Wicklow Harbour – Appropriate Assessment Screening

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1 Introduction

Gavin and Doherty Geosolutions (GDG) were commissioned by Wicklow County Council (Wicklow CoCo) to undertake a Screening for Appropriate Assessment in relation to the proposed construction of a floating pontoon in Wicklow Harbour, Wicklow Town, Co. Wicklow. GDG completed the environmental assessment in conjunction with BEC Consultants Ltd.

This is required under Article 6(3) of the EU Habitats Directive, as transcribed into Irish law. This report presents information on the Natura 2000 sites (Special Areas of Conservation – SACs, or Special Protection Areas - SPAs) that may potentially be impacted upon by the proposed project and assesses the likelihood of significant adverse effects. The findings of this report will establish whether the preparation of a Natura Impact Statement is required.

This report has been prepared with reference to the following guidance:

- DEHLG (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government.
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission.
- EC (2018) Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission

The Appropriate Assessment process focuses on the Natura 2000 sites, their Qualifying Interests and the related Conservation Objectives. The term Qualifying Interests will also be used when referring to the bird species listed as Features of Interest for SPAs.

1.1 Background to Appropriate Assessment

Natura 2000 sites are a network of sites deemed to be of international importance for their habitats and/or species. This network is formed by Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), which have been designated by all member states of the European Community. SACs are designated under the European Union's Habitats Directive (92/43/EEC), while SPAs are designated under the Birds Directive (2009/147/EC replacing 79/409/EEC). Both Directives are transcribed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011.

Article 6(3) of the Habitats Directive states that: "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."

As such, any project likely to have a significant effect, either individually or in combination with other plans and projects, on the Conservation Objectives of Natura 2000 sites must undergo an assessment of the implications of this project on the relevant Natura 2000 sites.

It is detailed in the guidance documents prepared by the Department of the Environment, Heritage and Local Government (DEHLG, 2010) and the European Commission (EC, 2002) that a staged approach to assessment is required.

A conclusion is made at the end of each stage of the assessment as to whether the project should proceed to the next stage.

- *Stage 1: Screening* - This stage determines whether Appropriate Assessment is necessary. The proposed project is defined and an assessment is made of the potential for significant effects upon the Natura 2000 network, either alone or in combination with other projects. Plans or projects directly connected with, or necessary to the nature conservation management of the site do not require an Appropriate Assessment.
- *Stage 2: Appropriate Assessment* - If there is potential for a significant effect on the Natura 2000 network an Appropriate Assessment is required. During this stage the impact of the project on the Conservation Objectives of the Natura 2000 sites is assessed and measures are proposed to avoid or reduce these impacts such that they do not result in a significant impact. The outcome of the assessment establishes whether the plan or project will have a significant adverse effect on the integrity of the Natura 2000 site, its Qualifying Interests and associated Conservation Objectives. Factors such as the magnitude, extent, duration and reversibility of the effect are considered in this assessment.
- *Stage 3: Alternative Solutions* - Before a project that has adverse effects on a Natura 2000 site can proceed for imperative reasons of overriding public interest it must be objectively concluded that no less-damaging alternative solutions exist.
- *Stage 4: Imperative Reasons of Overriding Public Interest ("IROPI")* - Where no alternative options exist and adverse impacts remain but imperative reasons of overriding public interest for the project exist compensatory measures must be implemented to ensure the overall coherence of the Natura 2000 site.

BEC Consultants Ltd has been commissioned by GDG to carry out Stage 1: screen for likely significant effects and assess whether the proposed development is likely to result in significant adverse effects on any Natura 2000 site.

1.2 Screening methodology

As indicated above, the purpose of screening is to determine if Appropriate Assessment is required. Screening requires the following information:

- A description of the project and an assessment as to whether the project is necessary for the conservation management of a Natura 2000 site.
- Identification of relevant Natura 2000 sites and compilation of information on their Qualifying Interests and Conservation Objectives.
- Assessment of the likely direct, indirect and cumulative effects of the project.
- A screening statement with conclusions.

A screening process is applied for assessing the potential impacts from the proposed project on Natura 2000 sites; the precautionary principle is applied when making these assessments. The screening process includes:

a) Project background, including a description of the proposed project, timing and duration, local resource requirements (e.g. water abstraction), emissions (e.g. disposal to land, water, air), construction details, details for the operation of the proposed project, and transportation.
b) An assessment of proximity and connectivity between the proposed project and Natura 2000 sites.
c) An assessment of the potential for the loss of habitats listed as Qualifying Interests for Natura 2000 sites that are assessed to have both proximity and/or connectivity to the proposed project.
d) An assessment of the potential for the disturbance to species listed as Qualifying Interests for Natura 2000 sites that are assessed to have both proximity and/or connectivity to the proposed project. This would include an assessment of factors such as possible habitat fragmentation and the disruption to species through the fragmentation of populations.

As stated in the guidance document from the European Commission (2002), "*screening should be carried out in the absence of any consideration of mitigation measures that form part of a plan or project and are designed to avoid or reduce the impact of a project or plan on a Natura 2000 site*". This guidance has been further clarified by rulings from the Court of Justice of the European Union (cases C-323/17 and C-164/17) and the Irish High Court ([2019] IEHC 84).

2 Project Background

2.1 Project description

This project involves the construction of a floating pontoon adjacent to the South Quay wall, with an associated access ramp, within Wicklow Port (Figure 2-1 and Figure 2-2). The pontoon will comprise the following elements: 79.25m walking pontoon (2.4m wide), 11 m landing pontoon (3m wide), 22m gangway (1.2m wide) and a 2.7m access platform (2.5m wide). The pontoon will be secured to the quay wall by H-section galvanised steel piles joined to the quay wall through two arms with 20mm base plates and an 8mm top plate. There will be four chemical anchor fixings per plate.

The drilling of the holes for the plates will be carried out from a man basket on a teleporter or from a floating platform. The steel piles will be lowered into place by a teleporter and affixed with chemical anchors, as described above.

The project is not connected with or necessary to the management of any Natura 2000 site and so is not exempt from the Appropriate Assessment process on these grounds.

Figure 2-1: Plan view of proposed floating pontoon

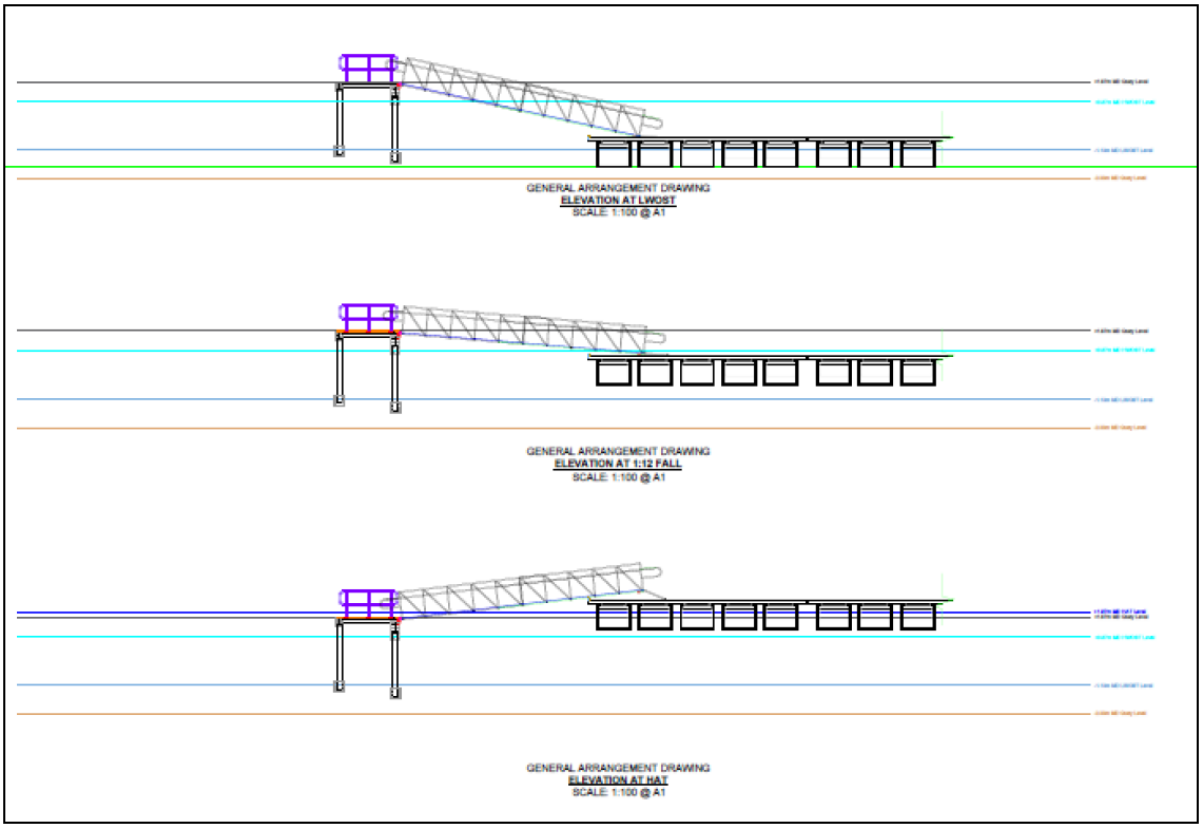

Figure 2-2: Elevation view of proposed floating pontoon

2.2 Project timing and duration

The installation of the proposed floating pontoon is expected to take 4 weeks. The timing is dependent on duration of the consent process, but is likely to be June 2020 at the earliest.

2.3 Local resource requirements

The proposed development is a floating pontoon and has no local resource requirements.

2.4 Potential emissions relating to the construction Phase

The only potential emissions from the construction of the proposed floating pontoon are very small quantities of dust related to the drilling of anchor points and the accidental spillage of hydrocarbons are other chemicals related to the operation of construction plant and machinery.

2.5 Potential Emissions relating to the Operation of the Proposed Floating pontoon

There will be no emissions during the operation of the proposed floating pontoon.

2.6 Lighting

There is no lighting proposed for the floating pontoon.

2.7 Transportation

During the construction of the floating pontoon there will be additional traffic in and out of the site to facilitate employees of the contractor and the transport equipment and materials.

2.8 Disturbance

The proposed works will entail human activities and the operation of machinery, which may cause disturbance to animal species in the vicinity of the work site for the duration of the construction.

2.9 Receiving environment

A site visit was carried out by John Brophy of BEC Consultants Ltd on 9th December 2019.

The proposed development site is alongside an existing concrete quay on the south side of Wicklow Port, adjacent to a pedestrian walkway and road (Appendix 1, Plate 1). It is currently used for mooring small boats. Wicklow Port is a fishing and cargo port, with hard stand areas, warehouses and associated machinery (Appendix 1, Plate 2).

A small number of seabirds were noted in the vicinity of the proposed development on the day of the site visit, including two Black-headed Gulls flying over, approximately 10 Herring Gulls associated with fishing boats on the north quay and a Turnstone and Greater Black-backed Gull on the north quay.

Upstream of the bridge to the north of the harbour was a flock of approximately 100 Black-headed Gulls, 25 Herring Gulls, two Mute Swans and a Redshank. A person was feeding birds from a location adjacent to the next bridge.

3 Consultation

Consultation with the National Parks and Wildlife Service (NPWS) in relation to this project was not carried out at this stage of the process due to the nature of the habitats located within and adjacent to the proposed project and the fact that the project is not located within a Natura 2000 site.

4 Natura 2000 Sites

4.1 Identification of Natura 2000 sites

DEHLG (2010) recommends the use of a 15km radius around a plan area to identify Natura 2000 sites that should be considered when screening for Appropriate Assessment. For projects, the distance can be much less than 15km, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors and the potential for in-combination effects. In this case, the source-pathway-receptor model was used to identify Natura 2000 sites that need to be considered in relation to the proposed development. The locations of Natura 2000 sites were viewed using ArcGIS and also the online NPWS Map Viewer. Table 4-1 lists the Natura 2000 sites within 15km of the project and any other site deemed relevant, and also whether each of these sites was considered further in this report and the reason this decision was made. The map in Appendix 2 shows the location of each of these Natura 2000 sites relative to the location of the proposed floating pontoon.

Table 4-1: List of Natura 2000 sites within 15km of the proposed development site, or identified on the basis of the source-pathway-receptor model. Sites are presented in order from the closest to the most distant from the proposed development site.

Site name	Code	Distance from proposed development (km)	Considered further?	Reason
The Murrough SPA	004186	0.13	Yes	SPA boundary is very close to the development location and there is a hydrological connection
The Murrough Wetlands SAC	002249	1.15	Yes	SAC boundary is close to the development location and there is a hydrological connection
Wicklow Head SPA	004127	1.29	Yes	SPA boundary is close to the development location and QIs may occur in waters close to the development
Wicklow Head Reef SAC	002274	3.22	No	SAC located some distance from the development location and the dilution effect of the Irish Sea will prevent any adverse effect from any potential drop in water quality
Maherabeg Dunes SAC	001766	5.26	No	SAC located some distance from development location and QIs are terrestrial habitats, so no potential for an adverse effect
Deputy's Pass Nature Reserve SAC	000717	8.50	No	SAC located some distance from development location and QI is a terrestrial habitat, so no potential for an adverse effect
Buckroney-Brittas Dunes and Fen SAC	000729	9.07	No	SAC located some distance from development location and QIs are terrestrial habitats, so no potential for an adverse effect
Vale of Clara (Rathdrum Wood) SAC	000733	11.91	No	SAC located some distance from development location and QI is a terrestrial habitat, so no potential for an adverse effect

4.2 Natura 2000 Sites Qualifying Interests and Conservation Objectives

Three Natura 2000 sites will be considered further: The Murrough SPA, The Murrough Wetlands SAC and Wicklow Head SPA. Qualifying Interests are habitats and species for which a Natura 2000 site is designated. A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site

NPWS (2018a) states the following, in relation to favourable conservation status:

"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."*

4.2.1 The Murrough SPA

The Murrough SPA (site code: 004186) is located a straight-line distance of 130m upstream of the proposed development site. This SPA was considered in order to assess the potential for the proposed construction works to impact on the site through water quality and disturbance effects. The Qualifying Interests (QI) of the The Murrough SPA are presented in Table 4-2. The designation of the site relates to the wintering population of all the QIs, with the exception of Little Tern, for which it is the breeding population.

Table 4-2: Qualifying Interests for The Murrough SPA (004186) with Overall National Conservation Assessment (NPWS, 2018a; 2012; Colhoun & Cummins, 2013). (b) = breeding, (w) = wintering

Code	Qualifying Interest	Overall National Trend 2008-2012	BOCCI Status
A001	Red-throated Diver (*Gavia stellata*)	Unknown	Amber (b)
A043	Greylag Goose (*Anser anser*)	Decreasing	Amber (w)
A046	Light-bellied Brent Goose (*Branta bernicla hrota*)	Increasing	Amber (w)
A050	Wigeon (*Anas penelope*)	Decreasing	Red (w)
A053	Teal (*Anas crecca*)	Stable	Amber (b&w)
A179	Black-headed Gull (*Chroicocephalus ridibundus*)	Unknown	Red (b)
A184	Herring Gull (*Larus argentatus*)	Unknown	Red (b)
A195	Little Tern (*Sterna albifrons*)	Increasing	Amber (b)

There are no Site-Specific Conservation Objectives for The Murrough SPA, only the generic Conservation Objectives:

- *"To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA";* and
- *"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"* (NPWS, 2018a).

The site synopsis for The Murrough SPA is included in Appendix 3.

4.2.2 The Murrough Wetlands SAC

The Murrough Wetlands SAC (site code: 002249) is located a straight-line distance of 1.15km upstream of the proposed floating pontoon. This SAC was considered in order to assess the potential for the proposed construction works to impact on the site through water quality effects.

The Qualifying Interests of The Murrough Wetlands SAC are presented in Table 4-3.

Table 4-3: Qualifying Interests for The Murrough Wetlands (002249) with Overall National Conservation Assessment (NPWS, 2018b; 2019)

Code	Qualifying Interest	Overall National Assessment 2019
1210	Annual vegetation of drift lines	Unfavourable-Inadequate (declining)
1220	Perennial vegetation of stony banks	Unfavourable-Inadequate (stable)
1330	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Unfavourable-Inadequate (declining)
1410	Mediterranean salt meadows (Juncetalia maritimi)	Unfavourable-Inadequate (declining)
7210	Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae*	Unfavourable-Inadequate (stable)
7230	Alkaline fens	Unfavourable-Bad (declining)

There are no Site-Specific Conservation Objectives for The Murrough Wetlands SAC, only the generic Conservation 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"* (NPWS, 2018b).

The site synopsis for The Murrough Wetlands SAC is included in Appendix 4.

4.2.3 Wicklow Head SPA

Wicklow Head SPA (site code: 004127) is located a straight-line distance of 1.29 km away from the proposed development site. This SPA was considered in order to assess the potential for the proposed construction works to impact on the site through water quality and disturbance effects.

The only Qualifying Interests of Wicklow Head SPA is the breeding population of Kittiwake (*Risa tridactyla*) [A188], which showed a declining trend in the period 2008-2012 (NPWS, 2012) and is on the Amber List (Colhoun & Cummins, 2013). There are no Site-Specific Conservation Objectives for Wicklow Head SPA, only the generic Conservation Objective *"To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA" (NPWS, 2018c).*

The site synopsis for Wicklow Head SPA is included in Appendix 5.

5 Assessment of likely effects

Potential impacts on the Natura 2000 sites from the proposed project will now be discussed. It is important to establish whether there is a pathway between the proposed project and the Natura 2000 sites. If there is no pathway (direct or otherwise), an impact cannot occur.

5.1 Loss of habitats

The proposed development takes place entirely outside the Natura 2000 network, with the closest site, The Murrough SPA, being 130m away. For this reason, there will be no loss of habitat in a Natura 2000 site as a result of the proposed development.

5.2 Disturbance to species

The proposed development takes place entirely outside the Natura 2000 network with the closest site, The Murrough SPA, being 130m away, while Wicklow Head SPA is 1.29km away. The proposed development site is located within an operational port area of a town and so any species that would be in the vicinity of the works would be accustomed to a level of disturbance from human activity. For this reason, there will be no significant disturbance to species associated with a Natura 2000 site as a result of the proposed development, with its limited construction period and minor works.

5.3 Water quality

The proposed works will involve drilling holes in the existing quay wall and the use of plant and machinery. This raises the potential for the accidental release of hydrocarbons and other chemicals, which could have negative impacts on water dependent habitats and species. However, the risk of such a release is considered negligible in the course of the normal working conditions. In addition, given the scale of the works, the volumes of hydrocarbons available for release at any given time would be low and subject to dilution and dispersion by the waters of Wicklow Port.

5.4 In-combination effects

When assessing in-combination effects it is necessary to consider the effect of other plans and projects that, together with the current project, could have an in-combination effect on any Natura 2000 site. It has been stated in the sections above that this proposed project will not have any adverse effects on Natura 2000 sites and therefore would not be expected to contribute significantly to in-combination effects with other plans or projects in the area.

Other plans and projects considered in relation to in-combination effects were:

- Wicklow County Development Plan 2016-2022 (Wicklow County Council, 2016)
- Individual planning applications in the local area

The Wicklow County Development Plan 2016-2022 contains objectives aimed at protecting the natural environment, including Natura 2000 sites. These include:

- **NH2:** No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects).
- **NH4:** All projects and plans arising from this plan (including any associated improvement works or associated infrastructure) will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

    1. The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
    2. The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
    3. The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

A search for Planning Applications on the Wicklow County Council Map Viewer (https://www.wicklow.ie/Living/Services/Planning/Planning-Applications/Online-Planning accessed 10th December 2019) showed few active applications in the locality of the proposed floating pontoon. No specific pathway has been identified by which any of the plans and projects identified would result in a significant adverse effect on any Natura 2000 site in-combination with the proposed floating pontoon.

6 Summary of assessment of likely effects

A summary table has been prepared for each considered Natura 2000 to ensure that the pertinent information is presented in a clear and concise fashion to support the screening conclusion presented in Section 7. Table 6-1 summarises the assessment of likely effects on the Qualifying Interests (QIs) listed for The Murrough SPA related to the proposed project due to reasons of proximity and connectivity, Table 6-2 relates to The Murrough Wetlands SAC and Table 6-3 relates to Wicklow Head SPA.

Table 6-1: Summary of the assessment of likely effects for the Qualifying Interests (QIs) of The Murrough SPA that could potentially be affected by the proposed floating pontoon development.

Qualifying Interest	Reason for consideration	Considered effects					In-combination effects	Conclusion
		Local resource requirements	Emissions	Lighting	Transportation	Disturbance		
		Section 2.3	Section 2.4 & 2.5	Section 2.6	Section 2.7	Section 2.8	Section 5.4	
Red-throated Diver (*Gavia stellata*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect
Greylag Goose (*Anser anser*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect
Light-bellied Brent Goose (*Branta bernicla hrota*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect
Wigeon (*Anas penelope*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect

Teal (*Anas crecca*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect
Black-headed Gull (*Chroicocephalus ridibundus*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect
Herring Gull (*Larus argentatus*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect
Little Tern (*Sterna albifrons*)	QI of The Murrough SPA, 130m upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	Negligible potential for adverse effect through noise and human activity	No significant in-combination effects likely	No likely significant adverse effect

Table 6-2: Summary of the assessment of likely effects for the Qualifying Interests (QIs) of The Murrough Wetlands SAC that could potentially be affected by the proposed floating pontoon development.

Qualifying Interest	Reason for consideration	Considered effects					In-combination effects	Conclusion
		Local resource requirements	Emissions	Lighting	Transportation	Disturbance		
		Section 2.3	Section 2.4 & 2.5	Section 2.6	Section 2.7	Section 2.8	Section 5.4	
Annual vegetation of drift lines	QI of The Murrough Wetlands SAC, 1.15km upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect
Perennial vegetation of stony banks	QI of The Murrough Wetlands SAC, 1.15km upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	QI of The Murrough Wetlands SAC, 1.15km upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect
Mediterranean salt meadows (Juncetalia maritimi)	QI of The Murrough Wetlands SAC, 1.15km upstream of development site.	No potential for adverse effect	Negligible potential for adverse effect through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect
Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae*	QI of The Murrough Wetlands SAC, 1.15km upstream of development site.	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect
Alkaline fens	QI of The Murrough Wetlands SAC, 1.15km upstream of development site.	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect

Table 6-3: Summary of the assessment of likely effects for the Qualifying Interest (QIs) of Wicklow Head SPA that could potentially be affected by the proposed floating pontoon development.

Qualifying Interest	Reason for consideration	Considered effects					In-combination effects	Conclusion
		Local resource requirements	Emissions	Lighting	Transportation	Disturbance		
		Section 2.3	Section 2.4 & 2.5	Section 2.6	Section 2.7	Section 2.8	Section 5.4	
Kittiwake (*Risa tridactyla*)	QI of Wicklow Head SPA, 1.29km away development site.	No potential for adverse effect	Negligible potential for adverse effect on birds outside the SPA through impact on water quality in event of an accidental spillage	No potential for adverse effect	No potential for adverse effect	No potential for adverse effect	No significant in-combination effects likely	No likely significant adverse effect

7 Screening Conclusion

The findings of this screening exercise, which has been conducted in accordance with the approach set out in Section 1.2, are that there will be no significant adverse effects on any Natura 2000 sites, their Qualifying Interests, Conservation Objectives or Integrity as a result of the proposed project to develop a floating pontoon in Wicklow Harbour, Wicklow Town, Co. Wicklow. This is due to the small scale and short duration of the works and the negligible risk of any significant impact on water quality. It is therefore not a requirement to proceed to Stage 2 of the Appropriate Assessment process.

It should be noted that this screening report is valid for this proposed project only and any changes to this project must be subjected to the Appropriate Assessment process.

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Appendix 1 – Plates

Figure: Plate 1: View of proposed development location on South Quay

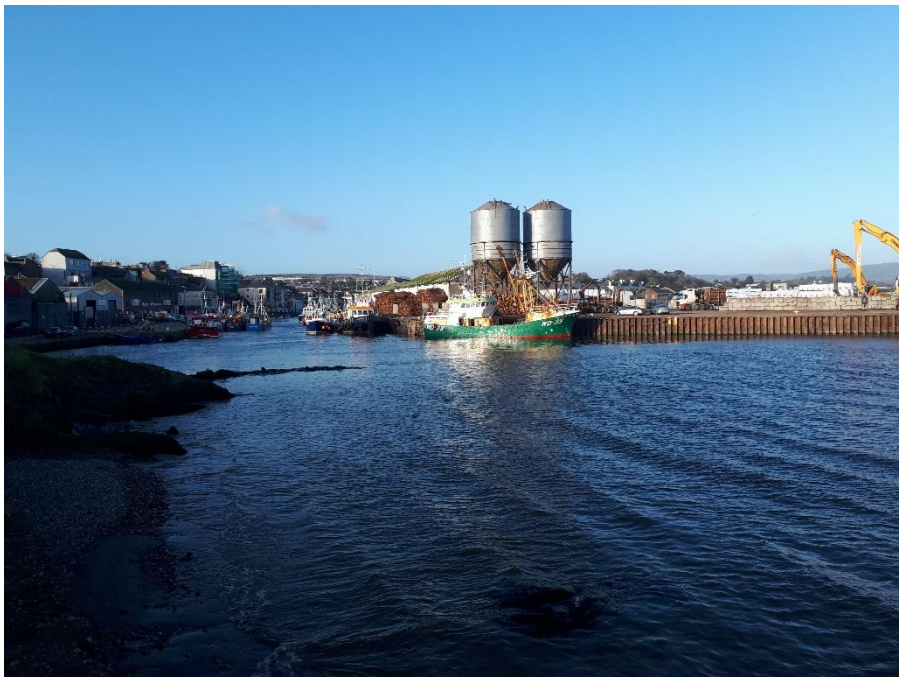

Figure: Plate 2: View of Wicklow Port

Appendix 2 – Natura 2000 site map

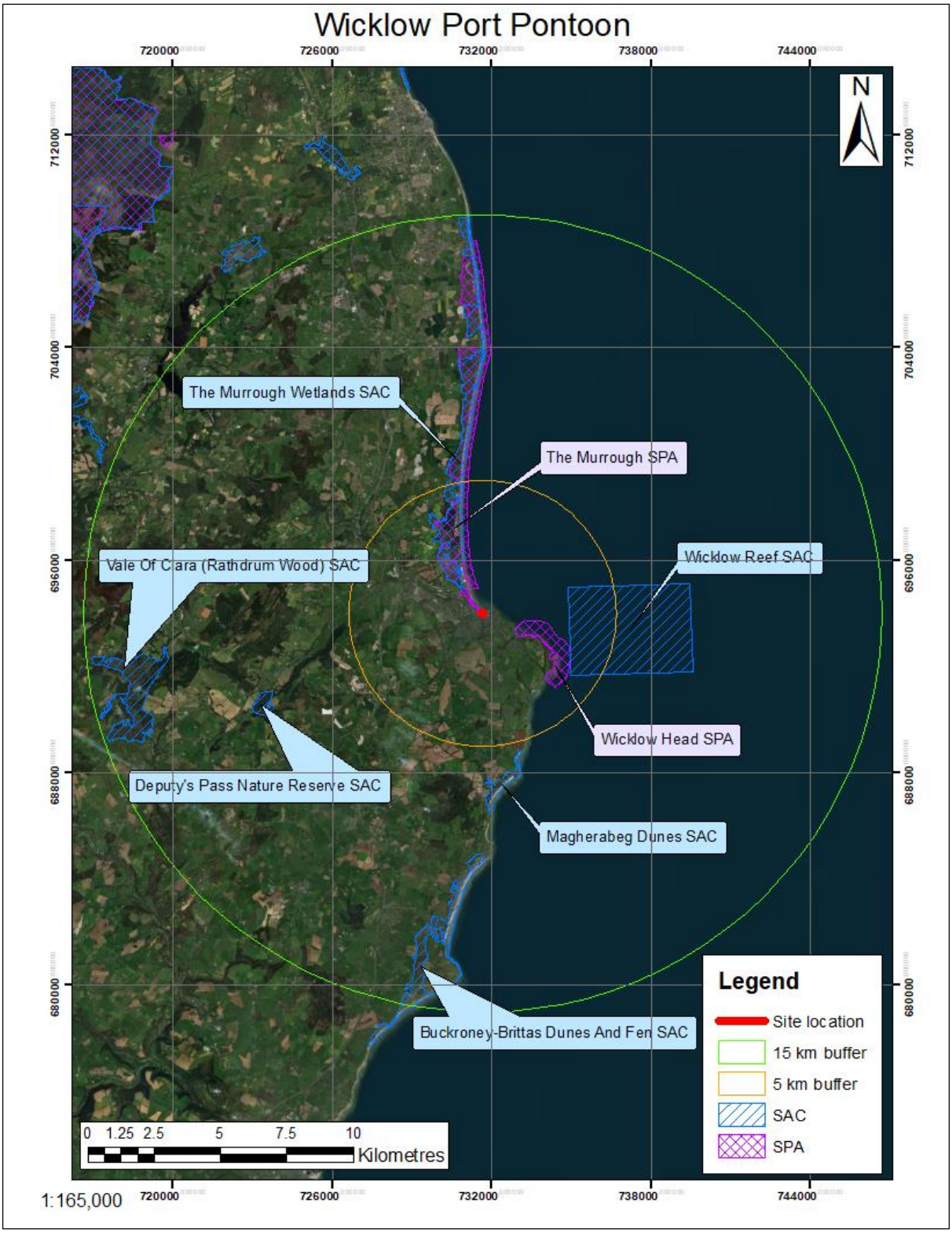

Figure: Natura 2000 sites within 15 km of the proposed floating pontoon development site.

Appendix 3 – Site synopsis: The Murrough SPA (004186)

SITE NAME: The Murrough SPA

SITE CODE: 004186

The Murrough SPA comprises a coastal wetland complex that stretches for 13km from Kilcoole Station, east of Kilcoole village in the north to Wicklow town in the south, and extends inland for up to 1km in places. The site includes an area of marine water to a distance of 200m from the low water mark. A shingle ridge runs along the length of the site and carries the Dublin-Wexford railway line.

Beside the shingle shore is a stony ridge supporting perennial vegetation. Driftline vegetation on the seaward side includes species such as Sea Rocket (*Cakile maritima*), Sea Sandwort (*Honkenya peploides*), Sea Holly (*Eryngium maritimum*) and Yellow-horned Poppy (*Glaucium flavum*). Low sand hills occur at Kilcoole, with Marram (*Ammophila arenaria*) and Lyme-grass (*Leymus arenarius*). In other areas and further inland a rich grassy sward, which is most extensive in the south end of the site, has developed. A community dominated by Silverweed (*Potentilla anserina*) and Strawberry Clover (*Trifolium fragiferum*) occurs in some of the wetter, grassy areas. In some places, particularly at the south of the site, a Gorse (*Ulex*) heath has developed on the stony ridge.

At the southern end of the site, Broad Lough, a brackish, partly tidal lake, has a well-developed saltmarsh community. Common Reed (*Phragmites australis*) is abundant along the western shore, along with some Sea Club-rush (*Scirpus maritimus*). Saltmarsh is also present in the northern end of the site in the vicinity of the Breaches. An area of fen occurs at Five Mile Point. Here, Black Bog-rush (*Schoenus nigricans*) is dominant. Fen Sedge (*Cladium mariscus*) is present where the ground is wetter. This merges into areas dominated by Common Reed. A wide range of freshwater and brackish marsh habitats occur within the site. These vary from reed-marsh dominated by reeds and rushes (Juncus spp.), to those of sedges (*Carex* spp.) with other areas supporting a mixture of sedges and Yellow Iris (Iris pseudacorus) also occurring. The marshes merge into wet grassland in many areas and where grazing pressure is low, a herb-rich sward occurs. Sedges are abundant in the wetter areas. Where drains have been cut, there are many other species such as Greater Spearwort (*Ranunculus lingua*), Bogbean (*Menyanthes trifoliata*) and Reed Sweet-grass (*Glyceria maxima*).

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Red-throated Diver, Greylag Goose, Light-bellied Brent Goose, Wigeon, Teal, Black-headed Gull, Herring Gull and Little Tern. 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.

The shingle ridge at Kilcoole is a traditional nesting area for Little Tern, and the site now supports one of the largest colonies in the country. Numbers vary between years, with 36 pairs recorded in 1995 and 106 pairs in 2006. A tern protection scheme and research programme, co-ordinated by BirdWatch Ireland and the National Parks and Wildlife Service, has been in operation since 1985. Breeding success varies from year to year, largely due to predation by foxes, crows and other species.

During the winter this site is important for a number of waterbirds - all population sizes are the mean of peak counts for the 5 years, 1995/96 – 1999/2000. Light-bellied Brent Goose occurs here in internationally important numbers (859). Other species that visit here in nationally important numbers are Red-throated Diver (32), Greylag Goose (300), Wigeon (1,209), Teal (644), Black-headed Gull (997) and Herring Gull (506). Other species that are known to occur here are Little Grebe, Grey Heron, Cormorant, Mute Swan, Whooper Swan, Greenland White-fronted Goose, Shelduck, Gadwall, Shoveler, Mallard, Golden Plover, Ringed Plover, Lapwing, Dunlin, Curlew, Greenshank and Redshank.

Short-eared Owl is recorded here during the winter. Little Egret has bred locally in recent years and this site is a main feeding area, with several birds present regularly. While formerly a rare bird in Ireland, Little Egret is now well-established with most birds occurring in the south-east and south (Counties Wexford, Waterford and Cork). The Murrough is presently at the edge of the species' range. This site is one of the few sites in Ireland where Reed Warbler breeds regularly. It is considered that 1-4 pairs bred each year during the 1980s and early 1990s, with a minimum of 6 birds in song in 1993. An absence of records since 1996 may be due to under-recording. Kingfisher regularly uses the site. Sandwich Tern are recorded from the site during the autumn.

The Murrough SPA is an important site for wintering waterbirds, being internationally important for Light-bellied Brent Goose and nationally important for Red-throated Diver, Greylag Goose, Wigeon, Teal, Black-headed Gull and Herring Gull. It is probably the most important site in the country for nesting Little Tern. The regular occurrence of Red-throated Diver, Little Egret, Whooper Swan, Greenland White-fronted Goose, Golden Plover, Little Tern, Sandwich Tern, Short-eared Owl and Kingfisher is of note as these species are listed on Annex I of the E.U. Birds Directive. Part of the Murrough SPA is a Wildfowl Sanctuary.

15.5.2015

Appendix 4 - Site synopsis: The Murrough Wetlands SAC (002249)

SITE NAME: The Murrough Wetlands SAC

SITE CODE: 002249

The Murrough is a coastal wetland complex which stretches for 15km from Ballygannon to north of Wicklow town, and in parts, extends inland for up to 1km. A shingle ridge stretches the length of the site and carries the mainline Dublin-Wexford railway.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1210] Annual Vegetation of Drift Lines

[1220] Perennial Vegetation of Stony Banks

[1330] Atlantic Salt Meadows

[1410] Mediterranean Salt Meadows

[7210] Cladium Fens*

[7230] Alkaline Fens

On the seaward side of the shingle bank which runs along The Murrough Wetlands SAC site drift line vegetation includes species such as Sea Rocket (Cakile maritima), Sea Sandwort (*Honkenya peploides*), Sea-holly (*Eryngium maritimum*) and Yellow Horned-poppy (*Glaucium flavum*). The rare and legally protected Oysterplant (*Mertensia maritima*) (Flora (Protection) Order, 1999) has been recorded on the gravelly shore in the past, but is now considered to be extinct from this locality.

Low sand hills occur at Kilcoole, with Marram (*Ammophila arenaria*) and Lyme-grass(*Leymus arenarius*). In other areas and further inland a rich grassy sward, which is most extensive at the south of the site, has developed. Typical species include Sweet Vernal-grass (*Anthoxanthum odoratum*), Crested Dog's-tail (Cynosurus cristatus), Common Bird's-foot-trefoil (*Lotus* corniculatus), Burnet Rose (*Rosa pimpinellifolia*) and Pyramidal Orchid (*Anacamptis pyramidalis*). A community dominated by Silverweed (*Potentilla anserina*) and Strawberry Clover (*Trifolium fragiferum*) occurs in some of the wetter, grassy areas. In some places, particularly at the south of the site, a gorse (*Ulex* sp.)heath has developed on the stony ridge.

Saltmarsh is present within the site in two distinct areas. At the southern end of the site is found Broad Lough. This is a brackish, partly tidal lake, and has a well-developed saltmarsh community which includes Saltmarsh Rush (*Juncus gerardii*), Common Saltmarsh-grass (Puccinellia maritima), Sea Aster (*Aster tripolium*), Sea Purslane (*Halimione portulacoides*) and Common Scurvygrass (*Cochlearia officinalis*). Common Reed (*Phragmites australis*) is abundant along the western shore, along with some Sea Club-rush (*Scirpus maritimus*). Saltmarsh is also present in the northern end of the site in the vicinity of The Breaches. Though this has been greatly affected by drainage in the late 1980s and

early 1990s, localised Sea Couch (*Elymus pycnanthus*) still occurs. The grassland which was created and improved as a result of the drainage is now influenced by seepage and flooding of saline waters.

Fen vegetation is well developed in the Murrough wetlands, with both alkaline and calcareous fen with Great Fen-sedge (Cladium mariscus) represented. The fens occur mostly between Five Mile Point and Six Mile Point, especially in the townland of Blackditch and also in the Leamore and Grange areas. The alkaline fen is dominated by Black Bog-rush (*Schoenus nigricans*), with Marsh Pennywort (*Hydrocotyle vulgaris*), Purple Moor-grass (*Molinia caerulea*), Devil's-bit Scabious (*Succisa pratensis*), Heather (*Calluna vulgaris*), Cross-leaved heath (*Erica tetralix*), and a wide variety of orchids also present. The rare, Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri*) has also been recorded here. Great Fen-sedge occurs in mosaic with several vegetational elements but chiefly with alkaline fen. Its many forms can range from pure stands of Great Fen-sedge, through to occurring as a dominant with Greater Tussock-sedge (Carex paniculata) and Blunt-flowered Rush (Juncus subnodulosus). Cladium fen also occurs at Blackditch within stretches of swamp woodland or fen carr dominated by Rusty Willow (*Salix cinerea* subsp. *oleifolia*) and Downy Birch (Betula pubescens).

A fine wet woodland occurs at Blackditch. Downy Birch is the dominant species, with some Alder (*Alnus glutinosa*), willows (*Salix* spp.) and Ash (*Fraxinus excelsior*) also present. The ground flora of this wooded area is often quite dense. This wood also contains a rich invertebrate community with at least eight rare or notable species of fly (Order Diptera) occurring, including *Syntormon setosus*, a species unknown elsewhere in Britain or Ireland.

A wide range of freshwater and brackish marsh habitats occur within the site. These vary from reed-marsh dominated by reeds and rushes (*Juncus* spp.), to those of sedges (*Carex* spp.), with other areas supporting a mixture of sedges and Yellow Iris (*Iris pseudacorus*). A wide variety of grasses and herbs are also found. These include Meadowsweet (*Filipendula ulmaria*), Silverweed and Common Spike-rush (*Eleocharis palustris*). The scarce Red Data Book species Marsh Pea (*Lathyrus palustris*) occurs in one area. The marshes merge into wet grassland in many areas. Where grazing pressure is low, a herb-rich sward occurs with species such as Ragged-Robin (*Lychnis flos-cuculi*), Cuckoo flower (*Cardamine pratensis*), Meadowsweet and Heath Spotted-orchid (*Dactylorhiza maculata*) occurring. Sedges are abundant in the wetter areas. Where drains have been cut, there are many other species such as Greater Spearwort (*Ranunculus lingua*), Bogbean (*Menyanthes trifoliata*) and the scarce Reed Sweet-grass (*Glyceria maxima*).

The Murrough is an important site for wintering waterfowl and breeding birds. Species listed on Annex I of the E.U. Birds Directive include Little Egret, Whooper Swan, Greenland White-fronted Goose, Golden Plover, Kingfisher and Little Tern. Average peak winter counts from 1994/95 - 1997/98 showed the site to have an internationally important population of Brent Goose (1,318, higher than in the early 1990s), nationally important populations of Wigeon (1,518), Teal (772) and Lapwing (3,140), and regionally or locally important populations of Whooper Swan (80), Little Grebe (22), Shelduck (95), Gadwall (9), Mallard (391), Shoveler (22), Golden Plover (615), Curlew (605) and Redshank (181). Greylag Goose numbers were nationally important in the early 1990s but these numbers have dropped off. The average peak is now 213.

Little Tern breed on the shingle beach near The Breaches and this is the largest colony on the east coast (approx. 50 pairs in 1993, an average of 37 pairs over the ten year period 1988-1998). Redshank,

Oystercatcher, Ringed Plover and Water Rail also breed. The reedbeds at Broad Lough provide habitat for Reed Warbler and the rare Bearded Tit has bred here.

Otter has been reported regularly from the Murrough. This is a Red Data Book Species, and is also listed on Annex II of the Habitats Directive. Recent farming and drainage practices and afforestation have greatly reduced the area and quality of the wetlands habitats - the area between Kilcoole and Newcastle is particularly affected. In 1997 there was some levelling of the sand hills below Killoughter station. Pollution, reclamation and further drainage would adversely affect this site. A section of the wetlands at Blackditch, which includes alkaline and Cladium fen, has been acquired by BirdWatch Ireland and is being managed for nature conservation.

This site is of importance as it is the largest coastal wetland complex on the east coast of Ireland. Although much affected by drainage, it still contains a wide range of coastal and freshwater habitats, including six listed on Annex I of the E.U. Habitats Directive, some of which contain threatened plants. Areas on the site contain a rich invertebrate fauna, including several rarities. It is an important site for both wintering and breeding birds and supports a variety of species listed on Annex I of the E.U. Birds Directive.

Appendix 5 – Site synopsis: Wicklow Head SPA (004127)

SITE NAME: Wicklow Head SPA

SITE CODE: 004127

Wicklow Head is a rocky headland with extensive exposures of mica-schist. It is situated approximately 3km south of Wicklow town. A lighthouse is located near the base of the cliffs. The cliffs are highest immediately south of the lighthouse where they rise to about 60m and it is here that most of the seabirds breed. The site comprises the cliffs and cliff-top vegetation, as well as some heath vegetation. The marine area to a distance of 500m from the base of the cliffs is included in the site.

At the time this site was identified for Special Protection Area (SPA) designation it was utilised by a nationally important population of Kittiwake and this species is regarded as a special conservation interest for this SPA.

A survey in 2002 recorded a nationally important population of breeding Kittiwake (956 pairs) and other breeding seabirds including Fulmar (62 pairs), Shag (11 pairs), Herring Gull (20 pairs), Guillemot (281 pairs) and Razorbill (125 pairs). A survey of Black Guillemot in April 1998 recorded 70 individual birds within the SPA.

The site also supports a pair of breeding Peregrine. Ravens nest annually on the cliffs, and the heath supports such species as Stonechat, Whitethroat and Linnet.

The occurrence of Peregrine, a species that is listed on Annex I of the EU Birds Directive, is of note.

24.4.2012

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