely Chough and Fulmar. The seaweed will be cut by hand (with some scissors) and bagged for sale locally. There is no mechanical input in the harvesting operation, therefore noise levels will be minimal. The harvester proposes to remove 2/3 of the seaweed crop, which will leave 1/3 to regenerate the site and therefore operate in a sustainable manner. This will be a one-man operation which will occur at low tide, one / two days per month.



Figure 4. Showing the location on the harvesting site. In addition, the red circle 500m radius shows the extent on the seaweed harvesting east and west of Dromatoor pier.

3.2 Identification of Natura 2000 sites

In relation to the proposed development a list of all Natura 2000 sites within a 15km radius (Figure 5) of the site was compiled. Any potential impacts associated with the development were identified and any likely significant impacts assessed. Designated Natura 2000 sites within 15km of the site and their distance to the site are shown in Table 1 below.

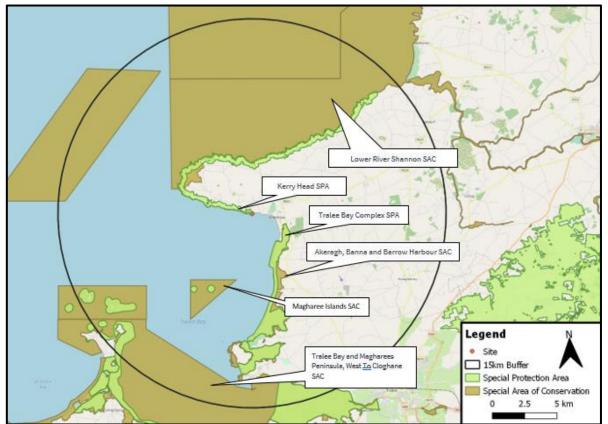


Figure 5: Location of the proposed site in relation to Natura 2000 sites

Table 1: Designated Natura 2000 sites within	15km of the proposed development site
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Designated Site	Site Code	Distance and direction from retention development site
Lower River Shannon SAC	002165	Approx. 3.7 km north
Kerry Head Shoal SAC	002263	Approx. 12.8 km west
Magharee Islands SAC	002261	Approx. 5.4 km south west
Akeragh, Banna and Barrow Harbour SAC	000332	Approx. 2.7 km east
Tralee Bay and Magharees Peninsula, West	002070	Approx.11.7 km south
To Cloghane SAC		
Kerry Head SPA	004189	Approx. 0.1km west
Tralee Bay Complex SPA	004188	Approx. 2.5 km east
Magharee Islands SPA	004125	Approx. 6.4 km south

The following table (Table 2) lists the features of interest for the Natura 2000 sites that lie within 15km of the proposal site. Information pertaining to designated sites is from site synopses,

conservation objectives, and other information available from the National Parks and Wildlife Service (NPWS) website.

Designated Site	Qualifying features of conservation interest
Lower River Shannon SAC (Site Code 002165)	Habitats [1110] Sandbanks [1130] Estuaries [1140] Tidal Mudflats and Sandflats [1150] Coastal Lagoons* [1160] Large Shallow Inlets and Bays [1170] Reefs [1220] Perennial Vegetation of Stony Banks [1230] Vegetated Sea Cliffs [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3260] Floating River Vegetation [6410] Molinia Meadows [91E0] Alluvial Forests* Species [1029] Freshwater Pearl Mussel (Margaritifera margaritifera) [1095] Sea Lamprey (Petromyzon marinus) [1096] Brook Lamprey (Lampetra planeri) [1099] River Lamprey (Lampetra fluviatilis) [1106] Atlantic Salmon (Salmo salar) [1349] Bottle-nosed Dolphin (Tursiops truncatus) [1355] Otter (Lutra lutra)
Kerry Head Shoal SAC (Site code 002263)	Habitats Reefs [1170]
Akeragh, Banna and Barrow Harbour SAC (Site Code 000332)	Habitats[1210] Annual Vegetation of Drift Lines[1310] Salicornia Mud[1330] Atlantic Salt Meadows[1410] Mediterranean Salt Meadows[2110] Embryonic Shifting Dunes[2120] Marram Dunes (White Dunes)[2130] Fixed Dunes (Grey Dunes)*[2190] Humid Dune Slacks[4030] Dry Heath
Magharee Islands SAC (Site Code 002261) Tralee Bay And Magharees	Habitats Reefs [1170] Habitats
Peninsula, West To Cloghane SAC (Site code 002070)	 [1130] Estuaries [1140] Tidal Mudflats and Sandflats [1150] Coastal Lagoons* [1160] Large Shallow Inlets and Bays [1170] Reefs [1210] Annual Vegetation of Drift Lines [1220] Perennial Vegetation of Stony Banks

Table 2: Designated site with qualifying features of conservation interest

	[1310] Salicornia Mud
	[1330] Atlantic Salt Meadows
	[1410] Mediterranean Salt Meadows
	[2120] Marram Dunes (White Dunes)
	[2130] Fixed Dunes (Grey Dunes)*
	[2170] Dunes with Creeping Willow
	[2190] Humid Dune Slacks
	[6410] Molinia Meadows
	[91E0] Alluvial Forests*
	Species
	[1355] Otter (Lutra lutra)
	[1395] Petalwort (Petalophyllum ralfsii)
Kerry Head SPA	Species
(Site code 004189)	[A009] Fulmar (Fulmarus glacialis)
	[A346] Chough (Pyrrhocorax pyrrhocorax)
Tralee Bay Complex SPA	Species
	•
(Site code 004188)	Whooper Swan (Cygnus cygnus) [A038]
	Light-bellied Brent Goose (Branta bernicla hrota) [A046]
	Shelduck (Tadorna tadorna) [A048]
	Wigeon (Anas penelope) [A050]
	Teal (Anas crecca) [A052]
	Mallard (Anas platyrhynchos) [A053]
	Pintail (Anas acuta) [A054]
	Scaup (Aythya marila) [A062]
	Oystercatcher (Haematopus ostralegus) [A130]
	Ringed Plover (Charadrius hiaticula) [A137]
	Golden Plover (Pluvialis apricaria) [A140]
	Grey Plover (Pluvialis squatarola) [A141]
	Lapwing (Vanellus vanellus) [A142]
	Sanderling (Calidris alba) [A144]
	Dunlin (Calidris alpina) [A149]
	Black-tailed Godwit (Limosa limosa) [A156]
	Bar-tailed Godwit (Limosa lapponica) [A157]
	Curlew (Numenius arquata) [A160]
	Redshank (Tringa totanus) [A162]
	Turnstone (Arenaria interpres) [A169]
	Black-headed Gull (Chroicocephalus ridibundus) [A179]
	Common Gull (Larus canus) [A182]
	Wetland and Waterbirds [A999]
Magharee Islands SPA	Species
(Site code 004125)	Storm Petrel (Hydrobates pelagicus) [A014]
	Shag (Phalacrocorax aristotelis) [A018]
	Barnacle Goose (Branta leucopsis) [A045]
	Common Gull (Larus canus) [A182]
	Common Tern (Sterna hirundo) [A193]
	Arctic Tern (Sterna paradisaea) [A194]
	Little Tern (Sterna albifrons) [A195]

3.5 Conservation Objectives

According to the Habitat's Directive, the *conservation status of a natural habitat* will be taken as 'favourable' within its biogeographic range when:

- its natural range and areas 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 as defined below.

According to the Habitat's Directive, the conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' within its biogeographic range 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.

Conservation objectives for Natura sites, together with other designated site information, are available on <u>http://www.npws.ie/protectedsites/</u>.

3.6 Natura 2000 sites potentially impacted by the development

The development site is sufficiently distant from, and not hydrologically linked with the Lower River Shannon SAC, Kerry Head Shoal SAC, Akeragh, Banna and Barrow Harbour SAC, Tralee Bay And Magharees Peninsula, West To Cloghane SAC, Tralee Bay Complex SPA and Magharee Islands SPA and therefore does not impact on the integrity of these sites or their conservation objectives. The Kerry Head SPA is located 50m west to the site. Therefore, the Natura 2000 sites where significant impacts are considered to be possible is Kerry Head SPA (Site code 004189). (see Appendix I for NPWS site synopses).

3.7 Identification of potential impacts

Only those features of the development that have potential to impact on the integrity of the Natura 2000 sites are considered. For screening purposes, the potential impacts from the proposed development are examined with regard to the following:

- Habitat loss and alteration

- Habitat or species fragmentation
- Potential impairment of water quality
- Disturbance and/or displacement of protected species
- Cumulative impacts

Habitat loss and alteration

The Kerry Head SPA is located adjacent to the site. However, due to the nature of the work that is proposed to be carried out on this site, (the harvesting of seaweed at low tide), there will be no interference with terrestrial habitats within the SPA.

Habitat or species fragmentation

The proposed seaweed harvesting will take place at low tide, one to two days per month. It will occur in an area 500m north and south of the Dromatoor Pier. The seaweed was observed growing on a rock shelf close to the low tide mark. The seaweed was not observed growing near the sea cliffs, therefore harvesting of the seaweed at this location will not impact on the habitat which may be habituated by designated species. In addition no machinery will be required for the harvesting operation. Therefore, habitat or species fragmentation within the SPA is unlikely to occur from the subject operation.

Potential impairment of water quality

The process of seaweed harvesting does not require any mechanical machinery or chemicals. The seaweed will be harvested by hand using some scissors. Therefore, there will not be any contaminated runoff from the site and water quality will not be impacted. Therefore, significant impacts on water quality will not occur during the harvesting of the seaweed.

Disturbance and/or displacement of protected species

In relation to potential for disturbance of bird species Chough and Fulmar as they are listed in the qualifying features for Kerry Head SPA, works described above do not occur on habitats which are designated for these protected birds.

Choughs are a corvid species primarily associated with coastal areas. They are amber listed species under Birdwatch Ireland's Bird of Conservation Concern in Ireland (BWI BoCCI), afforded statutory protections under the Irish Wildlife Acts and the EU Birds Directive (Annex I). They generally nest on ledges in cliffs and in sea caves, but also occasionally in suitable artificial structures (i.e. derelict buildings) (Birdwatch Ireland, 2020a) or on inland cliffs with suitable foraging habitat in their vicinity. Choughs in Ireland are known to forage principally on grazed

grassland with short sward heights, earthen banks, coastal machair and maritime turf, and to a lesser degree, also on heathland, dunes, cliffs, improved grassland and tidewrack. In terms of human disturbance Bullock (1983) states "the species is extremely tolerant of human disturbance and continues to breed at several tourist spots. Prolonged disturbance, such as climbing in inland quarries in the vicinity of traditional nest sites, seems the only serious form of direct [human disturbance] threat" (p.395). Additionally, surveys conducted for the purposes of an Appropriate Assessment at Bray Head, Valentia Island, Co. Kerry (Wild Eye & Ecology Ireland, 2018, p. 52) support this conclusion: "Chough at Bray Head appear to show a high degree of tolerance to disturbance from human visitors to the site, with many instances of birds not flushing even at low distances of 15-20m, and many instances of Chough approaching humans to distances of less than 20m".

Fulmar are protected under the Irish Wildlife Acts, but the species is not considered to be of conservation concern in Ireland. Birds winter and feed at sea and nest and roost on sea cliffs and caves – and occasionally on level ground or in artificial structures in coastal areas (Birdwatch Ireland, 2020b).

Having regard to the location and the specific nature and design of the works to be undertaken (as outlined above) it is concluded that significant impacts on bird species are unlikely to occur as a result of the seaweed harvesting.

Cumulative/In combination impacts

Activities that could potentially impact on ecological and water quality in combination with the planned harvesting include agriculture, treatment and other wastewater development/construction projects in the area. The CORINE 2018 Landcover map classes the area surrounding the development site as "Agricultural Areas" with pasture. Agricultural grassland predominantly used for grazing cattle is the main land use in the surrounding area. Such farming activities present potential point and diffuse sources of nutrients to Ballyhigue Bay. However, the spreading of inorganic or organic fertiliser, including slurry and farmyard manure is regulated under S.I. No. 605 of 2017- Good Agricultural Practice for Protection of Waters, and so significant effects are not expected to occur as a result of local agricultural activities.

Quali	iying Interes	t	Observations	Potential Direct/ In- situ Impacts	Potential Indirect/ Ex-situ Impacts
[A009	} Fulmar	(Fulmarus	Does not forage or roost in the vicinity of	No	No
glacia	lis)		the proposed seaweed harvesting. No		

Table 3: Potential impacts on Kerry Head SPA

	potential impact pathway, and so it is concluded that the proposed development does not pose a potential risk to this species		
[A346] Chough (Pyrrhocorax pyrrhocorax)	As above	No	No

3.9 Screening Assessment Conclusion

This screening assessment was carried out to identify potential significant impacts, if any, arising from the proposed harvesting of seaweed at Dromatoor Pier, Ballyheigue, Co Kerry. Due to the location, scale and nature of the development, it has been objectively concluded that significant impacts to the integrity of the Kerry Head SPA are unlikely to occur as a result of the proposed harvesting taking place.



Birdwatch Ireland, 2020a. *Chough*. [online] Available at: www.birdwatchireland.ie/birds/chough/ [Accessed 3 Sep. 2020].

Birdwatch Ireland, 2020b. *Fulmar*. [online] Available at: <birdwatchireland.ie/birds/fulmar/> [Accessed 3 Sep. 2020].

Bullock, I.D., Drewett, D.R. and Mickleburgh, S.P., 1983. The chough in Britain and Ireland. *British Birds*, 76(9), pp.377–401.

Appendix I

Site Synopsis – KERRY HEAD SPA (SITE CODE: 004189)

Kerry Head SPA is situated on the south side of the mouth of the River Shannon in north Co. Kerry. It encompasses the sea cliffs from just west of Ballyheigue, around the end of Kerry Head to the west and north-eastwards as far as Kilmore. The site includes the sea cliffs and land adjacent to the cliff edge. The high-water mark forms the seaward boundary. Most of the site is underlain by Devonian siltstones, sandstones and mudstones; a small section of the site has rocks of Carboniferous age.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Chough and Fulmar. The site supports an internationally important population of breeding Chough, a Red Data Book species that is listed on Annex I of the E.U. Birds Directive; 32 breeding pairs were recorded from the site in the 1992 survey and 30 in the 2002/03 survey. In addition, a flock of 20 birds was noted on the northern coast of the site during the latter survey. The site is of particular note for the density of breeding pairs found.

The site also supports a nationally important population of Fulmar (421 pairs), as well as a small population of Shag (8 pairs) – all seabird data from 2000. The site is also used by Peregrine (2 pairs in 2002). Kerry Head SPA is one of the most important sites in the country for Chough. It also supports a population of Fulmar of national importance. The presence of Chough and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive, is of particular significance.

Appendix III

Synopsis of Appropriate Assessment Report

Description of Project	The client, Sean Loughran, proposes to apply for a licence to harvest seaweed by hand at Dromatoor pier, Ballyheigue, Co Kerry.	
Description of Natura 2000 site	The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Chough and Fulmar. The site supports an internationally important population of breeding Chough	
Description of Individual Elements of the Project likely to give rise to Impacts on the Natura 2000 Site	None identified	
Description of Likely Direct, Indirect or Secondary Impacts of the Project on the Natura site	No potential for significant direct habitat loss/alteration, disturbance/displacement of species, negative impacts on water quality or cumulative/in combination impacts arising as a result of the proposed development.	
Description of Likely Changes to the site arising as a result of:	None identified	
 Reduction of habitat area Disturbance to key species Habitat or species fragmentation Reduction in species density Changes in key indicators of conservation value 		
Description of Likely Impacts on the Natura 2000 site as a whole in terms of:	None identified	
 Interference with key relationships that define the structure of the site 		

 Interferences with key relationships that define the function of the site 	
Indicators of Significance as a result of the identification of effects set out above in terms of: • Loss • Fragmentation • Disruption • Disturbance • Change to Key Elements of the site (e.g. water quality etc)	None identified