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Clonburris Strategic Development Zone (SDZ) Draft Planning Scheme

# Appropriate Assessment (AA) Screening Report

September 2017



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#### 1.0 Introduction

#### 1.1 Appropriate Assessment Screening Report: Purpose and Process

South Dublin County Council has commenced the preparation of the Balgaddy-Clonburris Strategic Development Zone (SDZ) — Draft Planning Scheme (hereafter referred to as the "Draft Scheme"). This Draft Scheme, through a series of objectives and policies, will set out the vision and direction for the future development of the Balgaddy-Clonburris area.

Proposed land use plans and proposed variations must undergo a formal "test" or "screening" to ascertain whether they are likely to result in any significant adverse effects on specific sites designated for their nature conservation importance. These sites are those designated under the European Commission's Natura 2000 network of sites (hereafter "European sites"1). These sites are designated on the basis of the presence of certain habitats and species that are deemed to be of international importance. The Irish Government and local Planning Authorities have a legal obligation to protect these sites.

The EC Habitats and Birds Directives are the framework for the designation of these sites. The EC Habitats Directive requires the "screening" of plans and projects under Article 6(3). If the screening process results in a judgement that likely significant effects may occur or cannot be ruled out, then a more detailed 'appropriate assessment' (AA) is required.

Scott Cawley Ltd. was appointed by South Dublin County Council to analyse the proposed Draft Scheme during the early stages of preparation and to prepare an AA Screening Report. The Council, as the Competent Authority, have issued a Screening decision on this basis.

#### 2.0 Existing Environment

The Draft Scheme sets out a vision for the future strategic development of lands (280ha) at Clonburris, Co. Dublin (Irish Grid Reference: O 04407 32474). The lands support a range of habitats including freshwater (canal, drainage ditches, Griffeen River) grassland, woodland, scrub, disturbed land and built lands. Residential areas exist to the north (Finnstown and Ronanstown) and south (Deansrath and Clondalkin). Industrial lands lie to the southwest (Grangecastle Business Park) and east (Clondalkin Industrial Estate). According to MyPlan.ie online map viewer, the subject lands are currently zoned as "SDZ Strategic Development Zone" under the South Dublin County Development Plan 2016-2022, with a planning objective to "provide for strategic development in accordance with approved planning schemes".

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<sup>&</sup>lt;sup>1</sup> Natura 2000 sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland these sites are designed as *European sites* - defined under the Planning Acts and/or Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs).



The subject lands are located within the Liffey and Dublin Bay catchment and the Liffey subcatchment. According to the EPA's online Map Viewer, the nearest known rivers are the Griffeen River and its tributary the Kilmahuddrick Stream which runs north-south through the west of the subject lands and the Camac River which runs to the south-east. The Grand Canal forms the southern boundary of the subject lands. The Griffeen River flows in a northerly direction before its confluence with the River Liffey near Lucan. The Camac River flows in a north-easterly direction towards Heuston Station where it also joins the River Liffey. The Grand Canal flows east for c. 2km, where it ultimately discharges into the Liffey Estuary near Ballsbridge. The Liffey Estuary ultimately discharges to Dublin Bay near Poolbeg Lighthouse on the South Wall. The River Liffey is regarded as being of 'Moderate (Q3-4)'quality shortly after its confluence with the Griffeen River near Lucan Bridge. The Camac River is deemed to be of 'Poor (Q2-3, Q3)' quality according to samples taken at the EPAs monitoring station at Riversdale Estate Bridge. The River Liffey ranges in quality from 'Moderate' to 'Poor'. As a transitional waterbody, the Liffey is regarded as 'Eutrophic' until it flows up to City Quay after which it is regarded as 'Unpolluted'. The coastal waterbody of Dublin Bay is regarded as 'Unpolluted'. As such, there have been no breaches of the EPA's threshold values for nutrient enrichment, accelerated plant growth, or disturbance of the level of dissolved oxygen normally present under the EPA's "Trophic Status Assessment Scheme" classification (EPA 2010).

The subject lands are located within the 'Dublin' groundwater body. According to the EPA Envision Map Viewer this groundwater body is described as 'poorly productive bedrock'. According to GSI Map Viewer, the level of vulnerability to groundwater contamination from human activities ranges from 'High' to 'Extreme' with some 'Rock at or near surface or Karst'. It is also described as a 'Locally Important Aquifer- Bedrock which is Moderately Productive only in Local Zones'. The bedrock of the area is classified as 'Dinantian Upper Impure Limestones'.

#### 3.0 Identification of European Sites, Generic Threats and Pressures

As part of the AA Screening prepared for the Draft Scheme, all European sites (SACs and SPAs) within the zone of influence of the Draft Scheme were identified. Similarly, all Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs) within the zone of influence of the Draft Scheme were identified. NHAs, pNHAs and other designated sites such as Nature Reserves, Wildfowl Sanctuaries and Ramsar sites do not form part of the European site network, however they often provide an important supporting role to the network, particularly when it comes to fauna species which often do not obey site boundaries. A list of all European sites, NHAs and pNHAs located within the Draft Scheme's boundary and surrounding environs can be found in Section 3.1.

The AA screening process also identified threats and pressures to the integrity of the European sites and hence the sensitivities of the Qualifying Interests (QI) and Special





Conservation Interests (SCI) of the European sites within the zone of influence of the Draft Scheme. Threats and pressures for QIs were extracted from the Status of EU Protected Habitats and Species in Ireland, Volume 2 & 3 (NPWS, 2013a & 2013b) while threats and pressures for QI bird species were extracted from Annex 2: Bird species' status and trends reporting format for the period 2008-2012<sup>2</sup>. Information on the parameters contributing to achieving and/or maintaining favourable conservation condition were largely compiled from a range of Site Specific Conservation Objectives (SSCOs) downloaded from the NPWS website, but is also based on professional judgement. Generic threats and pressures to key environmental and ecological conditions required for QIs/SCIs can be found in Section 3.1 also.

#### 3.1 European Sites

The analysis identified 5 SACs and 3 SPAs that will fall within the zone of influence of the Draft Scheme.

Figure 1. (overleaf) shows all European sites within 15km and beyond of the Draft Scheme's boundary. Information regarding European sites located within the zone of influence of the Draft Scheme are outlined in Table 3.1.1 below.

Table 3.1.1. European Sites within the Draft Scheme's Boundary and Zone of Influence

European Sites within the Draft Scheme's Boundary and Zone of Influence			
Site Code	Special Areas of Conservation	Site Code	Special Protection Areas
001398	Rye Water Valley/Carton SAC	004040	Wicklow Mountains SPA
001209	Glenasmole Valley SAC	004024	South Dublin Bay and River Tolka Estuary SPA
000210	South Dublin Bay SAC	004006	North Bull Island SPA
000206	North Dublin Bay SAC	004063	
002122	Wicklow Mountains SAC		

The Qualifying Interests of the European Sites within the zone of influence of the Draft Scheme are presented in Table 3.1.2 below.

Table 3.1.2 Qualifying Interests of European sites within the zone of influence of the Draft Scheme

Qualifying Interests of European sites within the zone of influence of the Draft Scheme		
Site Name:	Rye Water Valley/Carton SAC	
Site Code:	001398	



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<sup>&</sup>lt;sup>2</sup> Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B">http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>



Qualifying Interests:	Annex I Habitats:	
	<ul> <li>Petrifying springs with tufa formation (Cratoneurion) [7220]</li> </ul>	
	Annex II Species:	
	<ul> <li>Narrow-mouthed whorl snail (Vertigo angustior) [1014]</li> <li>Desmoulin's whorl snail (Vertigo moulinsiana) [1016]</li> </ul>	
<b>Source</b> : (NPWS, 2015) <i>G</i> (13/02/2015)	Generic Conservation Objectives for Rye Water Valley/Carton SAC [001398]	
Site Name:	Glenasmole Valley SAC	
Site Code:	001209	
Qualifying Interests:	Annex I Habitats:	
	<ul> <li>Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]</li> </ul>	
	<ul> <li>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]</li> </ul>	
	<ul> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</li> </ul>	
<b>Source</b> : (NPWS, 2016) G (15/08/2016)	 Generic Conservation Objectives for Glenasmole Valley SAC [001209]	
Site Name:	South Dublin Bay SAC	
Site Code:	000210	
Qualifying Interests:	Annex I Habitats:	
	<ul> <li>Mudflats and sandflats not covered by seawater at low tide</li> <li>[1140]</li> </ul>	
	<ul> <li>Annual vegetation of drift lines [1210]</li> </ul>	
	<ul> <li>Salicornia and other annuals colonising mud and sand [1310]</li> <li>Embryonic shifting dunes [2110]</li> </ul>	
<b>Source:</b> (NPWS, 2013) C	Conservation Objectives for South Dublin Bay SAC [000210] Version 1	
(22/08/2013) with addit	tional habitats as notified by NPWS.	
Site Name:	North Dublin Bay SAC	
Site Code:	000206	
Qualifying Interests:	Annex I Habitats:	
	<ul> <li>Mudflats and sandflats not covered by seawater at low tide</li> <li>[1140]</li> </ul>	
	<ul> <li>Annual vegetation of drift lines [1210]</li> </ul>	
	<ul> <li>Salicornia and other annuals colonising mud and sand [1310]</li> </ul>	
	<ul> <li>Atlantic salt meadows (Glauco-Puccinellietalia maritimae)</li> <li>[1330]</li> </ul>	
	<ul> <li>Mediterranean salt meadows (Juncetalia maritimi) [1410]</li> </ul>	
	<ul><li>Embryonic shifting dunes [2110]</li></ul>	





	<ul> <li>Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]</li> </ul>	
	<ul> <li>Fixed coastal dunes with herbaceous vegetation (grey dunes)</li> <li>[2130]</li> </ul>	
	<ul><li>Humid dune slacks [2190]</li></ul>	
	Annex II Species:	
	<ul> <li>Petalophyllum ralfsii (Petalwort) [1395]</li> </ul>	
<b>Source:</b> (NPWS, 2013) <i>Co</i> (06/11/2013)	nservation Objectives for North Dublin Bay SAC [000206] Version 1	
Site Name:	Wicklow Mountains SAC	
Site Code:	002122	
Qualifying Interests:	Annex I Habitats:	
	Annex I Habitats:  Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]  Annex II Species: Otter (Lutra lutra) [1355] Generic Conservation Objectives for Wicklow Mountains SAC [002122]	
(15/08/2016)	I we'll as a company of the company	
Site Name:	Wicklow Mountains SPA	
Site Code:	004040	
Qualifying Interests:	<ul> <li>Merlin (Falco columbarius) [A098]</li> <li>Peregrine (Falco peregrinus) [A103]</li> </ul>	
<b>Source:</b> (NPWS, 2016) <i>Ge</i> (15/08/2016)	neric Conservation Objectives for Wicklow Mountains SPA [004040]	
Site Name:	South Dublin Bay and River Tolka Estuary SPA	





Site Code:	004024
Qualifying Interests:	<ul> <li>Light-bellied brent goose (Branta bernicla hrota) [A046]</li> </ul>
	<ul><li>Oystercatcher (Haematopus ostralegus) [A130]</li></ul>
	<ul><li>Ringed plover (Charadrius hiaticula) [A137]</li></ul>
	<ul><li>Grey plover (Pluvialis squatarola) [A141]</li></ul>
	<ul><li>Knot (Calidris canutus) [A143]</li></ul>
	<ul><li>Sanderling (Calidris alba) [A144]</li></ul>
	<ul><li>Dunlin (Calidris alpina) [A149]</li></ul>
	<ul><li>Bar-tailed godwit (Limosa lapponica) [A157]</li></ul>
	<ul><li>Redshank (Tringa totanus) [A162]</li></ul>
	<ul> <li>Black-headed gull (Chroicocephalus ridibundus) [A179]</li> </ul>
	<ul><li>Roseate tern (Sterna dougallii) [A192]</li></ul>
	<ul><li>Common tern (Sterna hirundo) [A193]</li></ul>
	<ul><li>Arctic tern (Sterna paradisaea) [A194]</li></ul>
	<ul><li>Wetland and waterbirds [A999]</li></ul>

**Source:** (NPWS, 2015) *Conservation Objectives for South Dublin Bay and River Tolka Estuary SPA* [004024] Version 1 (09/03/2015)

Site Name:	North Bull Island SPA	
Site Code:	004006	
Qualifying Interests:	<ul> <li>Light-bellied brent goose (Branta bernicla hrota) [A046]</li> <li>Shelduck (Tadorna tadorna) [A048]</li> <li>Teal (Anas crecca) [A052]</li> <li>Pintail (Anas acuta) [A054]</li> <li>Shoveler (Anas clypeata) [A056]</li> <li>Oystercatcher (Haematopus ostralegus) [A130]</li> <li>Golden plover (Pluvialis apricaria) [A140]</li> <li>Grey plover (Pluvialis squatarola) [A141]</li> <li>Knot (Calidris canutus) [A143]</li> <li>Sanderling (Calidris alba) [A144]</li> <li>Dunlin (Calidris alpina) [A149]</li> <li>Black-tailed godwit (Limosa limosa) [A156]</li> <li>Bar-tailed godwit (Limosa lapponica) [A157]</li> <li>Curlew (Numenius arquata) [A160]</li> <li>Redshank (Tringa totanus) [A162]</li> <li>Turnstone (Arenaria interpres) [A169]</li> <li>Black-headed gull (Chroicocephalus ridibundus) [A179]</li> <li>Wetland and waterbirds [A999]</li> </ul>	

**Source:** (NPWS, 2015) *Conservation Objectives for North Dublin Bay SPA [004024]* Version 1 (09/03/2015)

3 SACs and 1 SPA were disregarded from further analysis entirely as a result of the initial screening process. The reasons for their exclusion are given below in Table 3.1.3

Table 3.1.3 European Sites screened out from further consideration

Site Code	Special Areas of Conservation	Distance from subject lands	Reasons for exclusion from further analysis
	Rye Water Valley/ Carton SAC	c.4km NW	<ul> <li>Distance</li> <li>Lack of hydrological linkage- the Griffeen confluence with the Liffey</li> </ul>





001398			lies downstream of the SAC's boundary
001209	Glenasmole Valley SAC	c.8.4km SE	<ul> <li>Distance</li> <li>Lack of hydrological linkage</li> <li>Different groundwater body (Kilcullen)</li> </ul>
002122	Wicklow Mountains SAC	c. 10.5km S	<ul> <li>Distance</li> <li>Lack of hydrological linkage</li> <li>Different groundwater body (Kilcullen)</li> </ul>
Site		Distance from	Reasons for exclusion from
Code	Special Protection Areas	subject lands	further analysis
004040	Wicklow Mountains SPA	c. 14.6km SE	<ul> <li>Distance- therefore very low risk of disturbance to QI bird species</li> <li>Lack of hydrological linkage</li> </ul>

These European sites were regarded to not have any potential impact pathways between the Draft Scheme area and the sites themselves and therefore there was no possibility of any significant impacts either in isolation or combination with elements of the Draft Scheme or other plans and projects.

The four remaining designated sites are listed in Table 3.1.4 below. Whilst impact pathways potentially do exist this does not de facto suggest that likely significant effects may arise.

Table 3.1.4 European Sites to be analysed further

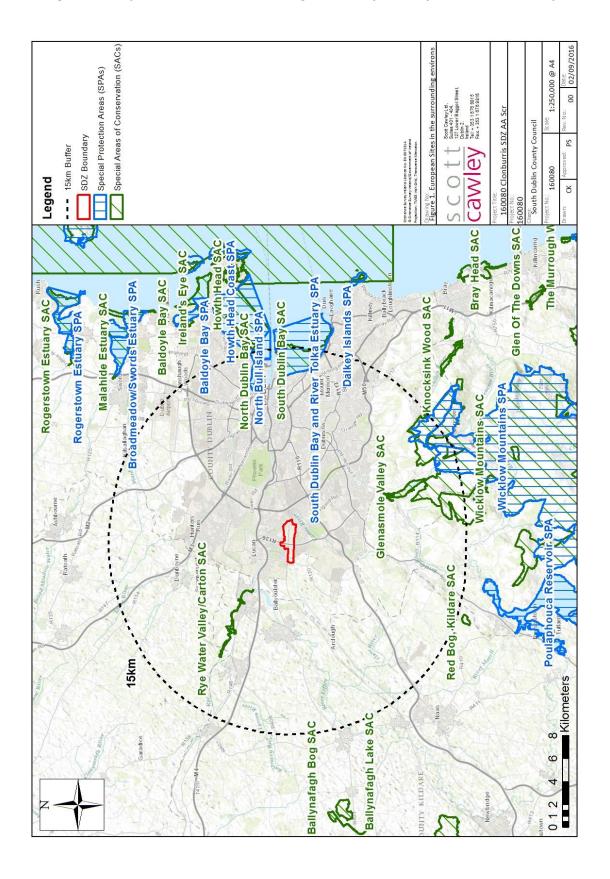
European Sites to be further analysed				
Site Code	Special Areas of Conservation	Site Code	Special Protection Areas	
Sites within Draft Scheme's Zone of Influence				
000210	South Dublin Bay SAC	004024	South Dublin Bay and River Tolka Estuary SPA	
000206	North Dublin Bay SAC	004006	North Bull Island SPA	

The potential for 'in-combination' effects on European sites as a result of the implementation of the Draft Scheme has also been assessed.





Figure 1. European Sites in the surrounding environs of the Draft Scheme's boundary.





#### 3.2 National Sites

Sites of national importance were also considered throughout this screening exercise. Four pNHA sites are located within 5km of the Draft Scheme's boundary. These sites were considered as they may provide connectivity to European sites. These sites are listed in Table 3.2.1 below.

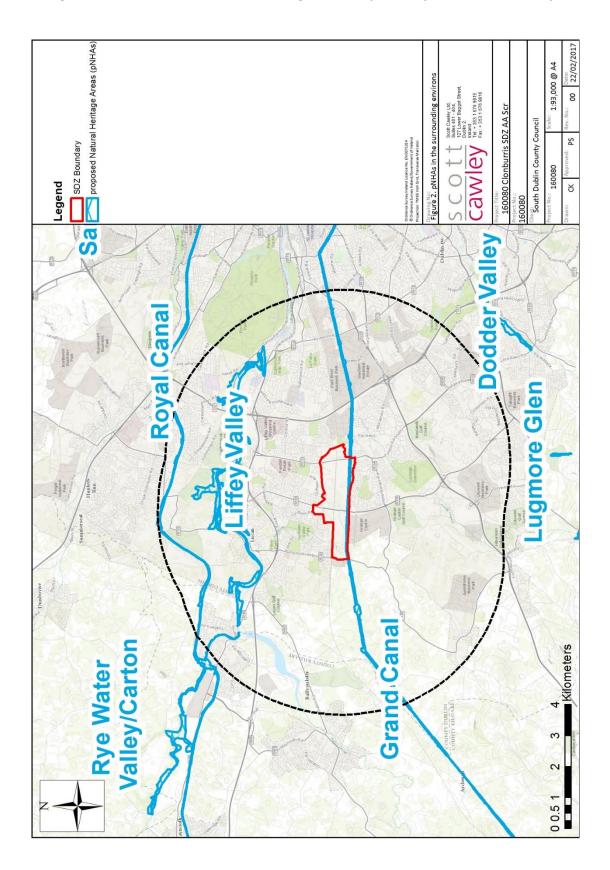
Table 3.2.1 Proposed Natural Heritage Areas within 5km of the Draft Scheme's boundary

Proposed Natural Heritage Areas within 5km of the Draft Scheme's boundary			
Site Code	proposed Natural Heritage Areas (pNHAs)	Distance from Draft Scheme's Boundary	
000128	Liffey Valley pNHA	c. 2.4km north	
002103	Royal Canal pNHA	c. 4.7km north	
002104	Grand Canal pNHA	Om- the canal runs along the southern boundary of the SDZ area	
001398	Rye Water Valley/ Carton pNHA	c. 3.9km north-west	

The ecological interests in these national sites are outlined in Appendix A, Table A1 below while a map of these sites is presented in Figure 2 (overleaf).



Figure 2. National Sites in the surrounding environs of the Draft Scheme's boundary.





#### 3.3 Threats and Pressures

The threats to, and pressures on, the integrity of the European sites listed were extracted from relevant published NPWS materials and are displayed below. Threats and pressure relating specifically to the European sites located within the Draft Scheme's Zone of Influence are presented in Appendix A Table A2.

Following the identification of the main threats and pressures to the integrity of these European Sites, these threats and pressures were grouped into impact types. Impact types were determined by the nature of activities which could potentially result in such impacts occurring, e.g. agricultural and rural activities may lead to overgrazing. A summary of the main impact types is presented in Table 3.3.1 below.

Table 3.3.1 Summary of Impact types on QIs/SCIs in the zone of influence of the Draft Scheme

#### **Agricultural and Rural activities**

- Fertilisation
- Grazing, (lack of/undergrazing /overgrazing)
- Abandonment of pastoral systems
- Forest and plantation management and
  use
- Diffuse pollution to surface waters due to agricultural and forestry activities
- Diffuse pollution to surface waters due to household sewage and waste waters
- Surface water abstractions for agriculture
- Discharges
- Fishing and harvesting aquatic resources
- Mowing/cutting of grassland
- Forest planting on open ground

- Infilling of ditches, dykes, ponds, pools, marshes or pits
- Dykes, embankments, artificial beaches, general
- Removal of beach materials
- Pollution to surface waters (limnic and terrestrial, marine and brackish)
- Intensive sheep grazing
- Intensive cattle grazing
- Agricultural intensification
- Restructuring agricultural land holding
- Fences, fencing
- Modification of cultivation practices
- Agricultural activities not referred to above
- Marine and freshwater aquaculture

#### **Economic and Infrastructure Development, Communications and Energy Network Development**

- Water abstraction from groundwater;
- Roads, motorways
- Roads, paths and railroads
- Garbage and solid waste
- Estuarine and coastal dredging
- Bridge, viaduct
- Industrial or commercial areas
- Shipping lanes
- Reclamation of land from sea, estuary or marsh
- Water abstractions from groundwater
- Pollution to groundwater (point sources and diffuse sources)
- Shipping lanes, ports, marine constructions

- Landfill, land reclamation and drying out;
- Disposal of household/ recreational facility waste
- Continuous Urbanisation
- Discontinuous urbanisation
- Dispersed habitation
- Sand and gravel extraction
- Flooding modifications
- Sea defence or coast protection works, tidal barrages
- Urbanised areas, human habitation
- Utility and service lines
- Renewable abiotic energy use
- Mining and quarrying
- Roads, paths and railroads

#### Tourism, Recreation and Leisure



	•	Tramp	ling/	overuse"
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- Other sport/leisure complexes
- Paths, tracks, cycling tracks
- Outdoor sports and leisure activities
- Sport and leisure structures
- Nautical sports
- Fishing and harvesting aquatic resources

#### Intensive management of public parks/ cleaning of beaches

- Walking, horse-riding and non-motorised vehicles
- Piers/ tourist harbours or recreational piers
- Golf Course
- Bait Digging/Collection

#### Other

- Modification of hydrographic functioning
- Species composition change (succession)
- Invasive non-native species
- Abiotic (slow) natural processes
- Changes in abiotic conditions
- Eutrophication (natural)
- Accumulation of organic material
- Other ecosystem modifications
- Human induced changes in hydraulic conditions
- Changes in biotic conditions

- Erosion
- Polderisation
- Reduction or loss of specific habitat features
- Off-road motorised driving
- Other human intrusions and disturbances
- Marine water pollution
- Other forms of pollution
- Fire and fire suppression
- Interspecific faunal relations
- Hunting and collection of wild animals (terrestrial)

#### 4.0 Examination of Risk of Likely Significant Effects of Implementing the Draft Scheme

The analyses of the relationship between the Draft Scheme and the European Sites which were connected via a potential impact pathway, indicated that the following issues were to be considered:

- The connection between the SDZ lands and Dublin Bay via the Griffeen and Camac rivers, the water chemistry of which could be affected by activities in the SDZ lands;
- The additional loading on foul water network and treatment facilities as a result of the rollout of the development on the SDZ lands, which could affect the quality of the treated effluent discharged into Dublin Bay.

Analysis of the other plans covering the wider and adjoining environs was also carried out:

- Fortunestown Local Area Plan (2012);
- Newcastle Local Area Plan (2012);
- Ballycullen Oldcourt Local Area Plan (2013);
- South Dublin County Council Development Plan (2016-2022).

#### Surface Water

Surface waters present in the area, both naturally occurring rivers and streams and manmade infrastructure relating to the surface water drainage network, ultimately drain into Dublin Bay. These features therefore offer a hydrological link to the suite of European sites



located in Dublin Bay. The following elements of the Draft Scheme have been taken into account during the analysis;

- To reduce the overall catchment that drains to the Camac River, the natural drainage characteristics of the site will be modified whereby, the extent of the site north of the railway and west of Fonthill (c. 25 hectares) will now be drained to the Griffeen River.
- Proposed surface water drainage includes the provision of a series of attenuation ponds and/or integrated catchment wetlands across the SDZ area, to limit the volume of surface waters regularly discharged from the overall site. The ponds will be located at several major outfall locations and will provide the final stage of treatment for surface water runoff prior to discharge to receiving watercourses. Section 2.9 of the Planning Scheme states that these attenuation ponds will not only provide additional storage for surface waters but will also be integrated as amenity and ecology features within parks and open spaces and be utilized as a local amenity within the overall SDZ scheme. Additional volumetric storage required during extreme rainfall occurrences (e.g. 1 in 100 -year storm event) will be provided by these attenuation ponds.
- The type, design and exact location for the attenuation pond areas shall be determined at the detailed design stage but they will be designed to be an integral part of any related open space and landscape structure. The preparation of the Draft Scheme has been informed by a Surface Water Strategy which embodies the construction of these ponds as a crucial prerequisite to development of the rest of the SDZ. Development in the catchment of these ponds will not be permitted until the ponds are installed and operational.
- Other surface water relief features to be employed in public realm areas include detention basins (located adjacent to existing and proposed roads), infiltration basins (located at carefully selected locations in the detention basins), undergound modular systems (subject to agreement with SDCC), filter strips, infiltration trenches and tree root structural cell systems. All of these features will reduce the volume and rate of surface waters discharging from the Clonburris area
- The attenuation ponds will ultimately discharge to the two local watercourses; the Griffeen River and the Camac River. Discharge to these rivers will be limited to 2l/sec/ha(a proposal which is supported by the Eastern CFRAM Hydrology report).
- These attenuation ponds are being proposed as flood relief measures rather than
  measures that would be interpreted as protecting the integrity of the European
  Sites downstream. Even in the absence of the ponds, the distance from the SDZ
  lands to the European sites would allow a high level of dilution, settlement and
  mixing to take place so as to avoid any perceptible changes in Dublin Bay.
- It is an objective of the SDZ Planning Scheme to ensure that SUDS measures should be fully implemented on all sites to achieve 2l/s/ha runoff rates, unless otherwise agreed with South Dublin County Council. All planning applications will be obliged to comply with this requirement.
- For individual development sites, it will be encouraged that surface water run-off
  pass through at least one level of treatment using a SUDS prior to the final level of



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treatment in the public realm areas (attenuation ponds). It will be recommended that roof waters be captured and treated within the curtilage on each site. This will be prioritized for larger developments within the Kishogue and Clonburris urban centres.

- For individual developments blue roofs, green roofs, swales, pervious paving, infiltration trenches, detention basins, tree root structural cell systems and on-site rain water harvesting will be recommended.
- Attenuation up to the 1 in 100-year event will be provided both within individual sites and within regional ponds for all public realm areas.
- All SUDs proposals within the SDZ will comply with the Greater Dublin Strategic Drainage Study and the Sustainable Urban Drainage Manual C753. A StormWater Audit will be required with each application for development within the SDZ, detailing measures to be undertaken at both construction and operational stages of all proposed developments.

#### **Foul Water**

Irish Water confirms that there is generally sufficient capacity in the public water services networks in the vicinity of the SDZ lands to connect developer-provided water service infrastructure to their networks (subject to the signing of individual connection agreements with Irish Water). The projected population of Clonburris SDZ has been taken into account in Irish Water's long-term planning for water services capacity in the Greater Dublin Area. A number of major infrastructure projects are being progressed to provide long term capacity to service projected demand into the future through Irish Water's multi annual Investment Programmes.

The proposed scheme is expected to result in an increase in foul loadings being discharged from site of c. 20,000 P.E. foul water comprising sewage and industrial effluent (and some surface water run-off) from the Dublin area has historically, and will continue to be treated at Ringsend WWTW prior to discharge to Dublin Bay. Ringsend WWTW has historically operated at or above capacity, with a contributing residential population in the order of 1.1 million P.E. and a total load (including non-domestic load) of 1.7 million P.E. on average, with significant fluctuations from day to day. Loading has increased in recent years with the rise in population recorded in the Dublin local authorities between 2011 and 2016 of approximately 4-6%<sup>3</sup>. The latest information from Irish Water indicates that the plant has operated above its capacity of 1.64 million P.E. as of March 2016 (Irish Water, 2016), with a current operational loading of 1.9 million P.E.

In 2016 the plant was non-compliant with several parameters as set under the EPA discharge license. Any existing or proposed projects discharging to the plant have the potential to act cumulatively to reduce water quality in Dublin Bay, affecting European Sites therein. Despite Ringsend WWTW historically operating at or above capacity, no significant effects from discharge arising from the proposed scheme are predicted due to the following:

<sup>3</sup> According to preliminary 2016 Census figures available from the Central Statistics Office <a href="https://www.cso.ie">www.cso.ie</a> (Accessed 04/08/2016)

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- Irish Water has confirmed that upgrade works are planned to proceed in stages to deliver a compliant effluent, at projected increased loads, with the full capacity of 2.4 m population equivalent completed by 2023. There are also plans to construct a new WWTW to the north of Dublin City which will permit flows to be diverted from the Ringsend catchment, thus ensuring that the capacity of Ringsend will be adequate to cater for growth in that catchment well into the future.<sup>4</sup>
- The 2016 Annual Environmental Report for the WWTP concluded that the assessments carried out on water quality in transitional and coastal waterbodies did not indicate a significant impact from the specific pollutants listed on the receiving waters outside the near field of the SW1 discharge point. The proposed upgrades will omit the requirement for this long sea outfall tunnel (LSOT) by installing an aerobic granular sludge (AGS) technology in both the capacity upgrade and in the existing treatment tanks. These measures will therefore reduce the risk of pollution to receiving waters.
- Even in the absence of an upgrade, there was no proven link between WWTW
  discharges and nutrient enrichment of sediments in Dublin Bay based on analyses
  of dissolved and particulate nitrogen signatures in research published in 2011
  (Wilson and Jackson, 2011);
- Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005);
- Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007).

#### Disturbance to European Site Species

A small number of lapwing *Vanellus vanellus*, a bird species listed on Annex 1 of the EU Birds Directive have been recorded using flooded grassland areas on occasion in winter and was also noted in the Environmental Report for the previous SDZ Planning Scheme (2007). The habitats present on the lands in the Draft Scheme are not suitable foraging habitats for other waders or other bird species for which North Bull Island SPA or South Dublin Bay and River Tolka Estuary SPA are designated and this site is not known to be an important feeding, roosting or breeding site for any of these species. Therefore, the inevitable loss of these sites as a result of the change of land use and ex-situ disturbance during construction is not regarded to be a likely significant effect on the SPAs for which lapwing are a special conservation interest. It is also possible that the proposed open space areas will be used by this species.

Table 4.1 below details the final screening process of the remaining European sites and the conclusion reached in relation to each.

Table 4.1. Final screening process of the remaining European sites and conclusions reached.

Special Areas of	Distance	Relevant source-pathway-receptor links between the
Conservation		Draft Scheme's lands and the European site?

<sup>&</sup>lt;sup>4</sup> Pers. Comm Irish Water 19/5/17

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South Dublin Bay SAC (000210)	c. 13.5km E	<ul> <li>Whilst there are potential impact pathways between the SDZ and European sites, no likely significant effects are deemed to be possible.</li> <li>There will be no significant impacts on water quality in Dublin Bay and therefore no adverse effects on the European sites, in view of the relevant conservation objectives. This judgement was informed by: <ul> <li>The known potential for waters in Dublin Bay to rapidly mix and assimilate pollutants (Wilson &amp; Jackson, 2011).</li> <li>The incorporation of attenuation ponds in the drainage design for the overall scheme to reduce the risk of flood events and the proposed requirement for the inclusion of SUDS features for all proposed development within the SDZ scheme area, will limit the discharge of waters from the site. This will serve to prevent flood events and reduce the risk of contamination of local watercourses and drainage networks.</li> </ul> </li> <li>Foul waters generated during operation/occupation will be directed to Ringsend WWTW where it will be treated prior to ultimate discharge to Dublin Bay. No significant effects were predicted for the</li> </ul>
		reasons outlined above.
North Dublin Bay	<i>c.</i> 15.5km	No. See entry under South Dublin Bay SAC above.
SAC (000206)	NE	,
Special	Distance	Relevant source-pathway-receptor links between the
Protection Areas		Draft Scheme's lands and the European site?
South Dublin Bay and River Tolka Estuary SPA	c. 12.8km E	No, due to the general absence of optimum habitat for SCI species, the existing high levels of disturbance in surrounding lands and the low levels of usage for such
(004024)		bird species within the subject lands.
North Bull Island SPA (004006)	c. 15.2km NE	No, due to the general absence of optimum habitat for SCI species, the existing high levels of disturbance in surrounding lands and the low levels of usage for such bird species within the subject lands.

#### 5.0 Conclusion and Determination of the Screening Process

Following an examination, analysis and evaluation of the relevant information, including in particular, the nature of the Draft Scheme and its potential relationship with European sites, as well as considering other plans and projects, and applying the precautionary principle, it is the professional opinion of the authors of this report that it is possible to rule out likely significant effects on all European sites.



The AA screening process has identified that 4 European Sites lie within the potential zone of influence of the proposed Scheme; South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA. These European Sites are <u>not</u> deemed to be at risk of likely significant effects from the Draft Scheme for the reasons outlined below:

- The incorporation of attenuation ponds in the drainage design for the overall scheme to reduce the risk of flood events and the proposed requirement for the inclusion of SUDs features for all proposed development within the SDZ scheme area, will limit the discharge of waters from the site. This will serve to prevent flood events and reduce the risk of contamination of local watercourses and drainage networks
- The known potential for waters in Dublin Bay to rapidly mix and assimilate pollutants (Wilson & Jackson, 2011).
- Irish Water intends to upgrade the wastewater treatment infrastructure at Ringsend to facilitate the continued growth of the region.<sup>5</sup> The provision of sufficient capacity should be available at Ringsend WWTP to process any additional waste generated by new development in the Clonburris SDZ area.
- In the absence of any upgrade, there was no proven link between WWTW discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate nitrogen signatures (Wilson and Jackson, 2011). Also that enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005) (Dowly & Bedri 2007).
- Whilst occasional use of the lands by lapwing has been recorded, due to the general absence of optimum habitat for QI species, the existing high levels of disturbance in surrounding lands and the low levels of usage for such bird species within the subject lands, the impact of the loss of areas for these birds is not deemed to be significant.

For these reasons, it is the professional opinion of the authors of this report that the draft Planning Scheme for Clonburris SDZ does not require a full Stage 2 Appropriate Assessment.

Notwithstanding this conclusion, which is based on the assessment of the Draft Scheme in its own right, it is important to acknowledge the "protective" policies and objectives contained within the South Dublin County Development Plan (2016-2022). These are reproduced in Appendix B. They are regarded as strategic policies and objectives for the County and the draft Planning Scheme is consistent with these policies and objectives. The draft Planning Scheme sets out principles to protect ecological networks and resources, to help to prevent any adverse effects on European sites (and their supporting networks) which may arise as a result of implementing the Clonburris SDZ.

<sup>&</sup>lt;sup>5</sup> It is intended that an application for planning permission will be made to An Bord Pleanála in early 2018.





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#### Appendix A

Table A1 Ecological Interests of National sites within 5km of the Draft Scheme's boundary.

Ecological Interests of	of National sites within 5km of the Draft Scheme's boundary
Site Name:	Liffey Valley pNHA
Site Code:	000128
Ecological Interest:  Source: (NPWS, 2009) Site Sy.	<ul> <li>Part of the Liffey Valley Amenity Areas Order 1990.</li> <li>Important site because of the diversity of habitats within the site, ranging from aquatic to terrestrial.</li> <li>A number of rare and threatened plant species have been recorded from the site- green figwort (Scrophularia umbrosa) (Irish Red Data Book), hairy St. John's-wort (Hypericum hirsutum) (Flora Protection Order 1987) and yellow archangel (Lamiastrum galeobdolon) (Irish Red Data Book).</li> </ul>
Site Name:	Royal Canal pNHA
Site Code:	002103
	<ul> <li>The ecological value of the canal lies more in the diversity of species it supports along its linear habitats than in the presence of rare species.</li> <li>It crosses through agricultural land and therefore provides a refuge for species threatened by modern farming methods.</li> <li>Evidence of otter (<i>Lutra lutra</i>), an Annex II species, is often seen along the towpath.</li> <li>The rare and legally protected opposite-leaved pondweed (<i>Groenlandia densa</i>) (Flora Protection Order 1987) is present at one site in Dublin along the canal.</li> <li>Tolypella intricata (a stonewort listed in the Red Data Book as vulnerable) is also in the Royal Canal in Dublin, the only site in Ireland where it is now found.</li> </ul>
Site Name:	Grand Canal pNHA
Site Code:	002104
Ecological Interest:	<ul> <li>The ecological value of the canal lies more in the diversity of species it supports along its linear habitats than in the presence of rare species.</li> <li>It crosses through agricultural land and therefore provides a refuge for species threatened by modern farming methods.</li> <li>The rare and legally protected opposite-leaved pondweed (<i>Groenlandia densa</i>) (Flora Protection Order 1987) is present at a number of sites in the eastern section of the Main Line, between Lowtown and Ringsend Basin in Dublin.</li> <li>Smooth newt (<i>Lissotriton vulgaris</i>) breeds in the ponds on the bank at Gollierstown in Co. Dublin.</li> <li>Evidence of otter (<i>Lutra lutra</i>), an Annex II species, is often seen along the towpath.</li> </ul>



Source: (NPWS, 2009) Site Synopsis for the Grand Canal pNHA [002104] (09/12/2009)		
Site Name:	Rye Water Valley pNHA	
Site Code:	001398	
Ecological Interest:	<ul> <li>The conservation importance of the site lies in the presence of several rare and threatened plant and animal species and the presence of petrifying springs, a habitat type listed on Annex I of the E.U. Habitats Directive.</li> <li>Protected and threatened species found here include salmon (Salmo salar), white-clawed crayfish (Austropotamobius pallipes), narrow-mouthed whorl snail (Vertigo angustior) and Desmoulin's whorl snail (Vertigo moulinsiana), hairy St. John's-wort (Hypericum hirsutum), green figwort (Scrophularia umbrosa), blue fleabane (Erigeron acer) and kingfisher (Alcedo atthis).</li> </ul>	
Source: (NPWS, 2013) Site Sy	nopsis for the Rye Water Valley/ Carton SAC [001398] (11/10/2013)	



#### Table A2 Threats and Pressures on each European Site

Site Name:	South Dublin Bay SAC
Site Name:	South Dublin Bay SAC
Site Code:	000210
Threats/Pressures:	<ul> <li>Accumulation of organic material</li> <li>Eutrophication (natural)</li> <li>Reclamation of land from sea, estuary or marsh</li> <li>Nautical Sports</li> <li>Walking, horse-riding and non-motorised vehicles</li> <li>Bait Digging/Collection</li> <li>Urbanised areas, human habitation</li> <li>Industrial or commercial areas</li> <li>Discharges</li> <li>Roads and motorways</li> </ul>
Source: (NPWS, undated) NA	TURA 2000- Standard Data Form for South Dublin Bay SAC [000210]
Site Name:	North Dublin Bay SAC
Site Code:	000206
Threats/Pressures:  Source: (NPWS, undated) NA	<ul> <li>Leisure Fishing</li> <li>Nautical Sports</li> <li>Bait Digging/Collection</li> <li>Invasive non-native species</li> <li>Walking, horse-riding and non-motorised vehicles</li> <li>Golf course</li> <li>Urbanised areas, human habitation</li> <li>Industrial or commercial areas</li> <li>Discharges</li> <li>Grazing</li> <li>TURA 2000- Standard Data Form for North Dublin Bay SAC [000206]</li> </ul>
Site Name:	South Dublin Bay and River Tolka Estuary SPA
Site Code:	004024
Threats/Pressures:  Source: (NPWS, undated) NA	<ul> <li>Nautical Sports</li> <li>Bait Digging/Collection</li> <li>Eutrophication (natural)</li> <li>Walking, horse-riding and non-motorised vehicles</li> <li>Leisure Fishing</li> <li>Urbanised areas, human habitation</li> <li>Reclamation of land from sea, estuary or marsh</li> <li>Industrial or commercial areas</li> <li>Discharges</li> <li>Roads and motorways</li> </ul> TURA 2000- Standard Data Form for South Dublin Bay and River Tolka Estuary SPA [004024]
Site Name:	North Bull Island SPA
Site Code:	004006
Threats/Pressures:	<ul><li>Industrial or commercial areas</li><li>Discharges</li></ul>



	■ Bait Digging/Collection			
	<ul><li>Shipping Lanes</li></ul>			
	<ul><li>Nautical Sports</li></ul>			
	<ul><li>Golf Course</li></ul>			
	<ul><li>Continuous urbanisation</li></ul>			
	<ul> <li>Other patterns of habitation</li> </ul>			
	<ul> <li>Walking, horse-riding and non-motorised vehicles</li> </ul>			
	<ul><li>Bridge, viaduct</li></ul>			
-	<ul><li>Roads and Motorways</li></ul>			
Source: (NPWS, undated) NATURA 2000- Standard Data Form for North Bull Island [004006]				
Habitat Specific Threats/Pressures:				
Habitat Name:	Mudflats and sandflats not covered by seawater at low tide [1140]			
Threats/Pressures:	<ul> <li>Pollution to surface waters (limnic and terrestrial, marine and</li> </ul>			
	brackish)			
	<ul> <li>Fishing and harvesting aquatic resources</li> </ul>			
	Bottom culture			
	<ul><li>Hand collection</li></ul>			
	<ul><li>Estuarine and coastal dredging</li></ul>			
	<ul><li>Nautical sports</li></ul>			
	<ul> <li>Other outdoor sports and leisure activities</li> </ul>			
<b>Source:</b> (NPWS, 2013) The Status of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2				
Habitat Specific Threats	Habitat Specific Threats/Pressures:			
Habitat Name:	Annual vegetation of drift lines [1210]			
Threats/Pressures:	Agricultural activities			
	<ul><li>Removal of beach materials</li></ul>			
	<ul> <li>Piers/ tourist harbours or recreational piers</li> </ul>			
	<ul><li>Walking, horse-riding and non-motorised vehicles</li></ul>			
	<ul> <li>Off-road motorised driving</li> </ul>			
	<ul> <li>Other human intrusions and disturbances</li> </ul>			
	<ul><li>Trampling, overuse</li></ul>			
	<ul> <li>Intensive maintenance of public parks/ cleaning of beaches</li> </ul>			
	<ul> <li>Garbage and solid waste</li> </ul>			
	<ul> <li>Sea defence or coast protection works, tidal barrages</li> </ul>			
	<ul> <li>Reduction or loss of specific habitat features</li> </ul>			
	Changes in abiotic conditions			
<b>Source:</b> (NPWS, 2013) The Sto	atus of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2			
Habitat Specific Threats	/Pressures:			
Habitat Name:	Embryonic shifting dunes [2110]			
Threats/Pressures:	<ul><li>Intensive grazing</li></ul>			
	<ul><li>Sand and gravel extraction</li></ul>			
	<ul><li>Paths, tracks, cycling tracks</li></ul>			
	<ul> <li>Disposal of household/recreational facility waste</li> </ul>			
	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> </ul>			
	<ul> <li>Sport and leisure structures</li> </ul>			
	<ul> <li>Trampling overuse</li> </ul>			
	<ul> <li>Intensive maintenance of public parks/ cleaning of beaches</li> </ul>			
	<ul><li>Fences, fencing</li><li>Invasive non-native species</li></ul>			
	<ul> <li>Invasive non-native species</li> </ul>			



	Estuarine and coastal dredging		
	<ul> <li>Sea defence or coastal protection works, tidal barrages</li> </ul>		
	<ul><li>Erosion</li></ul>		
	<ul> <li>Species composition change (succession)</li> </ul>		
• (1)	Changes in abiotic conditions		
<b>Source:</b> (NPWS, 2013) The S	tatus of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2		
Habitat Specific Threat	s/Pressures:		
Habitat Name:	Salicornia and other annuals colonising mud and sand [1310]		
Threats/Pressures:	<ul> <li>Invasive Non-native species</li> </ul>		
	<ul><li>Erosion</li></ul>		
	<ul><li>Silting up</li></ul>		
	<ul> <li>Intensive cattle grazing</li> </ul>		
	<ul> <li>Diffuse pollution to surface waters due to household sewage</li> </ul>		
	and waste waters		
	<ul> <li>Reclamation of land from sea, estuary or marsh</li> </ul>		
	<ul> <li>Dykes, embankments, artificial beaches, general</li> </ul>		
	<ul> <li>Walking, horse-riding and non-motorised vehicles</li> </ul>		
	<ul> <li>Intensive sheep grazing</li> </ul>		
	<ul> <li>Changes in abiotic conditions</li> </ul>		
	<ul> <li>Species composition change (succession)</li> </ul>		
Source: (NPWS, 2013) The Status of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2			
Habitat Specific Threat	s/Pressures:		
Habitat Name:	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330		
Threats/Pressures:	<ul> <li>Intensive cattle grazing</li> </ul>		
·	<ul> <li>Intensive sheep grazing</li> </ul>		
	<ul> <li>Paths, tracks, cycling tracks</li> </ul>		
	<ul> <li>Disposal of household/recreational facility waste</li> </ul>		
	<ul> <li>Disposal of industrial waste</li> </ul>		
	<ul> <li>Reclamation of land from sea, estuary or marsh</li> </ul>		
	<ul><li>Polderisation</li></ul>		
	<ul> <li>Modification of hydrographic functioning, general</li> </ul>		
	■ Erosion		
	<ul> <li>Invasive non-native species</li> </ul>		
Source: (NPWS, 2013) The S	tatus of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2		
Habitat Specific Threat	s/Pressures:		
Habitat Name:	Mediterranean salt meadows (Juncetalia maritimi) [1410]		
Threats/Pressures:	<ul> <li>Intensive cattle grazing</li> </ul>		
	<ul><li>Paths, tracks, cycling tracks</li></ul>		
	<ul><li>Erosion</li></ul>		
	<ul> <li>Modification of hydrographic functioning, general</li> </ul>		
	<ul> <li>Infilling of ditches, dykes, ponds, pools, marshes or pits</li> </ul>		
Source: (NPWS, 2013) The S	tatus of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2		
Habitat Specific Threat	s/Pressures:		
Habitat Name:	Shifting dunes along the shoreline with Ammophila arenaria (white		
	dunes) [2120]		



Threats/Pressures:  Source: (NPWS, 2013) The S	<ul> <li>Intensive grazing</li> <li>Sand and gravel extraction</li> <li>Paths, tracks, cycling tracks</li> <li>Disposal of household/recreational facility waste</li> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Sport and leisure structures</li> <li>Trampling overuse</li> <li>Intensive maintenance of public parks/ cleaning of beaches</li> <li>Fences, fencing</li> <li>Invasive non-native species</li> <li>Estuarine and coastal dredging</li> <li>Sea defence or coastal protection works, tidal barrages</li> <li>Erosion</li> <li>Species composition change (succession)</li> <li>Changes in abiotic conditions</li> </ul>
Habitat Specific Threat	s/Pressures:
Habitat Name:	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
Threats/Pressures:  Source: (NPWS, 2013) The S  Habitat Specific Threat	<ul> <li>Agricultural intensification</li> <li>Abandonment of pastoral systems, lack of grazing</li> <li>Forest and plantation management and use</li> <li>Trampling, overuse</li> <li>Garbage and solid waste</li> <li>Invasive non-native species</li> <li>Sea defence or coastal protection works, tidal barrages</li> <li>Species composition change (succession)</li> <li>Intensive grazing</li> <li>Sand and gravel extraction</li> <li>Roads, paths and railroads</li> <li>Discontinuous urbanisation</li> <li>Disposal of household/ recreational facility waste</li> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Sport and leisure structures</li> <li>Erosion</li> <li>Changes in abiotic conditions</li> </ul>
•	
Habitat Name:	Humid dune slacks [2190]
Threats/Pressures:	<ul> <li>Agricultural intensification</li> <li>Intensive grazing</li> <li>Abandonment of pastoral systems, lack of grazing</li> <li>Fertilisation</li> <li>Restructuring agricultural land holding</li> <li>Forest and plantation management and use</li> <li>Sand and gravel extraction</li> <li>Roads, paths and railroads</li> <li>Discontinuous urbanisation</li> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Sport and leisure structures</li> <li>Trampling, overuse</li> <li>Pollution to groundwater (point sources and diffuse sources)</li> </ul>



Source: (NPWS, 2013) The Sta	<ul> <li>Flooding modifications</li> <li>Water abstractions from groundwater</li> <li>Sea defence or coast protection works, tidal barrages</li> <li>Abiotic (slow) natural processes</li> <li>Changes in abiotic conditions</li> </ul> atus of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2		
Species Specific Threats,	/Pressures:		
Species Name:	Petalophyllum ralfsii (Petalwort) [1395]		
Threats/Pressures:	No known threats or pressures		
	ntus of EU Protected Habitats and Species in Ireland: Habitat Assessments; Volume 2		
Species Specific Threats,			
Species Name:	Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]		
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Utility and service lines</li> <li>Renewable abiotic energy use</li> <li>Modification of cultivation practices</li> <li>Agricultural activities not referred to above</li> <li>Marine and freshwater aquaculture</li> <li>Other human intrusions and disturbances</li> <li>Marine water pollution</li> <li>Other forms of pollution</li> <li>Invasive non-native species</li> <li>Other ecosystem modifications</li> </ul>		
Source: Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run">http://cdr.eionet.europa.eu/Converters/run</a> conversion?file=ie/eu/art12/envuvesya/IE birds reports-14328-144944.xml&conv=343&source=remote#A206_B			
Species Specific Threats/Pressures:			
Species Name:	Oystercatcher (Haematopus ostralegus) [A130]		
1	<ul> <li>Fishing and harvesting aquatic resources</li> <li>Human induced changes in hydraulic conditions</li> <li>Marine water pollution</li> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> </ul>		
http://cdr.eionet.europa.eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports-14328-144944.xml&conv=343&source=remote#A206_B			
Species Specific Threats,	/Pressures:		
Species Name:	Ringed Plover (Charadrius hiaticula) [A137]		
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> <li>Fishing and harvesting aquatic resources</li> <li>Marine water pollution</li> <li>Human induced changes in hydraulic conditions</li> </ul>		



<ul> <li>Other ecosystem modifications</li> </ul>

Changes in abiotic conditions

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/lE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B">http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/lE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**

Species Name:	Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> <li>Fishing and harvesting aquatic resources</li> <li>Marine water pollution</li> <li>Human induced changes in hydraulic conditions</li> <li>Other ecosystem modifications</li> <li>Changes in abiotic conditions</li> </ul>

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**

Species Name:	Knot (Calidris canutus) [A143]	
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> <li>Fishing and harvesting aquatic resources</li> <li>Marine water pollution</li> <li>Human induced changes in hydraulic conditions</li> <li>Other ecosystem modifications</li> <li>Changes in abiotic conditions</li> </ul>	

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/lE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B">http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/lE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**

Species Name:  Sanderling (Calidris alba) [A144]  Threats/Pressures:  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Changes in abiotic conditions			
<ul> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> <li>Marine water pollution</li> </ul>	Species Name:	Sanderling (Calidris alba) [A144]	
	Threats/Pressures:	<ul> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> <li>Marine water pollution</li> </ul>	

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B">http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**

Species Name:	Dunlin ( <i>Calidris alpina</i> ) [A149]
Threats/Pressures:	Modification of cultivation practices
	<ul> <li>Mining and quarrying</li> </ul>
	<ul> <li>Mowing/cutting of grassland</li> </ul>



■ Forest planting on open ground	
■ Fertilisation	
<ul> <li>Fire and fire suppression</li> </ul>	
■ Grazing	
<ul> <li>Interspecific faunal relations</li> </ul>	
<ul> <li>Invasive non-native species</li> </ul>	
<ul> <li>Changes in biotic conditions</li> </ul>	

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B">http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**

Species Name:	Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]		
Species Name.	But tailed Godwit (Limbsa lappointa) [A157]		
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> </ul>		
	<ul> <li>Marine and freshwater aquaculture</li> </ul>		
	<ul> <li>Renewable abiotic energy use</li> </ul>		
	<ul> <li>Fishing and harvesting aquatic resources</li> </ul>		
	<ul> <li>Marine water pollution</li> </ul>		
	<ul> <li>Human induced changes in hydraulic conditions</li> </ul>		
	<ul> <li>Other ecosystem modifications</li> </ul>		
	<ul> <li>Changes in abiotic conditions</li> </ul>		

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B">http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**

Species Name:	Redshank ( <i>Tringa totanus</i> ) [A162]	
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> <li>Marine and freshwater aquaculture</li> <li>Renewable abiotic energy use</li> <li>Fishing and harvesting aquatic resources</li> <li>Marine water pollution</li> <li>Human induced changes in hydraulic conditions</li> <li>Other ecosystem modifications</li> <li>Changes in abiotic conditions</li> </ul>	

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run">http://cdr.eionet.europa.eu/Converters/run</a> conversion?file=ie/eu/art12/envuvesya/IE birds reports-14328-144944.xml&conv=343&source=remote#A206 B

#### **Species Specific Threats/Pressures:**

Species Name:	Black-headed Gull (Chroicocephalus ridibundus) [A179]		
Threats/Pressures:	<ul> <li>Renewable abiotic energy use</li> </ul>		
	<ul> <li>Fishing and harvesting aquatic resources</li> </ul>		
	<ul><li>Marine water pollution</li></ul>		
	<ul> <li>Other ecosystem modifications</li> </ul>		

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

#### **Species Specific Threats/Pressures:**



Species Name:	Roseate Tern (Sterna dougallii) [A192]		
Threats/Pressures:	<ul> <li>Renewable abiotic energy use</li> </ul>		
<ul> <li>Outdoor sports and leisure activities, recreational a</li> </ul>			
<ul> <li>Roads, paths and railroads</li> </ul>			
	ies' status and trends reporting format for the period 2008-2012. Available at:		
	eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports- e343&source=remote#A206_B		
14328-144944.XIIII&COIIV=	343&SOUICE=TETHOLE#AZOO_B		
Species Specific Threat	s/Pressures:		
Species Name:	Common Tern (Sterna hirundo) [A193]		
Threats/Pressures:	s: Renewable abiotic energy use		
	<ul> <li>Invasive non-native species</li> </ul>		
	Shipping lanes, ports, marine constructions		
	ies' status and trends reporting format for the period 2008-2012. Available at:		
	eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports- e343&source=remote#A206_B		
14526-144944.XIIIIQCOIIV-	345&SOUICE-TETHOLE#AZOO_B		
Species Specific Threat	s/Pressures:		
Species Name:	Arctic Tern (Sterna paradisaea) [A194]		
Threats/Pressures:	<ul> <li>Renewable abiotic energy use</li> </ul>		
	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> </ul>		
	<ul> <li>Roads, paths and railroads</li> </ul>		
	ies' status and trends reporting format for the period 2008-2012. Available at:		
	eu/Converters/run conversion?file=ie/eu/art12/envuvesya/IE birds reports-		
14328-144944.xml&conv=	343&source=remote#A206_B		
Species Specific Threat	s/Pressures:		
Species Name:	Shelduck ( <i>Tadorna tadorna</i> ) [A048]		
Threats/Pressures:	<ul> <li>No known threats or pressures</li> </ul>		
Source: Annex2: Bird spec	ies' status and trends reporting format for the period 2008-2012. Available at:		
http://cdr.eionet.europa.e	eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports-		
14328-144944.xml&conv=	343&source=remote#A206_B		
Species Specific Threat	s/Pressures:		
Species Name:	Teal (Anas crecca) [A052]		
Threats/Pressures:	No known threats or pressures		
Source: Annex2: Bird spec	ies' status and trends reporting format for the period 2008-2012. Available at:		
•	eu/Converters/run conversion?file=ie/eu/art12/envuvesya/IE birds reports-		
	343&source=remote#A206_B		
Species Specific Threat	s/Pressures:		
Species Name:	Pintail (Anas acuta) [A054]		
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> </ul>		
<ul> <li>Hunting and collection of wild animals (terrestrial)</li> </ul>			
	<ul> <li>Hunting and collection of wild animals (terrestrial)</li> </ul>		
	<ul><li>Hunting and collection of wild animals (terrestrial)</li><li>Marine and freshwater aquaculture</li></ul>		



	<ul> <li>Pollution to surface waters (limnic &amp; terrestrial, marine &amp;</li> </ul>		
	brackish)		
	<ul> <li>Marine water pollution</li> </ul>		
	<ul> <li>Human induced changes in hydraulic conditions</li> </ul>		
	Other forms of pollution		
	cies' status and trends reporting format for the period 2008-2012. Available at:		
	<u>eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=</u> 343&source=remote#A206_B		
14326-144344.XIIIIQCUIIV	-343&30dice-remote#A200 b		
Species Specific Threa	ts/Pressures:		
Species Name:	Shoveler (Anas clypeata) [A056]		
Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, recreational activities</li> </ul>		
	<ul> <li>Hunting and collection of wild animals (terrestrial)</li> </ul>		
	<ul> <li>Renewable abiotic energy use</li> </ul>		
	<ul> <li>Pollution to surface waters (limnic &amp; terrestrial, marine &amp;</li> </ul>		
	brackish)		
	<ul> <li>Marine water pollution</li> </ul>		
	<ul> <li>Other forms of pollution</li> </ul>		
Source: Annex2: Bird spe	cies' status and trends reporting format for the period 2008-2012. Available at:		
http://cdr.eionet.europa.	eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports-		
<u>14328-144944.xml&amp;conv</u>	=343&source=remote#A206_B		
Cuasias Cuasifis Thuas	to /Duncouver		
Species Specific Threa	ts/Pressures:		
Species Specific Threa	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]		
	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]		
Species Name:			
Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  • Outdoor sports and leisure activities, recreational activities		
Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use		
Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution		
Species Name: Threats/Pressures:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices		
Species Name: Threats/Pressures: Source: Annex2: Bird species	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at:		
Species Name: Threats/Pressures:  Source: Annex2: Bird specient: Annex2: Bird specient: Bird spe	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at:  eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at:  eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at:  eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B		
Species Name: Threats/Pressures:  Source: Annex2: Bird specient: Annex2: Bird specient: Bird spe	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at:  eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]  Marine and freshwater aquaculture		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  Cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use Fishing and harvesting aquatic resources		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities  Marine and freshwater aquaculture  Renewable abiotic energy use  Marine water pollution  Modifications of cultivation practices  Cies' status and trends reporting format for the period 2008-2012. Available at:  eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]  Marine and freshwater aquaculture  Renewable abiotic energy use  Fishing and harvesting aquatic resources  Outdoor sports and leisure activities, recreational activities		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  Cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  Its/Pressures:  Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use Fishing and harvesting aquatic resources Outdoor sports and leisure activities, recreational activities Marine water pollution		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa.14328-144944.xml&conv Species Specific Threat Species Name:	Golden Plover (Pluvialis apricaria) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  Cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit (Limosa limosa) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use Fishing and harvesting aquatic resources Outdoor sports and leisure activities, recreational activities Marine water pollution Human induced changes in hydraulic conditions		
Species Name: Threats/Pressures:  Source: Annex2: Bird spechttp://cdr.eionet.europa 14328-144944.xml&conv Species Specific Threat Species Name: Threats/Pressures:	Golden Plover (Pluvialis apricaria) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  ts/Pressures:  Black-tailed Godwit (Limosa limosa) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use Fishing and harvesting aquatic resources Outdoor sports and leisure activities, recreational activities Marine water pollution Human induced changes in hydraulic conditions Other ecosystem modifications		
Species Name: Threats/Pressures:  Source: Annex2: Bird specienttp://cdr.eionet.europa. 14328-144944.xml&conv Species Specific Threat Species Name: Threats/Pressures:	Golden Plover (Pluvialis apricaria) [A140]  Outdoor sports and leisure activities, recreational activities Marine and freshwater aquaculture Renewable abiotic energy use Marine water pollution Modifications of cultivation practices  Cies' status and trends reporting format for the period 2008-2012. Available at: eu/Converters/run_conversion?file=ie/eu/art12/envuvesya/IE_birds_reports=343&source=remote#A206_B  Its/Pressures:  Black-tailed Godwit (Limosa limosa) [A156]  Marine and freshwater aquaculture Renewable abiotic energy use Fishing and harvesting aquatic resources Outdoor sports and leisure activities, recreational activities Marine water pollution Human induced changes in hydraulic conditions Other ecosystem modifications Modification of cultivation practices		

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Curlew (Numenius arquata) [A160]

**Species Name:** 



Threats/Pressures:	<ul> <li>Outdoor sports and leisure activities, red</li> </ul>	Outdoor sports and leisure activities, recreational activities	
	<ul> <li>Renewable abiotic energy use</li> </ul>		
	<ul> <li>Marine and freshwater aquaculture</li> </ul>		
	Fishing and harvesting aquatic resources		
	<ul> <li>Marine water pollution</li> </ul>		
	<ul> <li>Human induced changes in hydraulic co</li> </ul>	nditions	
	<ul> <li>Other ecosystem modifications</li> </ul>		

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run\_conversion?file=ie/eu/art12/envuvesya/IE\_birds\_reports-14328-144944.xml&conv=343&source=remote#A206\_B</a>

# Species Specific Threats/Pressures: Turnstone (Arenaria interpres) [A169] Threats/Pressures: Outdoor sports and leisure activities, recreational activities Renewable abiotic energy use Marine and freshwater aquaculture Marine water pollution Other ecosystem modifications Changes in abiotic conditions

**Source:** Annex2: Bird species' status and trends reporting format for the period 2008-2012. Available at: <a href="http://cdr.eionet.europa.eu/Converters/run">http://cdr.eionet.europa.eu/Converters/run</a> conversion?file=ie/eu/art12/envuvesya/IE birds reports-14328-144944.xml&conv=343&source=remote#A206\_B



#### Appendix B

## POLICIES & OBJECTIVES CONTAINED WITHIN THE SOUTH DUBLIN COUNTY DEVELOPMENT PLAN (2016-2022)

#### Heritage, Conservation and Landscapes (HCL)

#### Policy 12- Natura 2000 Sites:

"It is the policy of the Council to support the conservation and improvement of Natura 2000 Sites and to protect the Natura 2000 network from any plans and projects that are likely to have a significant effect on the coherence or integrity of a Natura 2000 Site".

<u>HCL12 Objective 1:</u> To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.

HCL12 Objective 2: To ensure that projects that give rise to significant direct, indirect or secondary impacts on Natura 2000 sites, either individually or in combination with other plans or projects, will not be permitted unless the following is robustly demonstrated in accordance with Article 6(4) of the Habitats Directive and S.177AA of the Planning and Development Act (2000 – 2010) or any superseding legislation:

- 1. There are no less damaging alternative solutions available; and
- 2. There are imperative reasons of overriding public interest (as defined in the Habitats Directive) requiring the project to proceed; and
- 3. Adequate compensatory measures have been identified that can be put in place.

#### <u>Infrastructure & Environmental Quality (IE)</u>

#### Policy 1- Water & Wastewater:

"It is the policy of the Council to work in conjunction with Irish Water to protect existing water and drainage infrastructure and to promote investment in the water and drainage network to support environmental protection and facilitate the sustainable growth of the County".

<u>IE1 Objective 4:</u> To promote and support the implementation of the Greater Dublin Strategic Drainage Study, Dublin Region Local Authorities (2005) to include the upgrade of Ringsend Sewerage Treatment Works and the construction of a new treatment plant at Clonshaugh and all associated works to increase drainage capacity throughout the Dublin Region.

#### **Policy 2- Surface Water & Groundwater:**

"It is the policy of the Council to manage surface water and to protect and enhance ground and surface water quality to meet the requirements of the EU Water Framework Directive".

Appendix C

PD/86 /17

### COMHAIRLE CHONTAE ATHA CLIATH THEAS SOUTH DUBLIN COUNTY COUNCIL

#### Record of Executive Business and Chief Executive's Orders

Clonburris-Balgaddy Strategic Development Zone

Appropriate Assessment (AA) Screening Determination

Planning and Development Act 2000-2016

Planning and Development Regulations 2001-2017

Pursuant to the requirements of the above, South Dublin County Council has prepared a draft Planning Scheme (the draft Scheme) for the Clonburris-Balgaddy Strategic Development Zone.

Having regard to Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Acts 2000 (as amended), the guidance contained in the Department of Housing Planning, Community and Local Governments "Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities" (2010) and following an examination, analysis and evaluation of the objective information provided in the "Clonburris SDZ AA Screening Report" prepared by Scott Cawley Ltd, South Dublin County Council, as the Competent Authority determines that the draft Scheme, individually and in combination with other plans and projects, does not require an AA as it has been concluded that it is possible to rule out likely significant effects on all European sites. The principal reasons supporting this determination include:

- The incorporation of attenuation ponds in the drainage design for the overall scheme to reduce the risk of flood events and the proposed requirement for the inclusion of SUDs features for all proposed development within the SDZ scheme area, will limit the discharge of waters from the site. This will serve to prevent flood events and reduce the risk of contamination of local watercourses and drainage networks
- The known potential for waters in Dublin Bay to rapidly mix and assimilate pollutants.
- Irish Water intends to upgrade the wastewater treatment infrastructure at Ringsend to facilitate the continued growth of the region.<sup>1</sup> The provision of sufficient capacity should be available at Ringsend WWTP to process any additional waste generated by new development in the Clonburris SDZ area.
- In the absence of any upgrade, there was no proven link between WWTW discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate nitrogen signatures (Wilson and Jackson, 2011). Also that enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005) (Dowly & Bedri 2007).

 $<sup>^{</sup>m I}$  It is intended that an application for planning permission will be made to An Bord Pleanála in early 2018.



Whilst occasional use of the lands by lapwing has been recorded, due to the
general absence of optimum habitat for QI species, the existing high levels of
disturbance in surrounding lands and the low levels of usage for such bird species
within the subject lands, the impact of the loss of areas for these birds is not
deemed to be significant.

Therefore I recommend that a Stage 2 Appropriate Assessment will not be required to inform the draft Scheme either alone or in combination with other plans & projects, with respect to any Natura 2000 site and its conservation objectives.

Senior Planner

ORDER:

That South Dublin County Council, as the Competent Authority having considering the AA Screening Report prepared by Scott Cawley Ltd makes a determination that a Stage 2 Appropriate Assessment will not be required to inform the draft Planning Scheme for the Clonburris-Balgaddy Strategic Development Zone either alone or in combination with other plans or projects, with respect to any Natura 2000 site and its conservation objectives.

Date

Director of Land Use, Planning & Transportation

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