



OPW

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Office of Public Works

The Murrough Coast Protection Scheme Maintenance Works

APPROPRIATE ASSESSMENT SCREENING REPORT

May 2020



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TABLE OF CONTENTS

1	Introduction and Background to Project	1
1.1	Background	1
1.2	The Requirement for Appropriate Assessment	1
1.3	Report Aim	1
2	The Appropriate Assessment Process	2
2.1	Stages of Article 6 Assessment	2
2.2	Guidance	2
2.3	Report Format	3
3	Description of the Project	3
3.1	Description of the Existing System	3
3.2	Proposed Design	4
3.3	Description of the Receiving Environment	5
4	European Sites	7
4.1	Designated Sites in the Vicinity of the Project	7
5	Potential Impacts on European Sites	11
5.1	Cumulative Impacts With Other Plans/Projects	11
6	Discussions and Conclusion	12

1 INTRODUCTION AND BACKGROUND TO PROJECT

1.1 BACKGROUND

Ryan Hanley was commissioned by the Office of Public Works (OPW) to prepare a Stage 1 Appropriate Assessment (AA) Screening Report for upgrade works to the rock armour revetment at the Murrough, Wicklow Town.

The scheme was originally constructed in the mid 1970's under the Coast Protection Act of 1963.

The purpose of the AA screening is to determine the potential adverse effects, if any, that the proposed upgrade works at the Murrough, Wicklow Town, may have, alone or in combination with other plans or projects on European Sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA)), within the potential zone of influence of the works.

This report constitutes an Appropriate Assessment Screening in accordance with Article 6.3 of the EU Habitats Directive (92/43/EEC), for the maintenance works to the coast protection infrastructure to be completed in The Murrough, Co. Wicklow.

1.2 THE REQUIREMENT FOR APPROPRIATE ASSESSMENT

The requirement for Appropriate Assessment is set out in the EU Habitats Directive (92/43/EEC) in Article 6 (3) which states:

“Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives.”

The Habitats Directive is transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations, 2011 (consolidating the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in recent CJEU Judgements) (hereafter referred to as the Habitats Regulations) and the Planning and Development (Amendment) Act, 2010.

1.3 REPORT AIM

This Screening for Appropriate Assessment (Stage 1) has been prepared in accordance with current guidance and provides the information required in order to establish whether or not the proposed development is likely to have significant adverse effects on the European Sites in the context of their conservation objectives and specifically on the habitats and species for which the European Sites have been designated.

By undertaking the ecological impact assessment in a step by step manner in relation to the habitats and species of the European Sites, this report seeks to inform the screening process required as the first stage of the process pursuant to Article 6.3 of the EU Habitats Directive.

2 THE APPROPRIATE ASSESSMENT PROCESS

2.1 STAGES OF ARTICLE 6 ASSESSMENT

The European Commission's guidance promotes a staged process, as set out below, the need for each being dependent upon the outcomes of the preceding stage.

- (1) Screening
 - (2) Appropriate Assessment
 - (3) Assessment of Alternative Solutions
 - (4) Assessment where no alternative solutions remain and where adverse impacts remain.
- The "IROPI test" (Imperative Reasons of Over-riding Public Interest) and compensatory measures.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures.

Stage 1 of the process is intended to identify whether the project is 'likely to have a significant effect' upon a European site, referred to as 'Screening for Appropriate Assessment'.

If the screening process identifies effects to be significant, potentially significant or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). Screening is undertaken without the inclusion of mitigation, unless potential impacts clearly can be avoided through the modification or redesign of the plan or project, in which case the screening process is repeated on the altered plan or project. The greatest level of evidence and justification will be needed in circumstances when the process ends at screening stage on grounds of no impact.

Section 177U of the Planning and Development Act 2010 states that; "the competent authority shall determine that an appropriate assessment of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on a European site."

Stage 2 of the process considers any potential impacts in greater detail including whether further mitigation measures are required. If an adverse impact upon the site's integrity cannot be ruled out then Stage 3 will need to be undertaken to assess whether alternative solutions exist. If no alternatives exist that have a lesser effect upon the European Site/s in question, the project can only be implemented if there are 'imperative reasons of overriding public interest', as detailed in Article 6(4). In essence, the work at Stage 1 will determine whether further stages of the process are required.

This report includes the testing required under Stage 1: Screening for Appropriate Assessment.

2.2 GUIDANCE

Article 6(3) of the EU Habitats Directive (92/43/EEC) defines the requirement for Appropriate Assessment of certain plans and projects. In order to inform the requirements of this Screening Report the following guidance documents have been referred to:

- DoEHLG Circular NPWS 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.
- DoEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environmental Heritage and Local Government.

- European Commission (2018) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2000) Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg. European Commission.
- European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC.
- European Commission (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/49/EEC; clarification of the concepts of: Alternative solutions, Imperative reasons of overriding public interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No.477 of 2011).

2.3 REPORT FORMAT

In complying with the obligations under Article 6(3) and to be consistent with the Guidance for Planning Authorities, this report has been structured as follows:

- Description of the Plan/Project;
- Identification of European Sites, and the associated Conservation Objectives, which may be potentially affected;
- Identification and description of individual and cumulative impacts likely to result from the Plan/Project;
- Assessment of the significance of the impacts identified above;
- Exclusion of site where it can be objectively concluded that there will be no significant effects.

3 DESCRIPTION OF THE PROJECT

3.1 DESCRIPTION OF THE EXISTING SYSTEM

The Murrough is a 15km long coastal wetland area which extends north of Wicklow Town and continues as far as Greystones, Co. Wicklow. It is among the largest coastal wetland complex on the East coast of Ireland.

The Murrough Coast Protection Scheme was originally constructed in the mid 1970's under the Coast Protection Act of 1963. The scheme comprises of a rock armoured revetment / apron structure and retaining wall and extends over a length of approximately 260m. There is a statutory requirement on the OPW to carry out maintenance works on coast protection schemes that were constructed under the Act to maintain these schemes in "proper repair and effective condition".

A condition survey of the Scheme was undertaken by OPW Coastal Section staff in September 2018. The subsequent report recommended that maintenance works be carried out at each section of the revetment to increase the stability of the structure and ensure the masonry wall is not subjected to wave action. An example of the existing condition can be seen in Figure 3.1 below. This image shows the damage to the existing revetment which resulted in the seaward face of the masonry wall being exposed.



FIGURE 3.1 DAMAGE TO THE EXISTING REVETMENT

3.2 PROPOSED DESIGN

The OPW Coastal Section intend to progress works to the existing revetment at The Murrough located in Wicklow Town. The 260m length of revetment is located north of Wicklow Port and Harbour.

The proposed works include the re-profiling of the existing revetment and placement of a single layer of 3-6 tonne rock armour over the top. A gabion mattress wrapped in geotextile will be placed under the proposed revetment toe. A brief summary of the anticipated scope of the work is as follows:

- Site set-up, including all compound and laydown areas;
- Identify and protect all existing services;
- Re-profiling of the existing revetment;
- Placement of the new armour layer and gabion mattress. It is anticipated that the proposed 3–6 tonne rock armour will be delivered to site via the road network;
- Site clean-up and demobilisation; and
- All temporary works associated with the project, e.g. temporary traffic management, etc.

The timescale for the completion of the work is estimated at approximately 3 to 6 months. Works will occur during normal working hours between 08.00 and 19.00hrs. No artificial lighting is therefore anticipated at the works location.



FIGURE 3.3—AERIAL MAP OF RECEIVING ENVIRONMENT



FIGURE 3.4—MAP OF RECEIVING WATERBODIES

4 EUROPEAN SITES

4.1 DESIGNATED SITES IN THE VICINITY OF THE PROJECT

Section 3.2.3 of the Guidance for Planning Authorities states that the approach to screening can be different for different plans and projects and will depend on the scale and the likely effects of the project. A key variable that will determine whether or not a particular European Site is likely to be negatively affected is its physical distance from the project site.

Given the nature of this project and the proposed construction methodology it is considered for the purpose of this screening exercise that the potential impact is a result of construction runoff to watercourses and the potential zone of impact immediately around the construction site and sites that are hydrologically and hydro geologically connected to the works, where distances would be dependent on the scale of the impact and the sensitivity of the qualifying interests of the site.

A review of the National Parks and Wildlife Service database has identified the following European Sites as potentially impacted by the proposed project, and which are in the vicinity of the works (See Figure 4.1):

- **002249 The Murrough Wetlands SAC**

The Murrough Wetlands SAC is located approximately 288m north of the proposed works. The site is designated for: Annual vegetation of drift lines, Perennial vegetation of stony banks, Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), Mediterranean salt meadows (*Juncetalia maritimi*), Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* and Alkaline fens. There are no habitats or species identified in the conservation objectives of the Murrough Wetlands within or adjoining the works area for this project. There is no source receptor pathway for the Murrough Wetlands in the context of the proposed works and therefore the potential impact on the SAC is screened out for Appropriate Assessment.

- **004186 The Murrough SPA**

The Murrough SPA is located approximately 87m north of the proposed works. This site is designated for: Red throated Diver (*Gavia stellata*), Greylag Goose (*Anser anser*), Light bellied Brent Goose (*Branta bernicla hrota*), Wigeon (*Anas penelope*), Teal (*Anas crecca*), Black-headed Gull (*Chroicocephalus ridibundus*), Herring Gull (*Larus argentatus*), Little Tern (*Sterna albifrons*) and Wetland and Waterbirds.

The potential impact on The Murrough SPA is listed below in Table 4-1 as the works occur near this SPA which is listed under the E.U. Birds Directive.



FIGURE 4.1—MAP OF EUROPEAN SITES ADJACENT TO MAINTENANCE WORKS

TABLE 4-1 THE MURROUGH SPA AND THEIR QUALIFYING INTERESTS AND POTENTIAL IMPACT

Natura 2000 site	Qualifying Interest (Conservation Objective)	Presence within the SAC/Zone of influence/ Potential Impact	Screening conclusion
The Murrough SPA	To maintain or restore the favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly occurring migratory waterbirds that utilise it. The species that utilise the Murrough SPA are listed below: Red Throated Diver (<i>Gavia stellate</i>) Greylag Goose (<i>Anser anser</i>) Light bellied Brent Goose (<i>Branta bernicla hrota</i>) Wigeon (<i>Anas penelope</i>) Teal (<i>Anas crecca</i>) Black headed Gull (<i>Chroicocephalus ridibundus</i>) Herring Gull (<i>Larus argentatus</i>) Little Tern (<i>Sterna albifrons</i>)	<p>During the winter the Murrough SPA is important for a number of waterbirds. Red-throated Divers start to arrive in Ireland from their northern breeding grounds in September and winter numbers peak in January and February. They are well distributed around the Irish coastline and are typically associated with shallow sandy bays. Red throated divers have been recorded in good numbers in Kilcoole. They have also been identified in Broad Lough and Wicklow Head and foraging at sea in proximity to the works.</p> <p>Greylag Geese, the winter migrant of Icelandic birds arrive in Ireland between November and April and is found mostly on estuaries, where they feed on the roots of rushes and sedges. Greylag Geese are found at Killoughter and Broad Lough and grazing around the coastal grazing marsh of north Wicklow, at Kilcoole and Newcastle.</p> <p>The Light-Bellied Brent Goose is a winter migrant from high Arctic Canada and arrives in Ireland between October and April. They overwinter mostly on coastal estuaries and grasslands until departure for breeding grounds in late April. Light-bellied Brent Geese are found at the Kilcoole Marshes. Kilcoole Marshes are located close to the northern end of the wetlands. There is great interest here in winter with the regular number of Brent Geese building up in numbers.</p> <p>Wigeons are medium sized ducks with round heads and small bills. They are common winter visitors to Ireland and the UK. They frequent wet grassland or marsh areas. Wigeons have been found at Broad Lough and the East Coast Nature Reserve in Co. Wicklow.</p> <p>Teal are a species of duck and can be found wintering in Ireland on wetlands with good cover, such as reedbeds. They are found in a wide range of habitats both coastal and inland including coastal lagoons, estuaries, marshes, lakes, ponds and turloughs. Teal are found at Broad Lough and The East Coast Nature Reserve.</p> <p>Black Headed Gulls are a resident species to Ireland and are widespread along the coast. They are opportunistic feeders and will feed on domestic waste and fisheries waste as well as insects. They are</p>	Screened Out for AA

Natura 2000 site	Qualifying Interest (Conservation Objective)	Presence within the SAC/Zone of influence/ Potential Impact	Screening conclusion
		<p>frequently found in urban areas and are tolerant of disturbance.</p> <p>Herring Gull are resident and widespread along the Irish Coast. They are both predator and scavenger, often feeding on the coast and following fishing boats and using landfill sites. They are frequently found in urban areas and are tolerant to high levels of disturbance.</p> <p>The Little Tern is a summer visitor found in suitable breeding shingle or sandy beaches along the coast. This species arrives in Ireland in April and stays until mid-August. The shingle ridge at Kilcoole is a traditional nesting area for Little Tern. Little Terns have a long established colony at the Breaches, near the outlet to the sea about 2km south of Kilcoole station. A tern protection scheme and research programme, co-ordinated by Bird Watch Ireland and the National Parks and Wildlife Service, has been in operation since 1985. The Little Tern nesting sites are found approximately 10km north of the works.</p> <p>The boundary of the Murrough SPA lies 87m north of the proposed works. The existing revetment has been in place since the 1970's and the works require maintenance on this structure. The existing works area does not provide roosting opportunity for birds identified within the SPA. The proposed works will commence in spring time and may run into early summer. The works will result in some noise and visual disturbance during this time. This will result in some avoidance of the area during working hours by some foraging bird species, however this is temporary and the area will be free from disturbance outside of these working times. There is significant large foraging area within the SAC and away from the proposed works area to maintain foraging activity during this time. Consequently, there is no predicted impact on the bird species which are protected within this SPA</p>	

5 POTENTIAL IMPACTS ON EUROPEAN SITES

In order to determine whether the project is likely to have a significant adverse effect, the proposed works and their potential impacts are assessed and followed by a determination of whether there is a risk that the effects identified could be significant. If the effects are deemed to be significant, potentially significant or uncertain, or if the screening process becomes overly complicated then the process must proceed to a full Appropriate Assessment and the provision of a Natura Impact Statement.

A desk study, summarised in the previous section, has been carried out to determine the potential source » pathway » receptor chains which could have a significant adverse effect on the qualifying interests and conservation objectives of the Murrough Wetlands SAC and the Murrough SPA.

The proposed works to The Murrough revetment are located within a rural environment along the coastline of County Wicklow. The revetment has been in place since the 1970's and was constructed under the Coast Protection Act of 1963. The works are proposed to commence in the spring months of 2021 when overwintering birds have not yet arrived. All works are proposed outside of the Murrough SPA. The works are located in an urban setting which is currently subject to disturbance. Increased disturbance may result in the species avoiding this area throughout the works period. There is sufficient habitat adjoining the area to provide foraging habitat during this time. Works are temporary only and will occur between the hours of 08.00 and 19.00.

Given that the works are for the maintenance of an existing structure it is envisaged that there will be no long-term effects on the surrounding European Sites.

5.1 CUMULATIVE IMPACTS WITH OTHER PLANS/PROJECTS

In order to fully assess the potential impact of the proposed development on European Sites, the project must be assessed alone or in combination with existing activities and proposed plans for the region. Myplan.ie, and Wicklow County Development Plan 2016-2022 were consulted in order to determine if there were any other plans or projects in the area which could result in cumulative impacts.

Wicklow County Development Plan carried out a Strategic Environmental Assessment (SEA) Statement and Natura Impact Report (NIR). The NIR identified policies and objectives which were not likely to cause potential adverse effects and screened them out. The NIR also identified policies and objectives which had a potential significant adverse effect and as a result, amendments were made to a number of policies and objectives to mitigate against adverse effects and to ensure the protection and conservation of qualifying interests and special conservation interests for European Sites. Therefore, the Wicklow County Development Plan in combination with the proposed works will not have any adverse effects on the integrity of European Sites.

Therefore, as a result of this assessment carried out, the proposed works at The Murrough will not compromise the conservation objectives of any European Site and will not have any significant impact on the designated species or habitat for which they have been designated.

6 DISCUSSIONS AND CONCLUSION

Potential significant effects during the proposed Murrough coast protection works have been considered in the context of The Murrough Wetlands SAC and The Murrough SPA and their qualifying interests and Conservation Objectives.

It is likely, given the works involve maintenance of an existing structure, that the proposed works will have no potential for significant effect on the above European Site in view of the sites' conservation objectives either alone or in combination with other plans and / or projects. This assessment is based on consideration of:

1. Relevant qualifying interests, their sensitivities and Conservation Objectives;
2. Potential source pathways between European Sites identified and the proposed development/works;
3. The temporary and localised (scale) nature of the proposed development/works.

The Screening report evaluates the objective information presented in the Project Description, taking consideration of the proposed works elements. The evaluation does not presuppose that the construction requirements specified in the design, or to be implemented on site, are integral to the avoidance or reduction of harmful effects on any European Site. Therefore, it is considered that in accordance with Article 6(3) of the Habitats Directive, the proposed revetment works at The Murrough, Co. Wicklow will not have any potential significant effects to any European Sites which form part of the Natura 2000 network.