



NATURA IMPACT REPORT

SOUTH DUBLIN COUNTY COUNCIL
**DRAFT CLIMATE CHANGE
ACTION PLAN**

2019-2024



Natura Impact Report

South Dublin County Council

Climate Change Action Plan

2019 – 2024

29th January 2019

South Dublin County Council

Climate Change Action Plan 2019 - 2024

Natura Impact Report

| Document Stage | Document Version | Prepared by |
|------------------|------------------|-------------------------|
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This report has been prepared by DEC Ltd with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

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1.0 INTRODUCTION

DEC Ltd have been appointed by South Dublin County Council to undertake a Natura Impact Report (NIR) of their proposed Climate Change Action Plan (CCAP) 2019 - 2024. This NIR has been completed with respect to the requirements outlined in Article 6(3) of the EU Habitats Directive and Section 177U of the Planning and Development Act and has been prepared in order to facilitate South Dublin County Council's requirement for completing an Appropriate Assessment of the Plan.

The proposed CCAP is not directly connected with or necessary for the management of any European Site and hence the requirements of Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Act 2000, apply. Section 177U(1) of the Planning and Development Act 2000 requires that a screening for appropriate assessment of, inter alia, a land use plan be carried out by a competent authority to assess, in light of best scientific knowledge, whether the proposed Plan, individually or in combination with another plan or project is likely to have a significant effect on a European site. A Statement in support of Screening for Appropriate Assessment has been completed and assessed the potential for the CCAP to result in likely significant effects to European Sites. A summary of the screening is provided in the following sub-section.

1.1 PROFESSIONAL COMPETENCIES OF LEAD AUTHOR

Pat Doherty MCIEEM was the lead author of this Natura Impact Report. Pat has 19 years professional practice as an ecologist. He contributes to Biodiversity, Flora and Fauna elements of SEA and has authored a wide range of Screening Statements in Support of Appropriate Assessments, and Natura Impact Statements/Reports. These include county and local area plans, recreational and tourism strategies, greenways, planning schemes and wind and renewable energy strategies. Pat's qualifications include MSc in Applied Environmental Science (Ecology), University College Dublin, 2003; BSc (Honours) in Environmental Earth Science, University of Wales, Aberystwyth, 2000; ongoing CDP including Habitat Assessment (NVC) and flora and fauna identification through the Institute of Ecology and Environmental Management (IEEM).

2.0 SUMMARY OF THE SCREENING FOR APPROPRIATE ASSESSMENT

A Statement in support of Screening for Appropriate Assessment has been completed for the proposed CCAP. This Screening Statement is provided as Appendix 1 to this NIR. This Screening was completed in line with the requirements of Article 6(3) of the EU Habitats Directive, as transposed into Irish law in Part XAB of the Planning and Development Act 2000 (as amended) in relation to land use planning.

The Screening represents the first stage of the Article 6(3) Habitats Directive assessment process and was undertaken to identify whether the plan has the potential to result in likely significant effects to European Sites. The first step of the Screening was to assess all actions proposed by the CCAP for their potential to result in likely significant effects to European Sites. A total of 4 actions were identified as having the potential to result in likely significant effects to European Sites. These actions are listed in full in Table 6.1 of this NIR.

The next step was to identify all European Sites occurring within and surrounding the footprint of South Dublin County Council's administrative area. All lands occurring within the South Dublin County Council's administrative area represent the Plan area and all European Sites occurring within this area and within a 15km buffer distance of the Plan area were screened for likely significant effects (the extent of the Plan area and the location of these sites with respect to the Plan area are shown on Figure 1.1 to Figure 1.3). No European Sites at a distance greater than 15km were considered during the screening as no source-pathway-receptor relationship occurs between lands subject to the Plan and European Sites at such distance from the Plan area. The European Sites occurring within 15km of the Plan area represented a preliminary list of European Sites to be screened for likely significant effects. A total of 25 European Sites were identified in this preliminary list. The next step in the screening was to identify which European Sites occur within the zone of influence of the plan and could be at risk of likely significant effects by the 4 actions listed in Table 6.1. A total of 6 European Sites, which are as follows:

Glenasmole Valley SAC;

Wicklow Mountains SAC;

Wicklow Mountains SPA;

South Dublin Bay River Tolka Estuary SPA;

North Dublin Bay SAC; and

North Bull Island SPA.

were identified as occurring within the zone of influence of the Plan and were potentially at risk of likely significant effects due the potential for negative land use effects to result from some or all of the 6 actions listed in Table 6.1 of this report.

Accordingly, this NIR has been prepared to inform the Appropriate Assessment of the Plan's potential to result in likely significant effects to these 6 European Sites and their qualifying features of interest occurring within the zone of influence of the plan.

The remainder of this NIR is structured as follows:

Section 3: Assessment Method

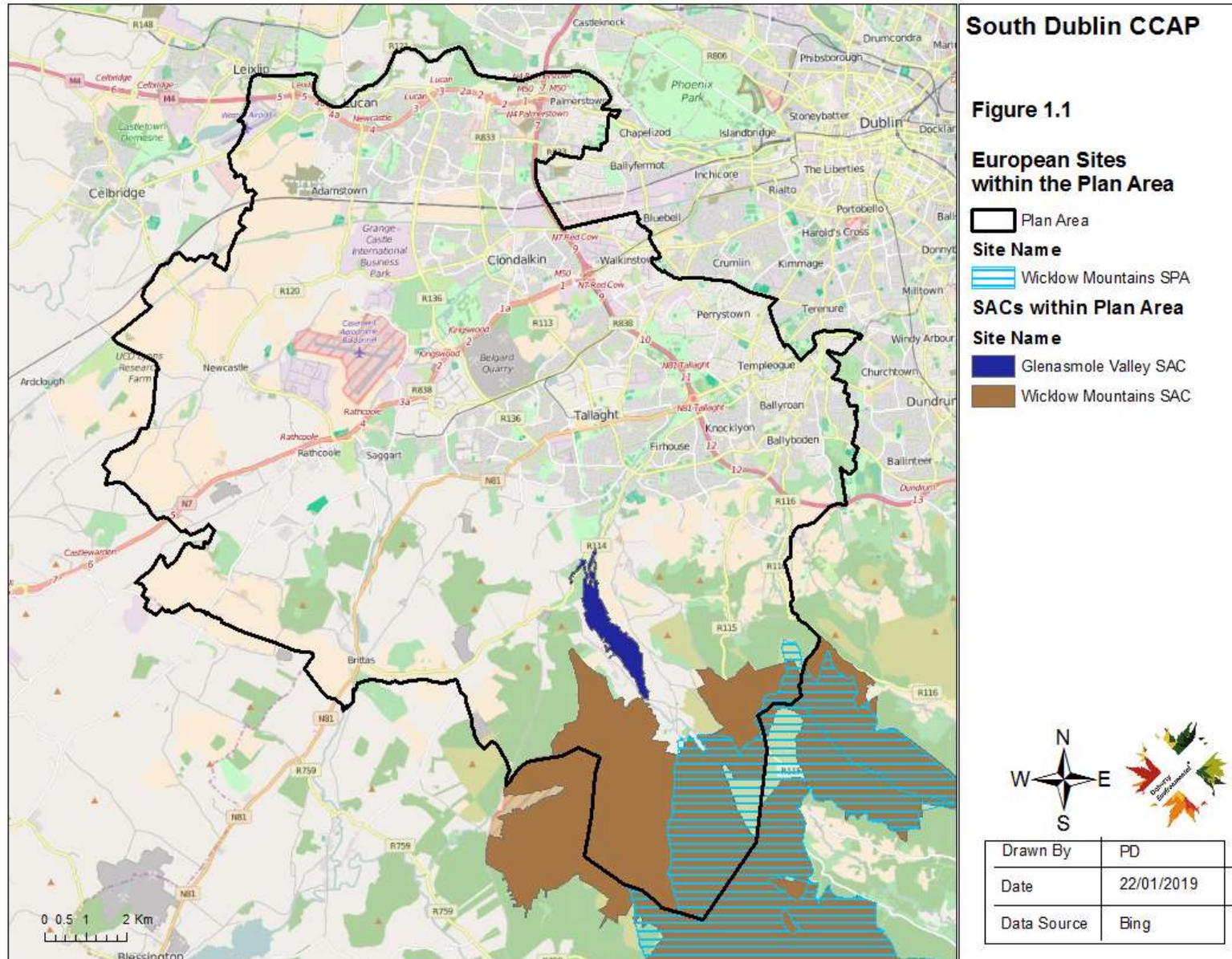
Section 4: Overview of the Plan

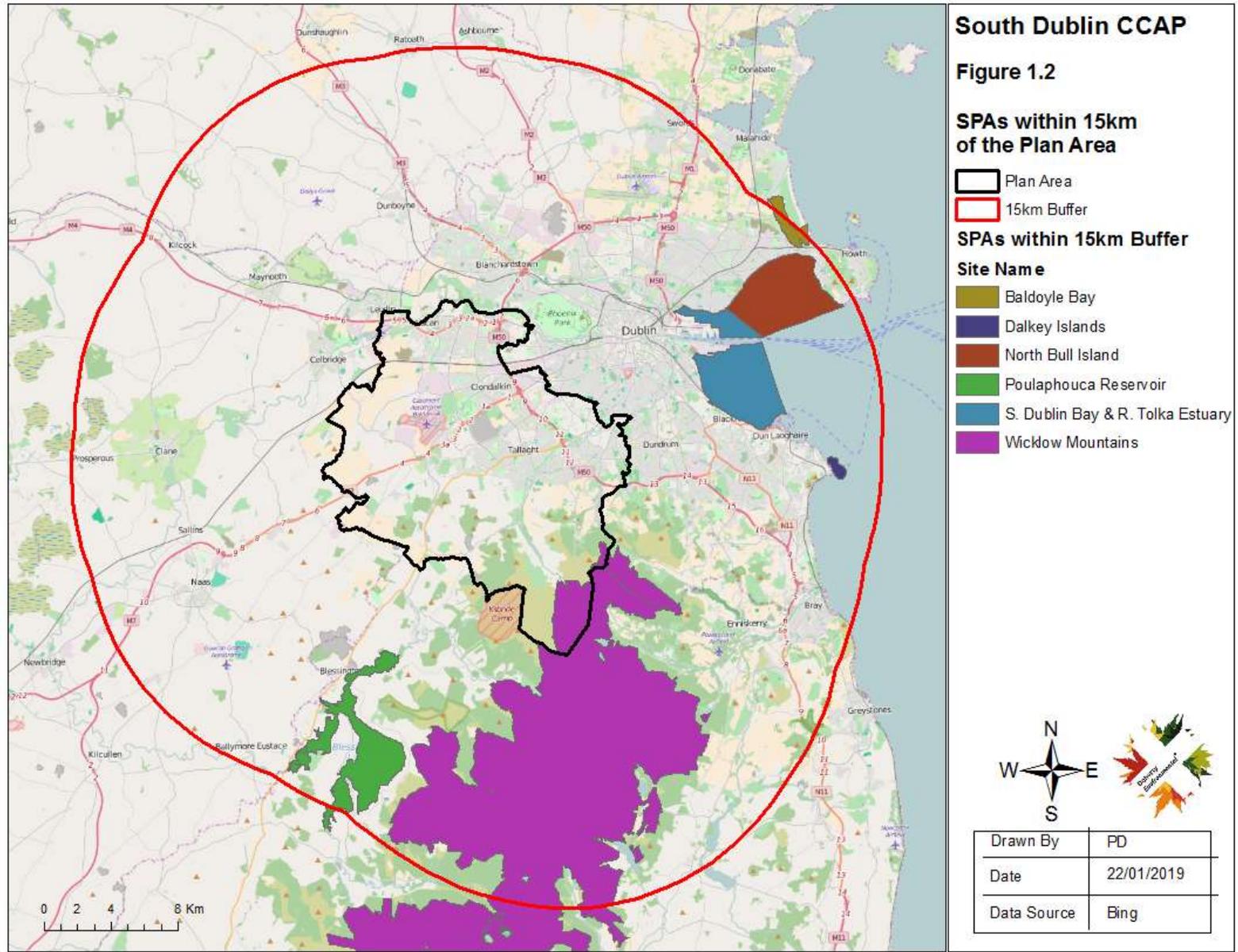
Section 5: Assessment of the Plan

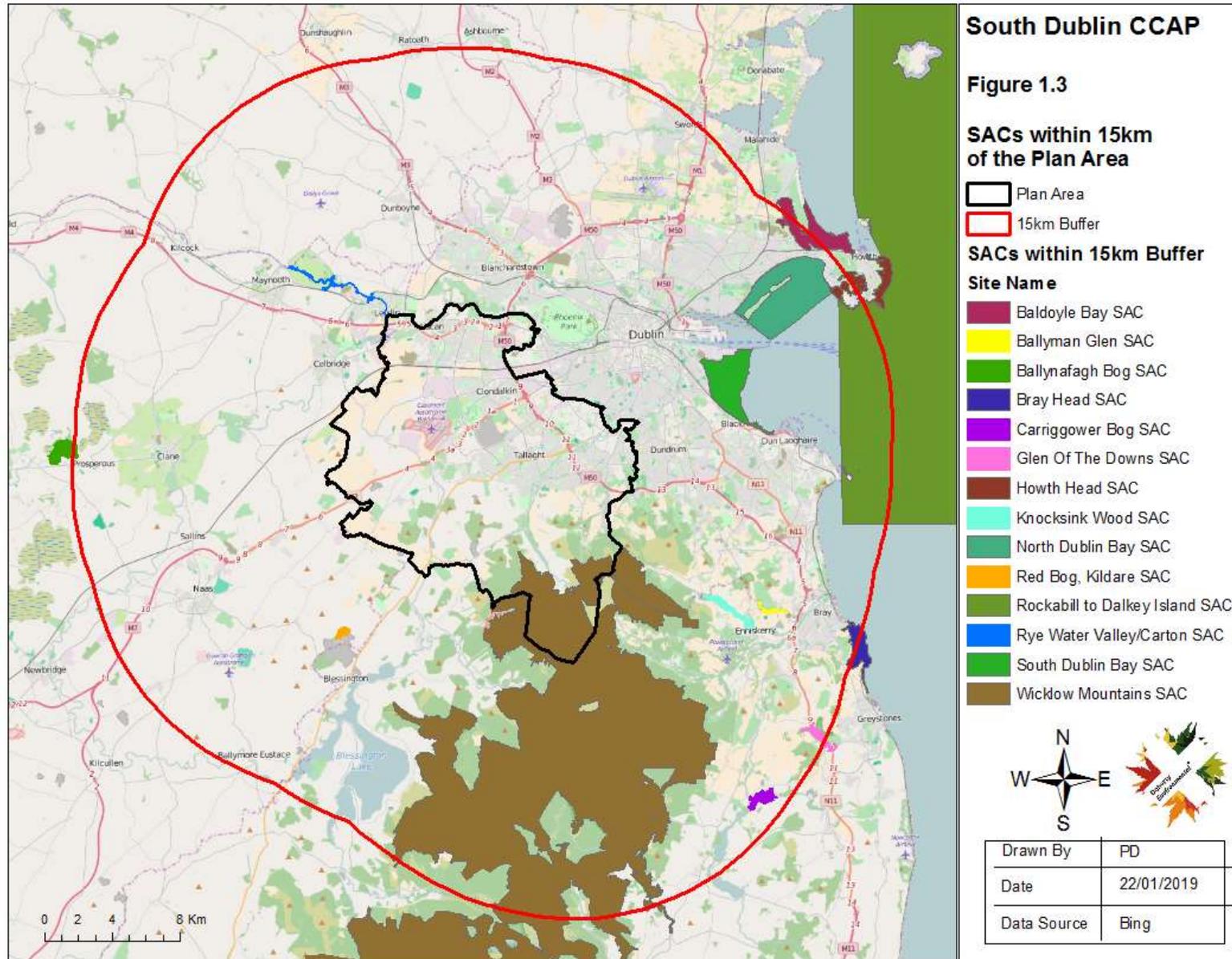
Section 6: Conservation Objectives

Section 7: Mitigation

Section 8: Conclusions







3.0 ASSESSMENT METHODOLOGY

3.1 GUIDANCE

This NIR has been undertaken in accordance with National and European guidance documents: *Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities* (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats directive 92/43/EEC*. The following guidance documents were also of relevance during this the preparation of this NIR:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (2010). DEHLG.
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EED*. European Commission (2001).
- *Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats directive 92/43/EEC*. European commission (2018).
- *Communication from the Commission on the precautionary principle*. European Commission (2000).

3.2 BACKGROUND TO HABITATS DIRECTIVE ARTICLE 6 ASSESSMENTS

The EC (2001) guidelines outline the stages involved in undertaking an assessment of a project under Article 6(3) and 6(4) of the Habitats Directive. The assessment process comprises the four stages outlined below. Stage 1 to 3 form part of the Article 6(3) process, while Stage 4 forms part of the Article 6(4) process. This NIR presents the findings of an assessment for Stage 2 of this assessment process.

- **Stage 1 – Screening:** This stage defines the proposed plan, establishes whether the proposed plan is necessary for the conservation management of the Natura 2000 site

and assesses the likelihood of the plan to have a significant effect, alone or in combination with other plans or projects, upon a Natura 2000 site.

- Stage 2 – Appropriate Assessment: If a plan or project is likely to have a significant affect an Appropriate Assessment must be undertaken. In this stage the impact of the plan or project to the Conservation Objectives of the Natura 2000 site is assessed. The outcome of this assessment will establish whether the plan will have an adverse effect upon the integrity of the Natura 2000 site.
- Stage 3 – Assessment of Alternative Solutions: If it is concluded that, subsequent to the implementation of mitigation measures, a plan has an adverse impact upon the integrity of a Natura 2000 site it must be objectively concluded that no alternative solutions exist before the plan can proceed.
- Stage 4 – Where no alternative solutions exist and where adverse impacts remain but imperative reasons of overriding public interest (IROPI) exist for the implementation of a plan or project an assessment of compensatory measures that will effectively offset the damage to the Natura site 2000 will be necessary.

3.3 STAGE 2: APPROPRIATE ASSESSMENT STEPS

The EC Guidance Assessment Criteria for Appropriate Assessment seeks the following information:

1. A description of the elements of the project that are likely to give rise to significant effects to European Sites;
2. The Setting out the Conservation Objectives of the Site;
3. A description of how the project will affect key species and key habitats;
4. A description of how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes etc.);
5. A description of the mitigation measures that are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of European Sites.

3.4 INFLUENCE OF THE APPROPRIATE ASSESSMENT PROCESS ON THE PLAN

The purpose of the Appropriate Assessment of the Plan is not only to assess the implications of this Plan on European Sites and their qualifying features of interest occurring within its zone of influence, but also to provide safeguards that aim to minimise the ecological implications of the Plan and avoid likely significant effects to European Sites. This was completed by identifying any elements of the Plan and the current South Dublin CDP that aim to protect the natural environment.

4.0 OVERVIEW OF THE CCAP & RELATED EUROPEAN SITES

For the first time, Dublin's four local authorities have joined together to develop Climate Change Action Plans as a collaborative response to the impact that climate change is having, and will continue to have, on the Dublin Region and its citizens. While each plan is unique to its functional area, they are unified in their approach to climate change adaptation and mitigation, and their commitment to lead by example in tackling this global issue.

This CCAP has been prepared in line with climate change policies and objectives of the CDP and follows on from the publication of A Strategy for Climate Change Action Plans for the Dublin Local Authorities (DLAs), which was published in January 2017. The strategy used a structured approach that focused on seven key areas (Citizen Engagement, Planning, Energy, Transport, Water, Waste, and Ecosystems & Biodiversity), and set out how the DLAs would develop the four climate change action plans. The action plans will be unique to each local authority area but synchronised in their methodology.

This Plan concentrates on the two approaches required to tackle climate change. The first, mitigation, consists of actions that will reduce current and future GHG emissions; examples of these include reductions in energy use, switching to renewable energy sources and carbon sinks. The second approach, adaptation, consists of actions that will reduce the impacts that are already happening now from our changing climate and those that are projected to happen in the future.

The actions in this draft CCAP for South Dublin County Council will be continually monitored and updated by a dedicated climate action team working across all Council departments. They will be assisted by the newly established Dublin Metropolitan Climate Action Regional Office, which will ensure that the overall plan is fully updated every five years to reflect latest policy, technology and climate-related impacts. The new office will work with Codema, as technical support and research partner, to ensure that the plans continue to be informed by national and international best practice.

The actions in the CCAP are presented around a number of themes as follows:

- Energy and Buildings

- Transport
- Flood Resilience
- Nature Based Solutions
- Resource Management.

Collectively, these collectively address the four targets of this plan, which are:

- A 33% improvement in the Council's energy efficiency by 2020
- A 40% reduction in the Council's greenhouse gas emissions by 2030
- To make Dublin a climate resilient region, by reducing the impacts of future climate change -related events
- To actively engage and inform citizens on climate change.

As such, this CCAP encompasses the functional area of South Dublin County Council. This area is referred to throughout this report as the "Plan area". The administrative area of the County Council for which the Plan has been prepared comprises 222.7 km².

4.1 EUROPEAN SITES OCCURRING WITHIN THE ZONE OF INFLUENCE OF THE VARIATON

The following sub-sections provide an overview of the five European Sites occurring within the zone of influence of the Plan. The threats and pressures reported for the individual European Sites listed in the following sub-sections are sourced from the Natura 2000 Data Forms or where available from Site Specific Conservation Objectives (SSCOs) supporting information. Where available the conservation status of features of interest at the site level has been sourced from SSCO. The conservation status of qualifying habitats and qualifying species at the national level has been sourced from the Habitat Directive Article 17 Reports

(NPWS, 2013a & 2013b) or from other sources as referenced below. The conservation status of bird species at the national level has been sourced from Colhoun & Cummins (2013).

4.1.1 *Glenasmole Valley SAC*

The qualifying features of interest for which this site has been designated as an SAC are listed in Table 4.1 below. The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SPA are as follows:

- human induced changes in hydraulic conditions
- fertilisation
- forest clearance
- grazing
- diffuse groundwater pollution
- diffuse surface water pollution
- roads, paths and railways
- urbanisation
- abandonment and lack of mowing
- camping and caravans

Table 4.1: Glenasmole SAC Qualifying Features of Interest & Conservation Status

| Qualifying Annex Feature | Conservation Status (Site-Level) | Conservation Status (National-Level) |
|---|----------------------------------|--------------------------------------|
| Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) | Not Reported | Bad |

| | | |
|--|--------------|--------------------------------------|
| Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) | Not Reported | Unfavourable |
| Petrifying springs with tufa formation (Cratoneurion) | Not Reported | Unfavourable-Inadequate ¹ |

4.1.2 Wicklow Mountains SAC

Qualifying features for which this site has been designated as a SAC are listed in Table 4.2 below. The distribution of the habitats associated with this SAC are outlined in the Conservation Objectives for this SAC (see NPWS, 2013).

The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SAC are as follows:

- Off-road motorized driving
- Disposal of household / recreational facility waste
- Damage by herbivores (including game species)
- Grazing in forests/ woodland
- Mountaineering, rock climbing, speleology
- Missing or wrongly directed conservation measures
- Walking, horseriding and non-motorised vehicles
- Invasive non-native species
- Erosion

¹ Lyons, M.D. & Kelly, D.L. (2016) Monitoring guidelines for the assessment of petrifying springs in Ireland. Irish Wildlife Manuals, No. 94. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Ireland.

- Grazing
- Wildlife watching
- Trampling, overuse,
- Stock feeding
- Urbanised areas, human habitation
- Hunting and collection of wild animals (terrestrial)
- Collapse of terrain, landslide
- Collection (fungi, lichen, berries etc.)
- Vandalism
- Outdoor sports and leisure activities, recreational activities
- Tree surgery, felling for public safety, removal of roadside trees
- Military manoeuvres
- Burning down
- Paths, tracks, cycling tracks
- Peat extraction
- Taking from nest (falcons)

Table 4.2: Wicklow Mountains SAC Qualifying Features of Interest & Conservation Status

| Qualifying Annex Feature | Conservation Status (Site-Level) | Conservation Status (National-Level) |
|---|----------------------------------|--------------------------------------|
| Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) | Not Reported | Bad |
| Natural dystrophic lakes and | Not Reported | unfavourable inadequate |

| | | |
|---|--------------|-------------------------|
| ponds | | |
| Northern Atlantic wet heaths with <i>Erica tetralix</i> | Not Reported | Bad |
| European dry heaths | Not Reported | Bad |
| Alpine and Boreal heaths | Not Reported | Bad |
| Calaminarian grasslands of the <i>Violetalia calaminariae</i> | Not Reported | unfavourable inadequate |
| Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) | Not Reported | Bad |
| Blanket bogs (* if active bog) | Not Reported | Bad |
| Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) | Not Reported | Inadequate |
| Calcareous rocky slopes with chasmophytic vegetation | Not Reported | Inadequate |
| Siliceous rocky slopes with chasmophytic vegetation | Not Reported | Inadequate |
| Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles | Not Reported | Bad |
| <i>Lutra lutra</i> (Otter) | Not Reported | Good |

Wicklow Mountains SPA

Special conservation interests for which this site has been designated as a SPA are listed in Table 4.3 below. The distribution of the habitats associated with this SPA are outlined in the Conservation Objectives for this SAC (see NPWS, 2013).

The threats and pressures to this SPA have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SPA are as follows:

- Paths, track and cycle ways
- Improved access to site
- Grazing
- Disposal of household and industrial waste
- Tree surgery
- Camping and caravanning
- Wrongly directed conservation measures
- Discharges

Table 4.3: Wicklow Mountains SPA Special Conservation Interests & Conservation Status

| Qualifying Annex Feature | Conservation Status (Site-Level) | Conservation Status (National-Level) |
|---------------------------------------|----------------------------------|--|
| Merlin (<i>Falco columbarius</i>) | Not Reported | Amber listed species- Species of medium conservation concern |
| Peregrine (<i>Falco peregrinus</i>) | Not Reported | Green listed species- Species of low conservation concern |

4.1.3 South Dublin Bay River Tolka Estuary SPA

The South Dublin Bay and River Tolka Estuary SPA comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.

The qualifying features for which this site has been designated as a SPA are listed in Table 4.4 below. The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SPA are as follows:

- Walking, horseriding and non-motorised vehicles
- Reclamation of land from sea, estuary or marsh
- Discharges
- Roads, motorways
- Industrial or commercial areas

Table 4.4: South Dublin Bay River Tolka Estuary SPA Special Conservation Interests & Conservation Status

| SCIs | Conservation Status |
|--|--|
| Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) | Amber listed species- Species of medium conservation concern |
| Oystercatcher (<i>Haematopus ostralegus</i>) | Amber listed species- Species of medium conservation concern |
| Ringed Plover (<i>Charadrius hiaticula</i>) | Amber listed species- Species of medium conservation concern |
| Grey Plover (<i>Pluvialis squatarola</i>) | Amber listed species- Species of medium conservation concern |
| Knot (<i>Calidris canutus</i>) | Red listed species – Species of high conservation concern [†] |
| Sanderling (<i>Calidris alba</i>) | Green listed species – Species not threatened |
| Dunlin (<i>Calidris alpina</i>) | Amber listed species- Species of medium conservation concern |
| Bar-tailed Godwit (<i>Limosa lapponica</i>) | Amber listed species- Species of medium conservation concern |
| Redshank (<i>Tringa totanus</i>) | Red listed species – Species of high conservation concern |
| Black-headed Gull (<i>Croicocephalus ridibundus</i>) | Red listed species – Species of high conservation concern |
| Roseate Tern (<i>Sterna dougallii</i>) | Green listed species – Species not threatened |
| Common Tern (<i>Sterna hirundo</i>) | Amber listed species- Species of medium conservation concern |

| | |
|--|--|
| Arctic Tern (<i>Sterna paradisaea</i>) | Amber listed species- Species of medium conservation concern |
| Wetlands & Waterbirds | |

4.1.4 North Dublin Bay

This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site. Qualifying features for which this site has been designated as a SAC are listed in Table 4.5 below. The distribution of the habitats associated with this SAC are outlined in the Conservation Objectives for this SAC (see NPWS, 2013).

The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SAC are as follows:

- Urbanised areas, human habitation
- Walking, horseriding and non-motorised vehicles
- Golf course
- Industrial or commercial areas
- Discharges

Table 4.5: North Dublin Bay SAC Qualifying Features of Interest & Conservation Status

| Qualifying Annex Feature | Conservation Status (Site-Level) | Conservation Status (National-Level) |
|--|----------------------------------|--------------------------------------|
| Mudflats and sandflats not covered by seawater at low tide | Favourable | Poor |
| Annual vegetation of drift lines | Not established | Poor |
| Salicornia and other annuals colonizing mud and sand | Unfavourable | Poor |

| | | |
|--|-------------------------|------|
| Atlantic salt meadows (Glauco-Puccinellietalia maritima) | Favourable | Poor |
| Petalwort (Petalophyllum ralfsii) | Not established | Good |
| Mediterranean salt meadows (Juncetalia maritimi) | Favourable | Poor |
| Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes) | Unfavourable-inadeqaute | Poor |
| Fixed coastal dunes with herbaceous vegetation (grey dunes) | Unfavourable-Bad | Bad |
| Humid dune slacks | Unfavourable-inadeqaute | Bad |

4.1.5 North Bull Island SPA

This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone and Black-headed Gull. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The special conservation interests for which this site has been designated as a SPA are listed in Table 4.6 below. The threats and pressures to this SAC have been documented in the Standard Natura 2000 Data Form for the site (NPWS, 2017). The documented threats and pressures to this SPA are as follows:

- Disposal of household / recreational facility waste
- Golf Course

- Industrial or commercial areas
- Walking, horseriding and non-motorised vehicles
- Bridge, viaduct
- Roads, motorways
- Discharges

Table 4.6: North Bull Island SPA Special Conservation Interests & Conservation Status

| SCIs | Conservation Status |
|---|--|
| Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) | Amber listed species- Species of medium conservation concern |
| Shelduck (<i>Tadorna tadorna</i>) | Amber listed species- Species of medium conservation concern |
| Teal (<i>Anas crecca</i>) | Amber listed species- Species of medium conservation concern |
| Pintail (<i>Anas acuta</i>) | Red listed species – Species of high conservation concern [†] |
| Shoveler (<i>Anas clypeata</i>) | Red listed species – Species of high conservation concern [†] |
| Oystercatcher (<i>Haematopus ostralegus</i>) | Amber listed species- Species of medium conservation concern |
| Golden Plover (<i>Pluvialis apricaria</i>) | Red listed species – Species of high conservation concern |
| Grey Plover (<i>Pluvialis squatarola</i>) | Amber listed species- Species of medium conservation concern |

| | |
|---|--|
| Knot (<i>Calidris canutus</i>) | Red listed species – Species of high conservation concern [†] |
| Sanderling (<i>Calidris alba</i>) | Green listed species – Species not threatened |
| Dunlin (<i>Calidris alpina</i>) | Amber listed species- Species of medium conservation concern |
| Black-tailed Godwit (<i>Limosa limosa</i>) | Amber listed species- Species of medium conservation concern |
| Bar-tailed Godwit (<i>Limosa lapponica</i>) | Amber listed species- Species of medium conservation concern |
| Curlew (<i>Numenius arquata</i>) | Red listed species – Species of high conservation concern |
| Redshank (<i>Tringa totanus</i>) | Red listed species – Species of high conservation concern |
| Turnstone (<i>Arenaria interpres</i>) | Green listed species – Species not threatened |
| Black-headed Gull (<i>Larus ridibundus</i>) | Red listed species – Species of high conservation concern |
| Wetlands & Waterbirds | |

5.0 CONSERVATION OBJECTIVES

The function of this NIR in support of Appropriate Assessment is to determine whether the Plan could have significant effects on the European Sites occurring within its zone of influence, in view of the Conservation Objectives for the qualifying features of

interest/special conservation interests of these European Sites that also occur within the zone of influence of the project. Generic Conservation Objectives have been published for all European Sites occurring in Ireland. The generic Conservation Objectives for SAC and their qualifying habitats and qualifying species are:

- To maintain the Annex I habitats for which the SAC has been selected at favourable conservation status;
- To maintain the Annex II species for which the SAC has been selected at favourable conservation status;
- To maintain the extent, species richness and biodiversity of the entire site; and
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

The generic Conservation Objectives for SPAs and their special conservation interests are:

To maintain the bird species of special conservation interest, for which the SPA has been designated, at favourable conservation status.

Favourable Conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing;
- 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”. 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;
- 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.

In addition to the published generic Conservation Objectives for all European Sites, Site Specific Conservation Objectives (SSCOs) have been published for a number of individual European Sites. These SSCOs identify the attributes that underpin the conservation status of qualifying features of interest/special conservation interests and provide targets for ensuring that their favourable status is maintained and/or restored. SSCOs have been published for the five European Sites occurring within the zone of influence of the CCAP and are available from the NPWS at the following website: <https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives>.

6.0 ASSESSMENT OF THE PLAN

As outlined in Section 3.3 above, the recommended steps for an Appropriate Assessment are as follows:

1. A description of the elements of the project that are likely to give rise to significant effects to European Sites;
2. The Setting out the Conservation Objectives of the Site;
3. A description of how the project will affect key species and key habitats;
4. A description of how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes etc.);
5. A description of the mitigation measures that are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of European Sites.

6.1 ELEMENTS OF THE PLAN THAT HAVE THE POTENTIAL TO RESULT IN SIGNIFICANT EFFECTS

The elements of the Plan that have the potential to give rise to likely significant effects to the 6 European Sites occurring within the zone of influence of the Plan are the 4 Actions identified during the Screening stage. These Actions are listed in Table 6.1 below.

Table 6.1: Land Use Actions Identified as having the Potential to Result in Likely Significant Effects to European Sites

| Action Theme | Action Theme No. | Action |
|-------------------|------------------|---|
| Transport Actions | 4 | Build out county cycle network |
| Transport Actions | 7 | Development of cycle/pedestrian greenways |

| | | |
|------------------|----|---|
| Flood Defence | 20 | Minor flood schemes and general maintenance |
| Flood Resilience | 17 | Whitechurch Flood Alleviation Scheme |

The potential ecological effects of such activities relate to:

- Habitat loss and fragmentation: the direct loss of habitat occurring within European Sites as a result of land use activities facilitated by the Plan.
- Habitat degradation resulting from emissions to surface water: the construction phase of projects resulting from the land use actions identified in Table 6.1 above could result in the discharge of contaminated surface water to receiving watercourses.
- Habitat degradation resulting from emissions to groundwater: as above, the development of projects can result in the discharge of polluted waters to groundwaters during the construction phase and operation phase of project.
- Habitat degradation resulting from emissions to air: the construction phase and operation phase of project can result in the emission of pollutants, such as dust, particulate matter, SO_x and NO_x to the atmosphere.
- Habitat degradation resulting from the spread of non-native invasive species during works facilitated by the land use actions listed in Table 6.1: If present on site development projects can result in the spread of these species; and
- Disturbance and/or displacement of qualifying species/special conservation interest bird species from within or outside European Sites: where project works facilitated by the actions listed in Table 6.1 above are located in close proximity to habitats upon which qualifying species/special conservation interest bird species of European Sites rely, then they could result in disturbance to these species and where disturbance stimuli persist they could result in displacement of these species from habitats.

Table 6.2 below lists the qualifying feature of interest/special conservation interests of the five European Sites occurring within the zone of influence of the Plan and assesses whether each of these features are risk from the ecological effects listed above.

Table 6.2: Potential for Ecological Effects to result in adverse effects to the Qualifying Features/special conservation interests of European Sites

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|---|---|---|--|---|---|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Glenasmole Valley SAC | | | | | | |
| Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use and any flood scheme works along the River Dodder represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with these actions and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area or the provision of flood scheme works. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network or the provision of flood scheme works are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use or the provision of flood scheme works within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|---|--|---|---|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | negative effects to its conservation status. | | | | | |
| Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use and any flood scheme works along the River Dodder represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with these actions and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area or the provision of flood scheme works. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network or the provision of flood scheme works are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use or the provision of flood scheme works within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|---|---|---|--|---|--|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Petrifying springs with tufa formation (Cratoneurion) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works and operations associated with these actions within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use and road maintenance works adjacent to or upstream of this qualifying habitat could result in perturbations to surface water quality with negative consequences for the conservation status of this habitat. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use and flood scheme works adjacent to or upstream of this qualifying habitat could result in perturbations to ground water quality with negative consequences for the conservation status of this habitat. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network and flood scheme works are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use and flood scheme works adjacent to or upstream of this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works adjacent to or upstream of examples of this habitat within the SAC could result in disturbance to this habitat. |
| South Dublin Bay & Tolka Estuary SPA | | | | | | |
| Wintering Waterbirds | No. Rationale: This wetland habitat of this SPA are located at remote distance from the Plan area and there will be no potential for works | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SPA. Perturbations to these watercourses from any | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and | Yes. Rationale: There is potential for construction works associated with the expansion of walking and cycling | No. Rationale: The habitats upon which wintering waterbirds rely for foraging and roosting are located at remote distance from the Plan area and there will be no potential for works |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--------------------------------------|---|--|--|---|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative downstream effects to the status of wetland habitats that support wintering waterbirds. | walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative effects to the status of wetland habitats that support wintering waterbirds | their subsequent use and flood scheme works are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to foraging or roosting wintering waterbirds. | trails and their subsequent use and flood scheme works to result in the spread of non-native invasive species that could undermine the status of wetland habitats upon which wintering waterbirds rely. | associated with the Actions listed in Table 6.1 above to result in disturbance or displacement of these bird species. |
| Breeding Terns | No. Rationale: The habitats upon which breeding terns rely for nesting and foraging are located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of these habitats. | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SPA. Perturbations to these watercourses from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could, in theory, result in negative downstream at coastal foraging ground for | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could, in theory, result in negative downstream at coastal foraging ground for tern species. | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to | Yes. Rationale: There is potential for construction works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works to result in the spread of non-native invasive species that could undermine the status of tern breeding colonies. | No. Rationale: The habitats upon which breeding terns rely for nesting and foraging are located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance or displacement of these bird species. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|---|--|---|---|---|---|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | | tern species. | | breeding tern colonies. | | |
| North Dublin Bay SAC | | | | | | |
| Mudflats and sandflats not covered by seawater at low tide [1140] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SAC. Perturbations to these watercourses from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative downstream effects to the status of this habitat. | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative effects to the status of this habitat | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works will be undertaken at remote distance from this habitat and are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to this habitat. | Yes. Rationale: Where construction works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works are undertaken in the vicinity of watercourses there will be potential for such works to result in the spread of non-native invasive species. | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|---|--|--|--|--|---|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Annual vegetation of drift lines [1210] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by lotic or estuarine water quality. Any perturbations to watercourses draining to the South Dublin Bay SAC will not have the potential to undermine the status of this habitat. | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by groundwater water quality. | No. Rationale: The land use activities associated with the actions listed in Table 6.1 above are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the conservation status of this habitat. | No. Rationale: There are no pathways that could connect works associated with the Actions listed in Table 6.1 above to this habitat. | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |
| Salicornia and other annuals colonising mud and sand [1310] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SAC. Perturbations to these watercourses from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative effects to the status | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works will be undertaken at remote distance from this habitat and are not | Yes. Rationale: Where construction works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works are undertaken in the vicinity of watercourses there will be potential for such works to result | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|--|--|---|---|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | | in negative downstream effects to the status of this habitat. | of this habitat | predicted to have the potential to result in emissions to atmosphere that could result in negative effects to this habitat. | in the spread of non-native invasive species. | |
| Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SAC. Perturbations to these watercourses from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative downstream effects to the status of this habitat. | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative effects to the status of this habitat | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works will be undertaken at remote distance from this habitat and are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to this habitat. | Yes. Rationale: Where construction works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works are undertaken in the vicinity of watercourses there will be potential for such works to result in the spread of non-native invasive species. | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|--|--|---|---|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SAC. Perturbations to these watercourses from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative downstream effects to the status of this habitat. | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative effects to the status of this habitat | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works will be undertaken at remote distance from this habitat and are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to this habitat. | Yes. Rationale: Where construction works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works are undertaken in the vicinity of watercourses there will be potential for such works to result in the spread of non-native invasive species. | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |
| Embryonic shifting dunes [2110] | Yes. Rationale: Any works associated with coastal zone management, flood schemes or road maintenance within or adjacent to this SAC could have the potential to result in negative | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by lotic or estuarine water quality. Any perturbations to the Santry River draining | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by groundwater water quality. | No. Rationale: The land use activities associated with the actions listed in Table 6.1 above are not predicted to have the potential to result in | No. Rationale: There are no pathways that could connect works associated with the Actions listed in Table 6.1 above to this habitat. | Yes. Rationale: Any works associated with coastal zone management, flood schemes or road maintenance actions within or adjacent to this SAC could result in disturbance to this habitat. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|---|--|--|---|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | effects to the conservation status of this habitat. | to the North Dublin Bay SAC will not have the potential to undermine the status of this habitat. | | emissions to atmosphere that could result in negative effects to the conservation status of this habitat. | | |
| Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by lotic or estuarine water quality. Any perturbations to watercourses draining to the South Dublin Bay SAC will not have the potential to undermine the status of this habitat. | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by groundwater water quality. | No. Rationale: The land use activities associated with the actions listed in Table 6.1 above are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the conservation status of this habitat. | No. Rationale: There are no pathways that could connect works associated with the Actions listed in Table 6.1 above to this habitat. | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |
| Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by lotic or estuarine water quality. Any | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by groundwater water quality. | No. Rationale: The land use activities associated with the actions listed in Table 6.1 above are not predicted to | No. Rationale: There are no pathways that could connect works associated with the Actions listed in Table 6.1 | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|---|--|--|---|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | perturbations to watercourses draining to the South Dublin Bay SAC will not have the potential to undermine the status of this habitat. | | have the potential to result in emissions to atmosphere that could result in negative effects to the conservation status of this habitat. | above to this habitat. | result in disturbance to this habitat. |
| Humid dune slacks [2190] | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by lotic or estuarine water quality. Any perturbations to watercourses draining to the South Dublin Bay SAC will not have the potential to undermine the status of this habitat. | No. Rationale: This is a terrestrial coastal habitat and its status is not influenced by groundwater water quality. | No. Rationale: The land use activities associated with the actions listed in Table 6.1 above are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the conservation status of this habitat. | No. Rationale: There are no pathways that could connect works associated with the Actions listed in Table 6.1 above to this habitat. | No. Rationale: This habitat is located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance to this habitat. |
| Petalophyllum ralfsii (Petalwort) [1395] | No. Rationale: The habitats upon which this species relies are located at remote distance from | No. Rationale: This species is not reliant on surface water bodies and its status is | No. Rationale: This species status is highly influenced by groundwater quality. | No Rationale: See rationale outlined for Mudflats and Sandflats above. | No. Rationale: There are no pathways that could connect works associated | No Rationale: See rationale outlined for Mudflats and Sandflats above. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--------------------------------------|---|--|--|---|--|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | not influenced by lotic or estuarine water quality. | However given that the habitats upon which this species relies is located within a separate groundwater catchment to the Plan area there will be no potential for perturbations to groundwaters quality to result in negative effects to this species. | | with the Actions listed in Table 6.1 above to the habitats that support this species. | |
| North Bull Island SPA | | | | | | |
| Wintering Waterbirds | No. Rationale: This wetland habitat of this SPA are located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in the loss or fragmentation of this habitat. | Yes. Rationale. Watercourses flowing through the Plan area discharge to this SPA. Perturbations to these watercourses from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result | Yes. Rationale. Perturbations to groundwaters from any works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works could in theory result in negative effects to the status | No. Rationale: The land use activities associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works are not predicted to have the potential to result in emissions to | Yes. Rationale: There is potential for construction works associated with the expansion of walking and cycling trails and their subsequent use and flood scheme works to result in the spread of non-native invasive species that could | No. Rationale: The habitats upon which wintering waterbirds rely for foraging and roosting are located at remote distance from the Plan area and there will be no potential for works associated with the Actions listed in Table 6.1 above to result in disturbance or displacement of these bird species. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|--|---|--|---|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | | in negative downstream effects to the status of wetland habitats that support wintering waterbirds. | of wetland habitats that support wintering waterbirds | atmosphere that could result in negative effects to foraging or roosting wintering waterbirds. | undermine the status of wetland habitats upon which wintering waterbirds rely. | |
| Wicklow Mountains SAC | | | | | | |
| Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of this qualifying habitat could result in perturbations to surface water quality with negative consequences for the conservation status of this habitat. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of this qualifying habitat could result in perturbations to ground water quality with negative consequences for the conservation status of this habitat. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works adjacent to or upstream of this SAC could result in disturbance to this habitat. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|--|---|--|---|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Natural dystrophic lakes and ponds | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of this qualifying habitat could result in perturbations to surface water quality with negative consequences for the conservation status of this habitat. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of this qualifying habitat could result in perturbations to ground water quality with negative consequences for the conservation status of this habitat. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works adjacent to or upstream of this SAC could result in disturbance to this habitat. |
| Northern Atlantic wet heaths with Erica tetralix | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--------------------------------------|--|---|---|--|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | walking and cycling network in the Plan area. | the expansion of the walking and cycling network in the Plan area. | emissions to atmosphere that could result in negative effects to the status of this habitat. | result in the spread of non-native invasive species that could undermine the status of this habitat. | |
| European dry heaths | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|---|--|---|---|--|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Alpine and Boreal heaths | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |
| Calaminarian grasslands of the <i>Violetalia calaminariae</i> | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|---|---|--|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | walking and cycling network in the Plan area. | the expansion of the walking and cycling network in the Plan area. | emissions to atmosphere that could result in negative effects to the status of this habitat. | result in the spread of non-native invasive species that could undermine the status of this habitat. | |
| Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|---|---|--|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Blanket bogs (* if active bog) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |
| Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--|--|---|---|--|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | walking and cycling network in the Plan area. | the expansion of the walking and cycling network in the Plan area. | emissions to atmosphere that could result in negative effects to the status of this habitat. | result in the spread of non-native invasive species that could undermine the status of this habitat. | |
| Calcareous rocky slopes with chasmophytic vegetation | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|---|--|---|---|--|--|---|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Siliceous rocky slopes with chasmophytic vegetation | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the walking and cycling network in the Plan area. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to result in the spread of non-native invasive species that could undermine the status of this habitat. | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |
| Old sessile oak woods with Ilex and Blechnum in the British Isles | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during the expansion of the | No. Rationale: This habitat is not reliant on surface water habitats and will not be negatively affected by any perturbations to surface waters that could arise during | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use within or adjacent to this habitat to | Yes. Rationale: Any works within or adjacent to examples of this habitat within the SAC could result in habitat disturbance. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--------------------------------------|---|--|---|--|--|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| | qualifying habitat. Works associated with this action and the subsequent use of trails within or in the vicinity of this qualifying habitat could have the potential to result in negative effects to its conservation status. | walking and cycling network in the Plan area. | the expansion of the walking and cycling network in the Plan area. | emissions to atmosphere that could result in negative effects to the status of this habitat. | result in the spread of non-native invasive species that could undermine the status of this habitat. | |
| Lutra lutra (Otter) | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities of the Plan most likely to result in negative effects to this qualifying species. Works associated with this action and the subsequent use of trails in the vicinity of watercourses supporting this species could result in the loss of habitat for this species | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of watercourses within the SAC could result in perturbations to surface water quality with negative consequences for the conservation status of this species. | Yes. Rationale: Any works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of watercourses within the SAC could result in perturbations to ground water quality with negative consequences for the conservation status of this habitat. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to the status of this species. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network and their subsequent use adjacent to or upstream of watercourses within the SAC to result in the spread of non-native invasive species that could undermine the status of habitats supporting this species. | Yes. Rationale: Any works adjacent to or upstream watercourses within the SAC could result in disturbance and displacement of this species. |

| European Sites & Qualifying Features | Habitat Loss & Fragmentation | Habitat Degradation | | | | Disturbance/Displacement |
|--------------------------------------|--|---|--|--|--|--|
| | | Surface Water | Groundwater | Air | Non-native invasive species | |
| Wicklow Mountains SPA | | | | | | |
| Breeding Raptors | Yes. Rationale: Works associated with the expansion of walking and cycling trails and their subsequent use represent the land use activities most likely to result in negative effects to this SPA. Works associated with this action and the subsequent use of trails within or in the vicinity of habitats upon which these species rely for breeding and foraging could have the potential to result in negative effects to their conservation status. | No. Rationale. These species are not reliant on surface water habitats or prey species and their conservation status is not likely to be undermined by perturbations to water quality that could during works associated with the expansion of walking and cycle network in the Plan area. | No. Rationale. These species are not reliant on groundwaters. | No. Rationale: The land use activities associated with the expansion of the walking and cycling network are not predicted to have the potential to result in emissions to atmosphere that could result in negative effects to breeding raptors. | Yes. Rationale: There is potential for construction works associated with the expansion of the walking and cycling network within or in the vicinity of this SPA to result in the spread of non-native invasive species that could undermine the status of raptor breeding habitat. | Yes. Rationale: There is potential for works associated with the expansion of the walking and cycling network within or adjacent to the SPA to result in disturbance and displacement of breeding raptors within this SPA. |

6.2 IN-COMBINATION EFFECTS

This Section provides an outline of the potential cumulative effects on the European Sites within the zone of influence of the Plan. There is potential for a wide range of plans and project to combine with the CCAP and documented threats and pressures to these European Sites. Table 6.3 below provides a non-exhaustive list of the Plans that represent those most likely to combine with the CCAP to result in potential cumulative effects. An assessment for potential cumulative effects to arise is provided for each of the Plans listed in Table 6.3.

Table 6.3: Assessment For Potential Cumulative Effects With Other Plans & Projects

| Plan | Comment | Cumulative effects |
|---|--|--|
| Climate change Action Plans for other Dublin Local Authorities | <p>During the formulation of the CCAPs for the Dublin Region, a suite of common thematic actions have been prepared for each of the local authority areas.</p> <p>The individual action plan for each Local Authority has undergone Habitats Directive Assessment and Strategic Environmental Assessment. It has been found that by implementing the mitigation policies and objectives of the relevant CDP as identified in the NIR and SEA ER, effects to the environment and European Sites are not likely to occur</p> | |
| National Planning Framework | <p>The purpose of the NPF is to provide a focal point for spatial plans throughout the planning hierarchy. It will provide a framework for the new Regional Spatial and Economic Strategies (RSEs) by the three Regional Assemblies and the associated enhancement of the economic development focus of local authorities as per the Local Government Reform Act</p> | <p>A NIR was prepared for this plan and an Appropriate Assessment was completed. The Appropriate Assessment concluded that, subject to mitigation measures</p> |

| Plan | Comment | Cumulative effects |
|--|---|--|
| | 2014. The draft NPF will co- ordinate the strategic planning of urban and rural areas in a regional development context to secure overall proper planning and development as well as co-ordination of the RSES's and city/ county development plans in addition to local economic and community plans and local area plans and other local development. | proposed in the NIR, there will be no adverse effects to the integrity of any European Sites as a result of the implementation of this Plan. |
| Regional Spatial & Economic Strategy | The RSES is a strategic plan which identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives. At this strategic level it provides a framework for investment to better manage spatial planning and economic development throughout the Region | A NIR was prepared for this plan and concluded that, subject to mitigation measures proposed in the NIR, there will be no adverse effects to the integrity of any European Sites as a result of the implementation of this Plan. |
| The Transport Strategy for the Greater Dublin Area, 2016-2035 | This Strategy sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and was subject to SEA and AA. | No in combination effects are identified. |
| Water Services Strategic Plan | Ireland's first integrated national plan for the delivery of water services, the Water Services Strategic Plan (WSSP) addresses six key themes and was adopted in 2015. It was subject to full SEA and AA and | No in-combination impacts were predicted as a result of implementation |

| Plan | Comment | Cumulative effects |
|--|--|--|
| | <p>concluded that overall, the assessment has identified that the implementation of the draft WSSP is likely to have positive effects on the environment and provided adequate environmental assessments and mitigations measures are implemented at lower plan and project levels it will not have the potential to result in likely significant effects to European Sites.</p> | <p>of the Plans</p> |
| <p>Neighbouring County Development Plans</p> | <p>These plans were subject to full SEA and AA and concluded that subject to full adherence and implementation of all measures and particularly those that aim to safeguard the environment, there will be no potential for adverse effects to European Sites.</p> | <p>No in-combination impacts were predicted as a result of implementation of the Plans</p> |
| <p>River Basin District Management Plans.</p> | <p>The National River Basin District Management Plan is now published (2018). The second cycle River Basin Management Plan aims to build on the progress made during the first cycle with a greater emphasis on ensuring the evidence base is available and the administration supports are fully in place to support key measures. The approach to the plan development involves characterisation of Ireland's water bodies in order to develop a tailored programme of measures to allow for the protection of good status or the restoration of good status for all water bodies. The outcomes are then monitored in order to feed into further characterisation and measures setting as the cycle moves forward. The plan was subject to SEA and Appropriate Assessment.</p> | <p>No in-combination impacts are predicted as a result of implementation of the Plans</p> |

| Plan | Comment | Cumulative effects |
|--------------------------------|---|--|
| CFRAMS Study | The Eastern CFRAM study has been commissioned in order to meet the requirements of the Floods Directive, as well as to deliver on core components of the 2004 National Flood Policy, in the Eastern district. | No in-combination impacts are predicted as a result of implementation of the Plans. |
| Greater Dublin Drainage | Irish Water made a planning application for strategic infrastructure development to An Bord Pleanála for the Greater Dublin Drainage Project in June 2018. The GDD project proposes a new regional wastewater treatment facility to be located in the townland of Clonshaugh in north county Dublin, an underground orbital sewer from Blanchardstown to Clonshaugh, a new pumping station at Abbotsown, a partial diversion of the north fringe sewer, and an outfall pipeline to return the treated water to the Irish Sea. The project also includes a regional sludge treatment centre at the new GDD facility and an associated biosolids storage facility at Newtown near Kilshane Cross. | Chapter 23 of the EIAR was reviewed with a focus on the cumulative impacts, No in-combination impacts are predicted as a result of implementation of the Project |

| Plan | Comment | Cumulative effects |
|--|--|---|
| The Greater Dublin Transport Strategy 2016-2035 | <p>The Transport Strategy for the Greater Dublin Area, 2016-2035 has been prepared and published by the National Transport Authority. It sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and has been approved by the Minister for Transport, Tourism and Sport in accordance with the relevant legislation.</p> <p>Luas, heavy rail and orbital bus routes are of particular relevance to the elements of this Plan.</p> | Positive effects in relation to the prioritisation of public transport modes above private transport. |

7.0 MITIGATION MEASURES

The South Dublin County CCAP sits within the frameworks of the South Dublin County Development Plan and has been prepared in line with Objective CC02 of the CDP. The CDP also outlines a range of policies and objectives that aim to safeguard the environment and ensure that low tier plans and project facilitated by the CDP do not have the potential to result in likely significant effects to European Sites. The protection afforded to the environment by these policies and objectives will also apply for all future land use actions facilitated by the CCAP. The key policies and objectives of the CCAP that will protect the European Sites occurring within the zone of influence of this Plan from likely significant effects are listed and evaluated in Table 7.1 below.

In addition to the environmental safeguard measures of the CDP identified in Table 7.1 further mitigation in the form of proposed amendments to specific Actions of the CCAP are outlined in Table 7.2. The amendments to these Actions emphasise the need to ensure protection of the natural environment during the implementation of these actions.

Table 7.1: South Dublin CDP Environmental Safeguards

| CDP Ref. | Mitigation Measure | Evaluation |
|---|---|--|
| 11.8.1 Environmental Impact Assessment | <p>The Planning and Development Regulations 2001 specify mandatory thresholds above which Environmental Impact Statements (EIS) are required, setting out the types and scale of development proposals that require EIS. Where it appears to the Planning Authority that a development proposal that falls below the thresholds set out in the Planning and Development Regulations would be likely to have a significant environmental effect, a subthreshold/discretionary EIS can be requested by the Planning Authority.</p> | <p>Adherence to this Section of the CDP will ensure that any land use projects supported by the CCAP that is likely to have significant effects on the environment will be subject to the Environmental Impact Assessment process. This will ensure that any such projects facilitated by the CCAP will be assessed and only permitted to proceed where it can be demonstrated that the potential environmental effects can be ameliorated to an acceptable level.</p> |
| 11.8.2 Appropriate Assessment | <p>Under Article 6 of the Habitats Directive there is a requirement to establish whether, in relation to plans and projects, Appropriate Assessment (AA) is required.</p> <p>If, following screening, it is considered that AA is required then the proponent of the plan or project must prepare a Natura Impact Statement. 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:</p> <p>The plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any Natura 2000 site (either individually or in combination with other plans or projects), or The plan or project will have significant adverse effects on the integrity of any Natura 2000 (that does not host a priority natural habitat type and/or a priority species) but there are no alternative solutions and the</p> | <p>Adherence to this Section of the CDP will ensure that any land use project facilitated by the CCAP will be subject to project-level Article 6(3) and where necessary Article 6(4) assessments. The requirement to carry out these assessments will ensure that only those projects that do not result in likely significant effects European Sites or that are of overriding public interest will be permitted. Adherence to this Section of the CDP establishes a strict process of pre-consent for all land use projects facilitated by the CCAP.</p> |

| | | |
|---------------------|---|---|
| | <p>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 a Natura 2000 site/network,</p> <p>or The plan or project will have a significant adverse effect on the integrity of any Natura 2000 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.</p> <p>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 a Natura 2000 site/network</p> | |
| <p>HCL12</p> | <p>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</p> | <p>The implementation of this Policy will ensure that only those projects facilitated by the CCAP that are not likely to result in significant effects to European Sites will be supported by the Council’s planning framework.</p> |
| <p>HCL15</p> | <p>Non-Designated Areas</p> <p>It is the policy of the Council to protect and promote the conservation of biodiversity outside of designated areas and to ensure that species and habitats that are protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979 and the Habitats Directive 1992 are</p> | <p>The implementation of this Policy will ensure that only those projects facilitated by the CCAP that are not likely to result in significant effects to protected habitats and species will be supported by the Council’s planning framework.</p> |

| | | |
|--------------------|--|---|
| | adequately protected | |
| HCL15 objective 1 | To ensure that development does not have a significant adverse impact on rare and threatened species, including those protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979 and the Habitats Directive 1992. | The implementation of this Policy will ensure that only those projects facilitated by the CCAP that are not likely to result in significant effects to rare, threatened or protected habitats and species will be supported by the Council's planning framework. |
| HCL15 objective 2: | To ensure that, where evidence of species that are protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979 and the Habitats Directive 1992 exists, appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment. | The implementation of this Policy will ensure that projects facilitated by the CCAP that present a risk to protected habitats and species will only be permitted where it can be demonstrated that effective mitigation can be implemented to minimise or eliminate the potential for such risks to occur. |
| IE2 policy | 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 | The implementation of this Policy will require any land use projects supported by the CCAP to demonstrate that they will not result in perturbations to surface water or groundwater quality. |
| IE2 objective 3 | To maintain and enhance existing surface water drainage systems in the County and promote and facilitate the development of Sustainable Urban Drainage Systems (SUDS), including integrated constructed wetlands, at a local, district and County level, to control surface water outfall and protect water quality. | The provision of enhanced surface water drainage systems will reduce the risk posed by projects that may be facilitated by the CCAP to European Sites occurring within the same catchment as the proposed project. |
| IE2 objective 5 | To limit surface water run-off from new developments through the use of Sustainable Urban Drainage Systems (SUDS) and avoid the use of underground attenuation and storage tanks | The implementation of this requirement will require, where applicable, projects that are supported by the CCAP to include design measures that limit surface water runoff. This will in turn have the potential to limit potential hydrological impacts to European Sites occurring within the same catchment area as a proposed project. |

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| IE2 objective 8 | To protect salmonid water courses, such as the Liffey and Dodder Rivers catchments (including Bohernabreena Reservoir), which are recognised to be exceptional in supporting salmonid fish species. | The implementation of this measures will require any projects supported by the CCAP in these surface water catchments to implement measures that protect the status of waters supporting salmonids. The implementation of such measures will in turn provide protection of water quality and will minimise the potential for hydrological pathways between projects and European Sites to function as impact pathways. |
| IE2 objective 9: | To protect water bodies and watercourses, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains, within the County from inappropriate development. This will include protection buffers in riverine and wetland areas as appropriate. (see also Objective G3 Objective 2 – Biodiversity Protection Zone) | The implementation of this objective will require the provision of buffers between waterbodies and certain projects supported by the CCAP. The provision of such buffers will have the potential to minimise or eliminate risks posed by projects to any freshwater-dependent habitats and species of European Sites that are linked to the project site. |
| IE2 Objective 10: | To require adequate and appropriate investigations to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, in particular for brownfield development. | The implementation of this objective will ensure that any projects supported by the CCAP in brownfield sites are investigated for their potential to result in surface water or groundwater pollution. The completion of such investigations will allow for the assessment and mitigation of such risks in advance of any project works. This approach to such projects will minimise or eliminate the potential risk posed by them to European Sites. |
| IE2 objective 10 | To require adequate and appropriate investigations to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, in particular for brownfield development | The implementation of this objective will ensure that any projects supported by the CCAP in brownfield sites are investigated for their potential to result in surface water or groundwater pollution. The completion of such investigations will allow for the assessment and mitigation of such risks in advance of any project works. This approach to such projects will minimise or eliminate the potential risk posed by them to European Sites. |

| | | |
|-----------------|---|---|
| G2 objective 3 | To restrict development that would fragment or prejudice the Green Infrastructure network. | European Sites are a key part of the Green Infrastructure network occurring in the Plan area and adherence to this objective will ensure that only projects that do not prejudice the status of European Sites will be permitted under the Council's planning framework. |
| G2 objective 12 | To seek to control and manage non-native invasive species and to develop strategies with relevant stakeholders to assist in the control of these species throughout the County | Adherence to this objective will require non-native invasive species management plans for any projects supported by the CCAP that may result in the spread of such species. This requirement will minimise or eliminate the risk posed by the spread of non-native invasive species during project works to European Sites . |
| G3 objective 5 | To restrict the encroachment of development on watercourses, and provide for protection measures to watercourses and their banks, including but not limited to: the prevention of pollution of the watercourse, the protection of the river bank from erosion, the retention and/or provision of wildlife corridors and the protection from light spill in sensitive locations, including during construction of permitted development. | The implementation of this objective will require the provision of buffers between waterbodies and certain projects supported by the CCAP. The provision of such buffers will have the potential to minimise or eliminate risks posed by projects to any freshwater-dependent habitats and species of European Sites that are linked to the project site. |

Table 7.2: Recommended Rewording of CCAP Actions

| Action No. | <i>Transport Actions</i> |
|------------|---|
| 5 | Strengthen traditional villages by improving the public realm through enhancement of green infrastructure measures and sustainable transport linkages |
| | <i>Flood Resilience</i> |
| 13 | Develop template to capture impacts, response and costs (including ecosystem services/natural capital costs) for all major climate events |
| 15 | Update DLA urban drainage and flooding policies for current knowledge of flood risk and the latest best practice in drainage design promoting natural flood measures as a priority |
| 20 | Minor flood schemes and general maintenance that are designed and implemented to promote nature based solutions where practical |

| | |
|----|--|
| 21 | Communication and awareness campaigns on flood risk management and natural flood management measures |
| | <i>Nature Based Solutions</i> |
| 22 | Include native species into local authority plans where appropriate as a key nature based measure where appropriate |

7.1 RESPONSIBILITY FOR IMPLEMENTING MITIGATION MEASURES

The responsibility for implementing land use actions proposed by the CCAP lies with the relevant departments of South Dublin County Council. Departments seeking to implement land use actions proposed by the CCAP are obliged to ensure that the implementation of these actions are consistent with the Objectives and requirements of the environmental safeguards of the CDP as listed in Table 7.1 above. It is a statutory requirement for a competent authority (e.g. South Dublin County Council) to carry out screening for appropriate assessment for all land use projects and all land use actions implemented under the CCAP will be assessed for their potential to result in likely significant effects. However, such effects are not likely to occur if the Objectives in the CDP as listed in Table 7.1 above are adhered to, where appropriate.

7.2 MONITORING OF MITIGATION MEASURES

Whilst there is no legal requirement to monitor the outputs of the AA process, there is an obligation to monitor the implementation of the CDP through the E.C. SEA Directive as implemented in Ireland. Contingency measures may have to be applied if there is evidence that Objectives cannot be implemented successfully. The *European Communities (Environmental Liability) Regulations 2008* will also apply in the event of any environmental damage to habitats and species both within and outside of the European sites.

8.0 CONCLUSION

This NIR has reviewed the potential impacts arising from the CCAP and found that, without the implementation of mitigation measures, the Plan will have the potential to impact upon the Conservation Objectives of eight European Sites and their relevant qualifying features that occur within the zone of influence of the Plan.

The potential impacts that could negatively affect these European Sites have been outlined in Section 6 this NIR. Section 7 outlines the environmental safeguards within the South Dublin CDP that will be applied for all land use activities supported by the CCAP. The purpose of these safeguards is to minimise and/or eliminate potential impacts associated with the CCAP land use actions to European Sites and the wider environment in general.

The mitigation measures outlined in Section 7 of this NIR will protect these Sites from potential adverse impacts. **Table 7.1 has listed these mitigation measures and evaluated their potential to safeguard European sites from these actions. A rationale has been provided to demonstrate how these mitigation measures will provide effective safeguards against any landuse projects arising from these actions of the CCAP.**

The measures and requirements of the South Dublin CDP and particularly Section 11.8.2 of the CDP that aim to protect, conserve and appropriately manage European Sites provide a basis for eliminating or minimising to an insignificant level potential adverse land use effects that could arise from the land use actions identified in Table 6.1 of this NIR. These objectives along with the additional safeguards within the CDP as outlined in Table 7.1 above will provide a basis for ensuring any future land use facilitated by the CCAP will not be supported where they present a risk of likely significant effects to European Sites.

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APPENDIX 1: SCREENING STATEMENT FOR APPROPRIATE ASSESSMENT

South Dublin County Council

Climate Change Action Plan 2019 -
2024

Statement in Support of

Screening for Appropriate
Assessment

Prepared by Minogue and Associates with Doherty
Environmental.

www.minogueandassociates.com

South Dublin County Council

Climate Change Action Plan 2019 - 2021

Statement in support of Screening for Appropriate Assessment

| Document Stage | Document Version | Prepared by |
|----------------|------------------|-------------------------|
| Draft | 1 | Pat Doherty MSc, MCIEEM |

This report has been prepared by Minogue and Associates with all reasonable skill, care and diligence. Information report herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is prepared for South Dublin County Council and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

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1.1 INTRODUCTION

South Dublin County Council intends to implement its first Climate Change Action Plan (CCAP) for the period 2019 to 2024. Minogue and Associates have been appointed by South Dublin County Council to prepare a statement in support of Screening for Appropriate Assessment for the CCAP.

The function of this Screening Exercise is to identify the potential for the proposed CCAP to result in likely significant effects to European Sites and to provide information so that South Dublin County Council can determine whether a Natura Impact Report and Appropriate Assessment is required for the Action Plan.

1.2 HABITATS DIRECTIVE ASSESSMENT

Article 6(3) of the Habitats Directive requires an assessment of the potential effects of a land use plan or project on one or more Natura 2000 (N2K) Sites. It is noted that a Habitats Directive Assessment is commonly referred to as an “Appropriate Assessment” (Dodd *et al*, 2007). However “Appropriate Assessment” forms only one stage of the HDA process (all stages making up the assessment process are outlined in detail below). The EU Habitats Directive provides the legislative framework for the protection of habitats and species throughout Europe through the establishment of a network of designated conservation areas known as the N2K network. The N2K network includes sites designated as Special Areas of Conservation (SACs), under the EU Habitats Directive and Special Protection Areas (SPAs) designated under the EU Birds Directive. Under the European Communities (Birds and Natural Habitats Regulations 2011, as amended) SACs and SPAs are referred to as European Sites. SACs are designated in areas that support habitats listed on Annex I and/or species listed on Annex II of the Habitats Directive. SPAs are designated in areas that support: 1% or more of the all-Ireland population of bird species listed on Annex I of the EU Birds Directive; 1% or more of the population of a migratory species; and more than 20,000 waterfowl.

Articles 6(1) & (2) of the Habitats Directive set out provisions for the conservation management of European Sites. Articles 6(3) and 6(4) of this Directive set out a series of procedural steps to test whether or not a plan or project is likely to affect a European Sites. Article 6(3) also establishes the requirement for a HDA:

“any plan or project not directly connected with or necessary to the management of the (European) site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”.

Therefore, the objective of this Screening is to identify whether or not land use measures supported by the Plan will have the potential to adversely affect the Conservation Objectives of European Sites. Such a conclusion will be arrived at by assessing the implications of future developments that will be supported by the Plan on each European Site occurring within its zone of influence.

The HDA is underpinned by the precautionary principle. Therefore, if the risk of adverse impacts to the conservation objectives of a European Site cannot be ruled out it is assumed that the potential for an adverse impact will exist. Where such uncertainties are identified during the assessment, measures will be proposed to avoid or mitigate the risk of adverse impacts occurring.

The Screening was undertaken with reference to the following guidance documents on Habitats Directive Assessments:

- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2009). DEHLG.
- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats directive 92/43/EEC. European commission (2000). (To be referred to as MN 2000).
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats directive 92/43/EEC. European Commission (2001).

1.3 STAGES OF THE HABITATS DIRECTIVE ASSESSMENT

The European Commission (2001) Guidance has outlined a staged process for the completion of a HDA.

- Stage 1 – Screening: This stage defines the proposed plan, establishes whether the proposed plan is necessary for the conservation management of the European Site and assesses the likelihood of the plan to have a significant effect, alone or in combination with other plans or projects, upon a European Site.
- Stage 2 – Appropriate Assessment: If a plan or project is likely to have a significant effect an Appropriate Assessment must be undertaken. In this stage the impact of the plan or project to the Conservation Objectives of the European Site is assessed. The outcome of this assessment will establish whether the plan will have an adverse effect upon the integrity of the European Site.
- Stage 3 – Assessment of Alternative Solutions: If it is concluded that, subsequent to the implementation of mitigation measures, a plan has an adverse impact upon the integrity of a European Site it must be objectively concluded that no alternative solutions exist before the plan can proceed.
- Stage 4 – Where no alternative solutions exist and where adverse impacts remain but imperative reasons of overriding public interest (IROPI) exist for the implementation of a plan or project an assessment of compensatory measures that will effectively offset the damage to the Natura site 2000 will be necessary.

The remainder of this document sets out the Methodology and Results of the Screening exercise. It is structured as follows:

Section 2: Habitats Directive Assessment Methodology;

Section 3: Description of the proposed Climate Change Action Plan & Screening of Actions for likely significant effects;

Section 4: Identifies the European Sites within the zone of influence of the Plan;

Section 5: Identifies the Likely Significant Effects of the Plan to European Sites occurring within its zone of influence; and

Section 6: Provides a Screening conclusion.

2.0 SCREENING METHODOLOGY

The function of the Screening Assessment is to identify whether the Plan will have a likely significant effect on European Sites. In this context “likely” means any effect that may be reasonably predicted and “significant” means not trivial or inconsequential but an effect that is potentially relevant to the Site’s conservation objectives¹. Any effect, which would compromise the functioning and viability of a Site and interfere with achieving the conservation objectives of the Site would constitute a significant effect.

The nature of the likely interactions between the Plan and the Conservation Objectives of European Sites will depend upon the potential for future land use activities supported by the Plan to interact with European Sites and their associated qualifying features of interest; the sensitivity of European Site qualifying features to potential impacts associated with land use activities facilitated by the Plan; the current conservation status of the European Site qualifying features; and the likely changes that will result from the implementation of the Plan, in combination with other plans and projects.

The European Commission Guidelines (2001) outline the stages involved in undertaking a Screening assessment of a plan or project that has the potential to have likely significant effects on European Sites. The methodology adopted for the Screening of the Plan is informed by these guidelines and was undertaken in the following stages:

- A brief description of the Plan is provided and determine whether it is necessary for the conservation management of European Sites;
- Identification of European Sites occurring within the zone of influence of the Plan;
- Identification of potential likely significant effects to European Sites; and

¹ See English Nature’s Habitat Regulations Guidance Note No. 3, 1999.

- Identification of other plans or projects that, in combination with the Plan, have the potential to affect European Sites.

3.0 DESCRIPTION OF THE CCAP

3.1 OVERVIEW

For the first time, Dublin's four local authorities have joined together to develop Climate Change Action Plans as a collaborative response to the impact that climate change is having, and will continue to have, on the Dublin Region and its citizens. While each plan is unique to its functional area, they are unified in their approach to climate change adaptation and mitigation, and their commitment to lead by example in tackling this global issue.

These CCAPs follow on from the publication of A Strategy for Climate Change Action Plans for the Dublin Local Authorities (DLAs), which was published in January 2017. The strategy used a structured approach that focused on seven key areas (Citizen Engagement, Planning, Energy, Transport, Water, Waste, and Ecosystems & Biodiversity), and set out how the DLAs would develop the four climate change action plans. The action plans will be unique to each local authority area but synchronised in their methodology.

This plan concentrates on the two approaches required to tackle climate change. The first, mitigation, consists of actions that will reduce current and future GHG emissions; examples of these include reductions in energy use, switching to renewable energy sources and carbon sinks. The second approach, adaptation, consists of actions that will reduce the impacts that are already happening now from our changing climate and those that are projected to happen in the future.

The actions in this draft CCAP for South Dublin will be continually monitored and updated by a dedicated climate action team working across all Council departments. They will be assisted by the newly established Dublin Metropolitan Climate Action Regional Office, which will ensure that the overall plan is fully updated every five years to reflect latest policy, technology and climate-related impacts. The new office will work with Codema, as technical support and research partner, to ensure that the plans continue to be informed by national and international best practice.

The actions in the CCAP are presented around a number of themes as follows:

- Energy and Buildings

- Transport
- Flood Resilience
- Nature Based Solutions
- Resource Management.

Collectively, these collectively address the four targets of this plan, which are:

- A 33% improvement in the Council's energy efficiency by 2020
- A 40% reduction in the Council's greenhouse gas emissions by 2030
- To make Dublin a climate resilient region, by reducing the impacts of future climate change -related events
- To actively engage and inform citizens on climate change.

As such, this CCAP encompasses the functional area of South Dublin County. This area is referred to throughout this report as the "Plan area". The administrative area of County Council for which the Plan has been prepared comprises 222.7 km².

3.2 SCREENING OF CCAP ACTIONS

All CCAP actions outlined in the Plan are presented in Appendix 1. A screening of each of these actions is also provided in Appendix 1. The majority of these actions have been identified as not having the potential to result in any land use effects or where land use effects arise, they are identified as having potential positive impacts for the environment. However a small number of actions, associated with transport and flood mitigation measures, have been identified as having the potential, in the absence of mitigation, to result in likely significant effects to European Sites. It is noted that the identification of likely significant effects associated with these actions is underpinned by a precautionary approach and the broad level of information available for each of these three actions at the Plan stage. In the absence of

definitive locations that will be subject to land use activities facilitated by these actions it cannot be ruled out that such activities will not have the potential to result in likely significant effects to European Sites.

The three actions that could not be screened out that this stage of the Habitats Directive Assessment process is as follows:

Transport Actions: Action No. 10 – Build out county cycle network

Transport Actions: Action No. 11 – Development of cycle/pedestrian greenways

Flood Defence: Action No. 20 – Minor flood schemes and general maintenance

3.3 PROPOSED CCAP & NATURA CONSERVATION MANAGEMENT

The proposed CCAP seeks to implement measures that will reduce the greenhouse gas emissions and provide improved resilience to climate change within the local authority area.

It is clear from this overarching objective of the proposed CCAP, that it is not necessary for the management of any European Site for nature conservation purposes. Therefore consideration is given to the Plan and whether it has the potential to result in likely significant effects to European Sites and their Conservation Objectives.

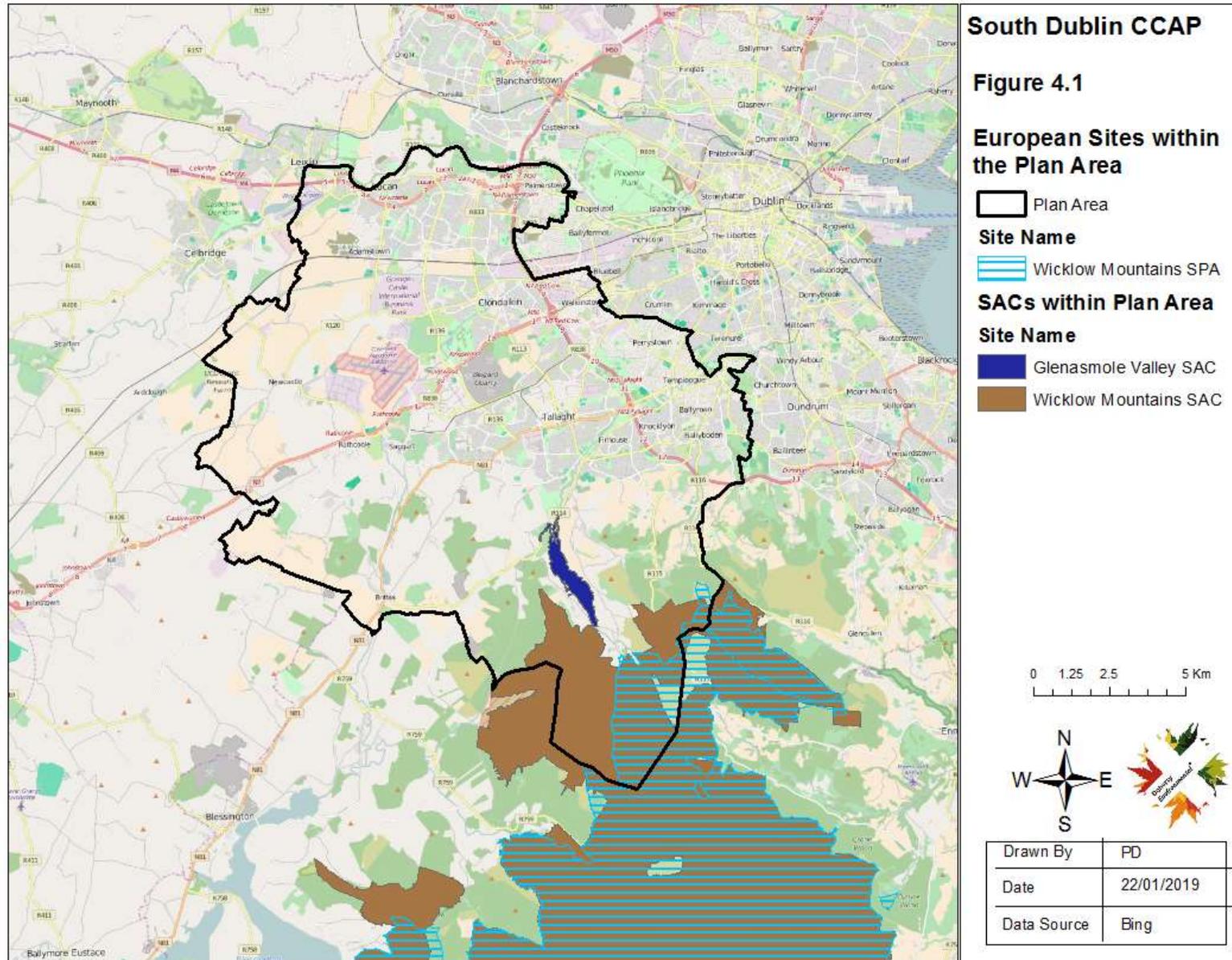
4.0 IDENTIFICATION OF EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PLAN

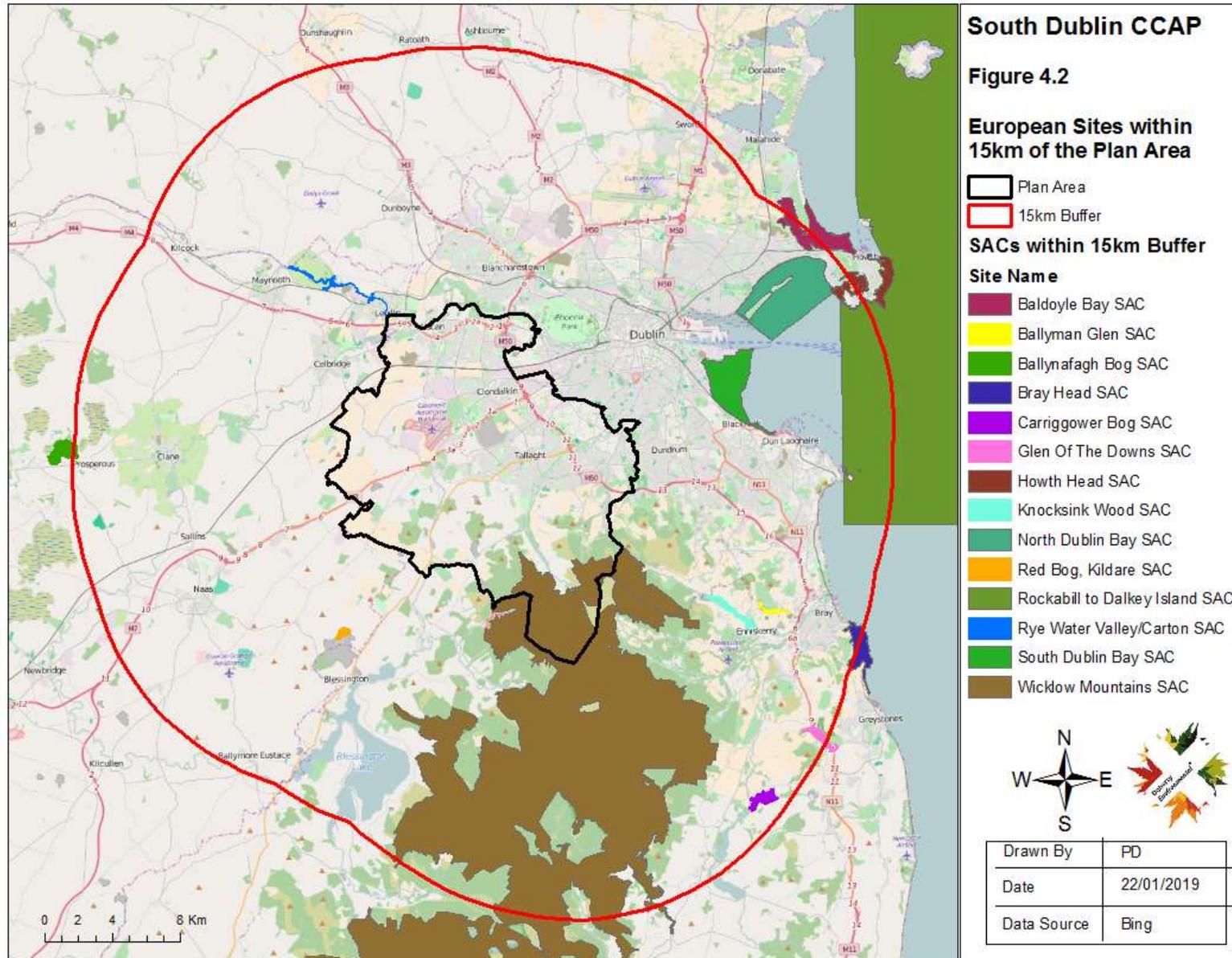
In order to identify the European Sites that could be significantly affected by the implementation of the proposed CCAP an initial long-list of sites occurring within a 15km radius of the Plan area (i.e. South Dublin County Council) has been compiled. The establishment of a 15km buffer area surrounding the Plan area is in line with the DAHLG recommended procedures for identifying European Sites. The buffer distance of 15km was also considered sufficient to ensure all potential impacts to European Sites arising from the implementation of the Plan were taken into account (see Section 4.1 below for more information). This is based on the absence of any impact pathways (i.e. the absence of hydrological pathway) between the Plan area and other European Sites occurring at a distance greater than 15km from the Plan area.

4.1 EUROPEAN SITES WITHIN 15KM OF THE PLAN

Table 4.1 lists all European Sites occurring within and surrounding the Plan area. A total number of three European Sites, comprising two SACs and one SPAs occur within the Plan Area (see Figures 4.1). In addition to these European Sites a total of 13 SACs and 5 SPAs occur within the Plan Area (see Figure 4.2 and Figure 4.3).

Table 4.1 lists the qualifying features of interest of the SAC and the special conservation interests of the SPAs occurring within the Plan area and the surrounding 15km buffer zone. In addition the broad habitat type and species for which each site is designated are also outlined.





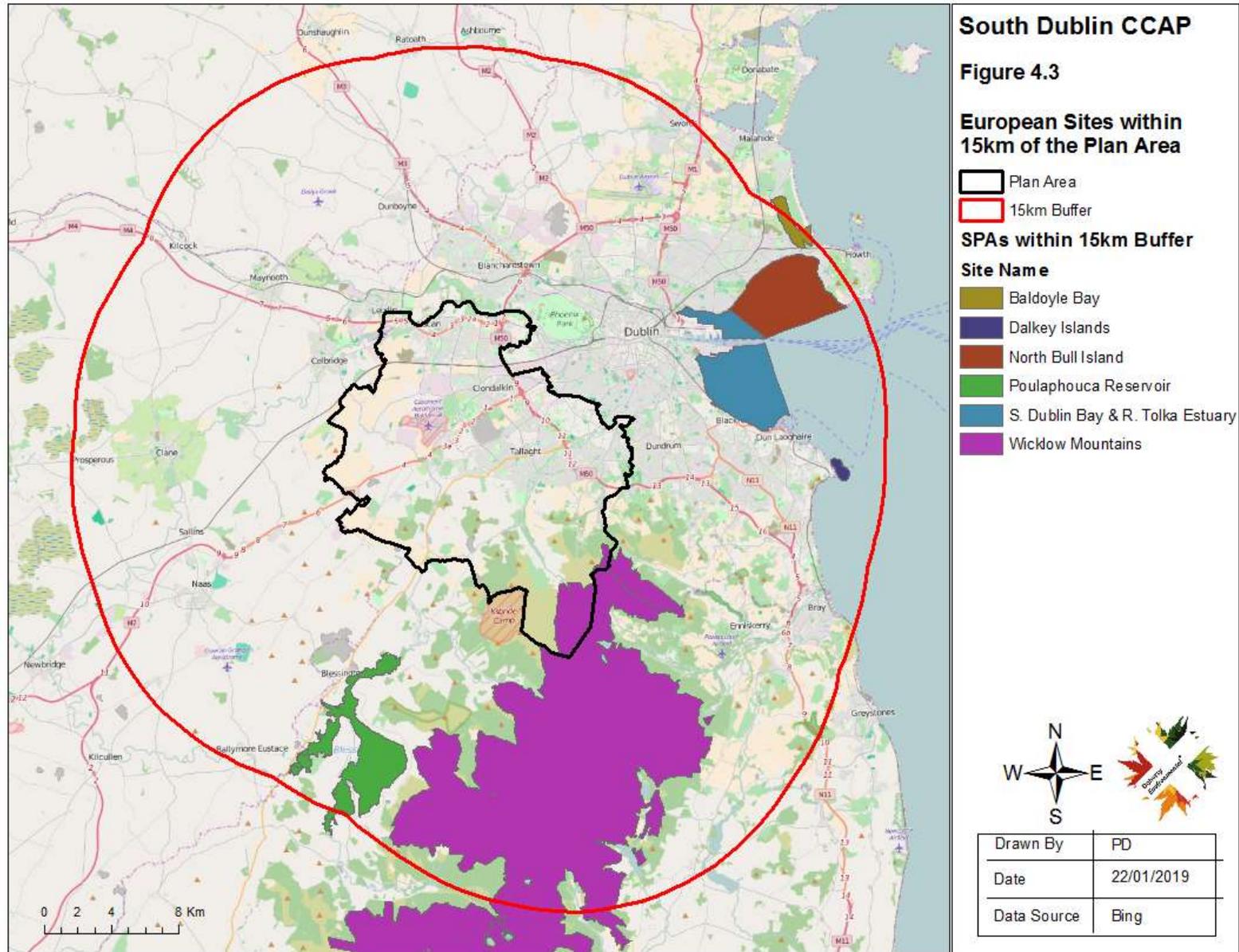


Table 4.1: European Sites within 15km of the Plan Area

| European Sites | Distance from Plan Area | Qualifying Features of Interest/Special Conservation Interests | Broad QI/SCI Category |
|-------------------------------------|-------------------------|--|---|
| European Sites within the Plan Area | | | |
| Glenasmole Valley SAC | Within Plan area | <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]</p> <p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p> | <p>Terrestrial grassland and peatland habitat</p> <p>Groundwater dependent habitat</p> |
| Wicklow Mountain SAC | Within Plan area | <p>Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]</p> <p>Natural dystrophic lakes and ponds [3160]</p> <p>Northern Atlantic wet heaths with Erica tetralix [4010]</p> <p>European dry heaths [4030]</p> | <p>Surface water dependent habitats</p> <p>Terrestrial grassland, peatland, woodland and exposed rock habitat</p> <p>Mammals (otters)</p> |

| | | | |
|---|------------------|--|------------------------------|
| | | <p>Alpine and Boreal heaths [4060]</p> <p>Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]</p> <p>Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]</p> <p>Blanket bogs (* if active bog) [7130]</p> <p>Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110]</p> <p>Calcareous rocky slopes with chasmophytic vegetation [8210]</p> <p>Siliceous rocky slopes with chasmophytic vegetation [8220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p> | |
| Wicklow Mountain SPA | Within Plan area | <p>Merlin (<i>Falco columbarius</i>)</p> <p>Peregrine (<i>Falco peregrinus</i>)</p> | Breeding raptor bird species |
| European Sites within 15km of the Plan area | | | |

| | | | |
|---------------------------------|------------------|---|---|
| <p>South Dublin Bay SAC</p> | <p>km to the</p> | <p>Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]</p> | <p>Coastal habitats</p> |
| <p>North Dublin Bay SAC</p> | <p>km to the</p> | <p>Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]</p> | <p>Coastal habitats Plant species (Petalwort liverwort)</p> |

| | | | |
|--------------------------------------|-----------|--|--|
| | | Petalophyllum ralfsii (Petalwort) [1395] | |
| South Dublin Bay & Tolka Estuary SPA | km to the | Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999] | Wintering coastal waterbirds Breeding Terns Coastal habitats |
| North Bull Island SPA | km to the | Light-bellied Brent Goose (Branta bernicla hrota) | Wintering coastal waterbirds |

| | | | |
|--|--|---|-------------------------|
| | | <p>[A046]</p> <p>Shelduck (<i>Tadorna tadorna</i>) [A048]</p> <p>Teal (<i>Anas crecca</i>) [A052]</p> <p>Pintail (<i>Anas acuta</i>) [A054]</p> <p>Shoveler (<i>Anas clypeata</i>) [A056]</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Curlew (<i>Numenius arquata</i>) [A160]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Turnstone (<i>Arenaria interpres</i>) [A169]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> | <p>Coastal habitats</p> |
|--|--|---|-------------------------|

| | | Wetland and Waterbirds [A999] | |
|----------------------|-----------|---|---|
| Knocksink Woods SAC | km to the | Petrifying springs with tufa formation (Cratoneurion) [7220] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] | Groundwater dependent habitats |
| Rye Water Valley SAC | km to the | Petrifying springs with tufa formation (Cratoneurion) [7220] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016] | Groundwater dependent habitats Groundwater/surface water dependent species |
| Baldoyle Bay SAC | km to the | Mudflats and sandflats not covered by seawater at low tide [1140] <i>Salicornia</i> and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] | Coastal habitats |
| Baldoyle Bay SPA | km to the | Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) | Wintering coastal waterbirds |

| | | | |
|----------------------|-----------|---|--|
| | | <p>[A046]</p> <p>Shelduck (<i>Tadorna tadorna</i>) [A048]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Wetland and Waterbirds [A999]</p> | Coastal habitats |
| Howth Head SAC | km to the | <p>Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]</p> <p>European dry heaths [4030]</p> | Terrestrial exposed rock and peatland habitats |
| Ballynafagh Bog SAC | km to the | <p>Active raised bogs [7110]</p> <p>Degraded raised bogs still capable of natural regeneration [7120]</p> <p>Depressions on peat substrates of the Rhynchosporion [7150]</p> | Terrestrial peatland habitats |
| Red Bog, Kildare SAC | km to the | Transition mires and quaking bogs [7140] | Terrestrial peatland habitats |
| Ballyman Glen SAC | km to the | Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] | Groundwater dependent habitats |

| | | | |
|---------------------------|-----------|--|--|
| | | Alkaline fens [7230] | |
| Bray Head SAC | km to the | Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] | Terrestrial exposed rock and peatland habitats |
| Carriggower Bog SAC | km to the | Transition mires and quaking bogs [7140] | Terrestrial peatland habitats |
| Glen Of The Downs SAC | km to the | Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] | Terrestrial woodland habitats |
| Poulaphouca Reservoir SPA | km to the | Greylag Goose (<i>Anser anser</i>) [A043] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] | Winter waterbirds |
| Dalkey Islands SPA | km to the | Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] | Breeding Terns |

4.2 EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PLAN

The next step of this Screening Exercise is to identify which, if any, of European Sites listed in Table 4.1 above occur within the zone of influence of the Plan area.

A source-pathway-receptor model has been used to establish which European Sites could occur within the zone of influence of potential impacts. Under such a model the elements of the Plan for which likely significant effects cannot be ruled out represents the source. As noted above these elements relate to the provision of cycle and pedestrian routes and the provision of flood defence works.

Potential impacts will have the potential to arise where these elements of the Plan have the potential to interact with qualifying features of interest/special conservation interests of European Sites. These interactions may arise as a result of direct impacts to habitats and species through habitat loss and disturbance or where pathways (such as rivers and streams) link land use activities associated with these elements to qualifying feature of interest/special conservation interests.

The receptors represent European Sites and their associated qualifying features of interest/special conservation interests.

European Sites and their associated qualifying features are likely to occur in the zone of influence of the project only where potential for the above interactions and pathways establish a link between the three Plan actions and European Sites. Table 4.2 provides a determination as to whether each European Site (as listed in Table 4.1) occur within the zone of influence of the project. This determination has been undertaken in line with the following assessment questions:

- Does the Plan Action have the potential to interact with qualifying habitats?
- Does the Plan Action have the potential to interact with qualifying species/special conservation interest bird species?
- Is there a hydrological pathway linking the Plan Action to European Sites and does this pathway have the potential to function as an impact pathway?

Table 4.4.2: Identification of European Sites within the Zone of Influence of the Plan

| European Sites | Potential Interaction with Qualifying Habitats | Potential Interaction with Qualifying Species | Potential Hydrological Pathway | Does the European Sites occur within the zone of influence of the Plan? |
|-------------------------------------|---|--|---|---|
| European Sites within the Plan Area | | | | |
| Glenasmole Valley SAC | The provision of cycling and walking routes, such as the Dodder Greenway, will have the potential to interact with qualifying habitats of this SAC. | No Annex II species are listed as qualifying features of interest for this SAC. | The Dodder Flood Relief Scheme has been implemented along the River Dodder catchment, in which this SAC is located. However minor flood relief works within this catchment and in the vicinity of this SAC could result in interactions with qualifying habitats of this SAC. | Yes. |
| Wicklow Mountain SAC | There are no known walking routes or cycling routes proposed within the section of this SAC occurring within South Dublin. Any minor flood works that may be completed in the upper Dodder catchment within this SAC will have the potential to interact with qualifying habitats of this SAC. | Any minor flood works that may be completed in the upper Dodder catchment within this SAC will have the potential to interact with qualifying species of this SAC. | Any minor flood works that may be completed in the upper Dodder catchment within this SAC will have the potential to interact with qualifying species of this SAC. | Yes |
| Wicklow Mountain SPA | There are no known walking routes or cycling routes proposed within the | Any minor flood works that may be completed in the upper Dodder | Any minor flood works that may be completed in the upper Dodder | Yes |

| | | | | |
|---|---|--|--|-----|
| | <p>section of this SPA occurring within South Dublin.</p> <p>Any minor flood works that may be completed in the upper Dodder catchment within this SPA will have the potential to interact with qualifying habitats of this SPA.</p> | <p>catchment within this SPA will have the potential to interact with qualifying species of this SPA.</p> | <p>catchment within this SPA will have the potential to interact with qualifying species of this SPA.</p> | |
| European Sites within 15km of the Plan area | | | | |
| South Dublin Bay SAC | <p>Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats.</p> | <p>No Annex II species are listed as qualifying features of interest for this SAC.</p> | <p>The Plan area is located upstream of this SAC but there is no functional hydrological impact pathway connecting the Plan area to this SAC (see).</p> | No |
| North Dublin Bay SAC | <p>Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats.</p> | <p>Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying species of this SAC. There will be no potential for the project to directly interact with these species or their habitat.</p> | <p>The Plan area is located upstream of this SAC and works associated with cycling, walking and minor flood relief projects within or adjacent to watercourses will be hydrologically connected to this SAC.</p> | Yes |
| South Dublin Bay & Tolka Estuary SPA | <p>Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the wetland habitats of this SPA.</p> | <p>Any works associated with cycling and walking routes and minor flood works within South Dublin are not likely to be undertaken within areas that are relied upon by the wetland</p> | <p>The Plan area is located upstream of this SPA and works associated with cycling, walking and minor flood relief projects within or adjacent to watercourses will be hydrologically</p> | Yes |

| | | | | |
|-----------------------|--|---|--|-----|
| | There will be no potential for the project to directly interact with these habitats | bird species of this SPA. This is due to the absence of suitable coastal habitats within the Plan area to support such species. Given the absence of coastal habitat and the distance between the Plan area and this SPA there will be no potential for the Plan to directly interact with these species. | connected to this SPA | |
| North Bull Island SPA | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the wetland habitats of this SPA. There will be no potential for the project to directly interact with these habitats | Any works associated with cycling and walking routes and minor flood works within South Dublin are not likely to be undertaken within areas that are relied upon by the wetland bird species of this SPA. This is due to the absence of suitable coastal habitats within the Plan area to support such species. Given the absence of coastal habitat and the distance between the Plan area and this SPA there will be no potential for the Plan to directly interact with these species. | The Plan area is located upstream of this SAC and works associated with cycling, walking and minor flood relief projects within or adjacent to watercourses will be hydrologically connected to this SPA | Yes |
| Knocksink Woods SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Rye Water Valley SAC | Any works associated with cycling and walking routes and minor flood | Any works associated with cycling and walking routes and minor flood | There are no hydrological pathways | No |

| | | | | |
|-----------------|--|--|--|----|
| | works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | works within South Dublin will be completed at a remote distance from the qualifying species of this SAC. There will be no potential for the project to directly interact with these species or their habitat. | connecting the Plan area to this SAC. | |
| Baldoye Bay SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Baldoye Bay SPA | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the wetland habitats of this SPA. There will be no potential for the project to interact with these habitats | Any works associated with cycling and walking routes and minor flood works within South Dublin are not likely to be undertaken within areas that are relied upon by the wetland bird species of this SPA. This is due to the absence of suitable coastal habitats within the Plan area to support such species. Given the absence of coastal habitat and the distance between the Plan area and this SPA there will be no potential for the Plan to interact with these species. | There are no hydrological pathways connecting the Plan area to this SPA. | No |
| Howth Head SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |

| | | | | |
|----------------------|--|---|--|----|
| | There will be no potential for the project to directly interact with these habitats. | | | |
| Ballynafagh Bog SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Red Bog, Kildare SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Ballyman Glen SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Bray Head SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |

| | | | | |
|---------------------------|--|---|--|----|
| | There will be no potential for the project to directly interact with these habitats. | | | |
| Carriggower Bog SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Glen Of The Downs SAC | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the qualifying habitats of this SAC. There will be no potential for the project to directly interact with these habitats. | No Annex II species are listed as qualifying features of interest for this SAC. | There are no hydrological pathways connecting the Plan area to this SAC. | No |
| Poulaphouca Reservoir SPA | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the wetland habitats of this SPA. There will be no potential for the project to directly interact with these habitats | Any works associated with cycling and walking routes and minor flood works within South Dublin are not likely to be undertaken within areas that are relied upon by the wetland bird species of this SPA. This is due to the absence of suitable coastal habitats within the Plan area to support such species. Given the absence of coastal habitat and the distance between the Plan area and this SPA there will be no potential for the Plan to interact with these | There are no hydrological pathways connecting the Plan area to this SPA. | No |

| | | | | |
|--------------------|--|--|--|----|
| | | species. | | |
| Dalkey Islands SPA | Any works associated with cycling and walking routes and minor flood works within South Dublin will be completed at a remote distance from the wetland habitats of this SPA. There will be no potential for the project to directly interact with these habitats | Any works associated with cycling and walking routes and minor flood works within South Dublin are not likely to be undertaken within areas that are relied upon by the wetland bird species of this SPA. This is due to the absence of suitable coastal habitats within the Plan area to support such species. Given the absence of coastal habitat and the distance between the Plan area and this SPA there will be no potential for the Plan to interact with these species. | There are no hydrological pathways connecting the Plan area to this SPA. | No |

Table 4.2 above outlines the relationship between the project site and the European Sites occurring within and in the surrounding 15km buffer area of the Plan area. Of the twenty European Sites occurring within and in a 15km radius of the Plan area, six have been identified as occurring within the zone of influence of the Plan. These European Sites are:

- Glenasmole Valley SAC;
- Wicklow Mountains SAC;
- Wicklow Mountains SPA;
- South Dublin Bay River Tolka Estuary SPA;
- North Dublin Bay SAC; and
- North Bull Island SPA

4.3 CONSERVATION OBJECTIVES FOR INTEREST FEATURES OF EUROPEAN SITES OCCURRING WITHIN THE ZONE OF INFLUENCE OF THE PROJECT

Generic conservation objectives for all European Sites have been established by the National Parks and Wildlife Service (NPWS). The generic conservation objective for the two habitats occurring within the zone of influence of the project is to maintain the favourable conservation status of these habitats. The favourable conservation status of these habitats 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 generic conservation objective for the qualifying species occurring within the zone of influence of the project is to maintain or restore the favourable conservation status of these species. This 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.

4.4 THREATS & PRESSURE TO THE EUROPEAN SITES OCCURRING WITHIN THE PLAN ZONE OF INFLUENCE

Threats and pressures to the European Sites and qualifying features of interest in Ireland have been documented by the National Parks and Wildlife Service at two levels, namely at the European Sites level and at the qualifying feature of interest/ Annex 1 habitat and Annex 2 species level. The threats and pressures to European Sites are documented by the NPWS in the Natura 2000 - Standard Data Forms for each SAC. The Natura 2000 - Standard Data Forms for the South Dublin Bay River Tolka Estuary SPA; North Dublin Bay SAC; and North Bull Island SPA. The threats and pressures to individual habitats and species listed on Annex 1 and Annex 2 of the Habitats Directive have been documented at a national level in Ireland's most recent Article 17 submission to the EU, titled The Status of EU Protected Habitats and Species in Ireland (NPWS, 2013). The threats and pressures identified at the three European Sites occurring within the zone of influence of the project are outlined in Table 4.3 below.

Table 4.3: Threats and Pressures to European Sites occurring within the Zone of Influence of the Plan Area

| European Sites | Threats & Pressures |
|-----------------------|--|
| Glenasmole Valley SAC | <ul style="list-style-type: none"> • human induced changes in hydraulic conditions • 'forestry clearance • 'forest replanting (non native trees) • Fertilisation |

| | |
|--|---|
| | <ul style="list-style-type: none"> • Grazing • diffuse pollution to surface waters due to agricultural and forestry activities • abandonment / lack of mowing • diffuse pollution to surface waters due to household sewage and waste waters • invasive non-native species • diffuse groundwater pollution due to non-sewered population • Roads, paths and railroads • urbanisation |
| <p>Wicklow Mountains SAC & SPA</p> | <ul style="list-style-type: none"> • Off-road motorized driving • Disposal of household / recreational facility waste • Damage by herbivores (including game species) • Grazing in forests/ woodland • Mountaineering, rock climbing, speleology • Missing or wrongly directed conservation measures • Walking, horseriding and non-motorised vehicles • Invasive non-native species • Erosion • Grazing • Wildlife watching |

| | |
|-----------------------------|---|
| | <ul style="list-style-type: none"> • Trampling, overuse, • Stock feeding • Urbanised areas, human habitation • Hunting and collection of wild animals (terrestrial) • Collapse of terrain, landslide • Collection (fungi, lichen, berries etc.) • Vandalism • Outdoor sports and leisure activities, recreational activities • Tree surgery, felling for public safety, removal of roadside trees • Military manoeuvres • Burning down • Paths, tracks, cycling tracks • Peat extraction • Taking from nest (falcons) |
| <p>North Dublin Bay SAC</p> | <ul style="list-style-type: none"> • Urbanised areas, human habitation • Walking, horseriding and non-motorised vehicles • Golf course • Industrial or commercial areas • Discharges |

| | |
|---|--|
| <p>North Bull Island SPA</p> | <ul style="list-style-type: none"> • Disposal of household / recreational facility waste • Golf Course • Industrial or commercial areas • Walking, horseriding and non-motorised vehicles • Bridge, viaduct • Roads, motorways • Discharges |
| <p>South Dublin Bay River Tolka Estuary SPA</p> | <ul style="list-style-type: none"> • Walking, horseriding and non-motorised vehicles • Reclamation of land from sea, estuary or marsh • Discharges • Roads, motorways • Industrial or commercial areas |

5.0 LIKELY SIGNIFICANT EFFECTS OF THE PLAN TO EUROPEAN SITES OCCURRING WITHIN ITS ZONE OF INFLUENCE

The potential ecological effects of land use activities associated with the provision of cycling and walking routes and flood defence works within the Glenasmole Valley and the Wicklow Mountains SAC and SPA could include:

- Habitat loss and fragmentation;
- Habitat degradation resulting from emissions to surface water;

- Habitat degradation resulting from emissions to groundwater;
- Habitat degradation resulting from the spread of non-native invasive species during works within enterprise zones; and
- Disturbance and/or displacement of qualifying species from within or outside European Sites.

Due to the hydrological pathway linking the Plan area to the three European Sites at Dublin Bay it cannot be ruled out that:

- future work associated with cycling and walking routes and flood defence works facilitated by the Plan area will not result in such effects; and
- that, should such effects occur, they will not result in likely significant effects to the three European Sites and their associated qualifying features of interest at Dublin Bay.

5.1 IN-COMBINATION EFFECTS WITH OTHER PLANS & PROJECTS

As part of the Habitats Directive Article 6(3) assessment process consideration must be given to the potential for the Plan to combine with other plans or projects to result in cumulative negative effects to European Sites. Given the broad level of detail associated with the Plan's actions and the potential for land use effects to arise as result of the implementation of actions associated with cycling, walking and flood defense measures, the potential for the Plan to combine within other Plans to result in cumulative effects cannot be ruled out. The key plans for which consideration has been given for potential cumulative effects are listed in Table 5.1 below.

Eastern and Midland Assembly Draft Regional Spatial and Economic Strategy 2018 (RSES)

National Planning Framework 2018 (NPF)

National Mitigation Plan

The Transport Strategy for the Greater Dublin Area, 2016-2035

Water Services Strategic Plan

Neighbouring County Development Plans

River Basin District Management Plans

CFRAMS Study

Greater Dublin Drainage

The Greater Dublin Transport Strategy 2016-2035

South Dublin County Council Development Plan 2016-2022

South Dublin Heritage Plan 2014-2019

A Strategy towards a Climate Change Action Plan for Dublin 2017

Catchment-Based Flood Risk Management Plans (CFRMP)

6.0 SCREENING CONCLUSION

The Screening of the proposed SDDCC CCAP as set out above shows that, in the absence of appropriate mitigation measures, it cannot be ruled out that the Plan and future land use measures facilitated by it, will not have the potential to result in likely significant effects to the following European Sites and their qualifying features of interest:

Glenasmole Valley SAC;

Wicklow Mountains SAC;

Wicklow Mountains SPA;

South Dublin Bay River Tolka Estuary SPA;

North Dublin Bay SAC; and

North Bull Island SPA.

Due to the potential risk of such effects occurring following the implementation of the CCAP, it has been concluded that the Plan has the potential to result in significant effects to European Sites. As such, a Natura Impact Report (NIR) is required to inform an Appropriate Assessment of the proposed CCAP.

7.0 APPENDIX 1: ACTION PLAN SCREENING

| | Energy and Buildings | Potential for Land Use Effects |
|---|--|--|
| 1 | Create Energy Master Plan for the Dublin Region | No. This action which calls for the preparation of this Plan will not in itself result in land use effects. |
| 2 | Develop Public Lighting Master Plan | No. This action which calls for the preparation of this Plan will not in itself result in land use effects. |
| 3 | Prepare South Dublin Sustainable Energy and Climate Action Plan | No. This action which calls for the preparation of this Plan will not in itself result in land use effects. |
| 4 | Evidence based Climate Change Chapter in County Development Plan 2022-2028 | No. This action which calls for the preparation of this Chapter will not in itself result in land use effects. |
| 5 | Evidence-based climate change chapter in <i>Tallaght Town Centre Local Area Plan</i> | No. This action which calls for the preparation of this Chapter will not in itself result in land use effects. |
| 6 | Comply with obligations for local authorities set under S.I. No. 426/2014 | No. Compliance with this legislation will not have the potential to result in adverse land use effects. |
| 7 | Display Energy Certificates for SDCC's public buildings | No. |
| 8 | Annual Monitoring and Reporting to SEAI | No. |
| 9 | Development of yearly Energy Review for SDCC | No. |

| | | |
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| 10 | Development of South Dublin District Heating System | No. |
| 11 | Deep retrofits of the Council's housing stock | No. |
| 12 | Energy efficiency works in Council owned and operated buildings | No. |
| 13 | Ongoing upgrading of lights in County Hall to LEDs | No. |
| 14 | Energy Performance Contract carried out in Tallaght and Clondalkin Leisure Centres | No. |
| 15 | Replace 4,000 SOX lamps with LEDs | No. |
| 16 | Expand and develop Small Business Innovation and Research (SBIR) programme | No. |
| 17 | Monitor and develop the Home Energy Savings Kit scheme in SDCC libraries | No. |
| 18 | <i>Assess feasibility of additional low carbon district heating networks: Clonburris and Grange Castle</i> | No. |
| 19 | <i>Expand housing assistance programme to include tenant energy awareness</i> | No. |
| | Transport | |

| | | |
|----|--|-----|
| 1 | Implement transport energy management system | No. |
| 2 | Ongoing replacement of Council vehicles with more energy-efficient alternatives, including EVs | No. |
| 3 | Use mobile canteens with operational crews | No. |
| 4 | Promotion of Cycle-to-Work Scheme to Council staff | No. |
| 5 | Strengthen traditional villages by improving the public realm through enhancement of green infrastructure measures and sustainable transport linkages | No. |
| 6 | Regular maintenance of regional and local roads | No. |
| 7 | Improve road safety at schools with additional school wardens | No. |
| 8 | Organised walks to promote healthy lifestyles, i.e. Clondalkin Route | No. |
| 9 | Develop cycle network strategy | No. |
| 10 | Build out County Cycle Network | Yes |
| 11 | Development of cycle/pedestrian greenways | Yes |
| 12 | Increase number of public bike facilities | No. |

| | | |
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| 13 | Extend BleeperBike public bike scheme | No. |
| 14 | Facilitate the delivery of public transport routes | No. |
| 15 | <i>Cycle training programme for 6th Class students/ pedal power labs</i> | No. |
| 16 | <i>Pilot VMS on Naas road</i> | No. |
| 17 | <i>Expand availability of EV charging points in County</i> | No. |
| | Flood Resilience | |
| 1 | Transpose national legislation and regulations on climate change adaptation and flood management into development guidelines | No. |
| 2 | Implement flood risk management guidelines | No. |
| 3 | Cross-boundary flood management with neighbouring local authorities | No. |
| 4 | Flood event emergency response plans | No. |
| 5 | Support the development of flood forecasting and warning system | No. |
| 6 | Implement and demonstrate SuDS guidelines in own buildings, SDZs and LAPs | No. |

| | | |
|----|---|-----|
| 7 | Undertake strategic flood risk assessment of all LAPs, SDZs and Development Plans | No. |
| 8 | Tree planting for water attenuation | No. |
| 9 | Develop demonstration sites to show how to combine SuDS/flood attenuation systems with existing land uses | No. |
| 10 | Protect and conserve floodplains, wetlands, rivers and watercourses subject to flooding | No. |
| 11 | Integrated constructed wetlands for water attenuation and purification | No. |
| 12 | Develop a climate change impact GIS risk map with scenarios for the Dublin Region | No. |
| 13 | Develop template to capture impacts, response and costs for all major climate events | No. |
| 14 | <p>Establish a Working Group to deal with the Issue of Pluvial Flood Risk. This shall include:</p> <p>How to manage “urban creep” and the increase in impermeable surfaces</p> <p>Promotion of SUDS early in design process</p> <p>Development of pluvial flood forecasting through use of point rainfall forecasting</p> | No. |

| | | |
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| | | |
| 15 | Update DLA urban drainage and flooding policies for current knowledge of flood risk and the latest best practice in drainage design promoting natural flood measures as a priority | No. |
| 16 | Risk workshops to assess impacts on council services | No. |
| 17 | Whitechurch Flood Alleviation Scheme | Yes. This project is currently being assessed for its potential to result in likely significant effects to European Sites. Given the absence of specific details regarding this project and the hydrological pathway linking this watercourses to European Sites at Dublin Bay the potential for likely significant effects cannot be ruled out at this stage. |
| 18 | Poddle Flood Alleviation Scheme | No. Screening for Appropriate Assessment has been completed for this project and the need for Appropriate Assessment has been ruled out. |
| 19 | River Camac Flood Alleviation Scheme | No. Screening for Appropriate Assessment has been completed for this project and the need for Appropriate Assessment has been ruled out. |
| 20 | Minor flood schemes and general maintenance that are designed and implemented to promote nature based solutions where practical | Yes. Given the absence of specific details regarding works associated with this action and the presence of three European Sites within the Plan area and the hydrological pathway linking this watercourses to European Sites at Dublin Bay the potential for likely significant effects cannot be ruled out at this stage. |
| 21 | <i>Communication and awareness campaigns on flood risk management and natural flood management measures</i> | No. |

| | | |
|----|--|-----|
| 22 | <i>Promote and encourage community involvement in the retrofit of SuDS in existing developments</i> | No. |
| | Nature Based Solutions | |
| 1 | Establish regional working group to identify areas and priorities for actions | No. |
| 2 | Establish a cross-departmental Trees and SUDS Working Group to promote and pilot water-sensitive urban design (WSUD) incorporating urban tree planting | No. |
| 3 | Workshop to develop Dublin Risk Assessment for nature and climate change | No. |
| 4 | Workshop on NBS, green infrastructure and Sustainable urban Drainage Systems (SuDS) | No. |
| 5 | Produce regional floodplain management guidelines - use Santry River as a demonstration | No. |
| 6 | Finalise draft Biodiversity Action Plan | No. |
| 7 | Develop Green Infrastructure Strategy that identifies areas and priorities for green infrastructure and investment | No. |
| 8 | Develop Public Open Space and Parks Strategy that incorporates climate change mitigation and | No. |

| | | |
|----|--|-----|
| | adaptation | |
| 9 | Incorporate natural play space into existing parks for recreation and as SuDS | No. |
| 10 | Implement policies in the development plan avoiding artificial underground storage of attenuation water, where possible, in favour of nature-based solutions | No. |
| 11 | Develop a hedgerow plan for the County, with actions to map, protect and develop hedgerows county-wide | No. |
| 12 | Develop urban woodland management strategy and action plan | No. |
| 13 | Implement Tree Management Policy | No. |
| 14 | Increase tree canopy cover in the County through annual planting and maintenance | No. |
| 15 | Develop coordinated regional planning approach to prevent the removal of healthy, established trees | No. |
| 16 | Measure and maintain species diversity in urban tree population | No. |

| | | |
|----|--|-----|
| 17 | Develop and promote establishment of tree trails in public parks across the County | No. |
| 18 | Develop demonstration projects for successful planting and establishment of trees in urban hardscapes | No. |
| 19 | Provide opportunities for community engagement, involvement and activities to raise awareness | No. |
| 20 | Review and climate-proof Biodiversity Action Plan, Invasive Alien Species Plan, and Tree Management Policy | No. |
| 21 | Develop list of species native to County and map of habitats that are at risk for use in EIAs | No. |
| 22 | Include native species into plans where appropriate | No. |
| 23 | Survey, map and implement control plan of invasive species | No. |
| 24 | Incorporate actions from national pollinator plan into Green Infrastructure Strategy | No. |
| 25 | Manage and monitor identified 'Pollinator Protection sites' | No. |

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| 26 | Maintain and expand community gardens and allotments for local food production | No. |
| 27 | Support local communities with biodiversity education | No. |
| 28 | Sustainable gardening workshops | No. |
| 29 | Develop demonstration sites to show how to combine nature conservation with existing land uses | No. |
| 30 | Deliver green roofs on civic buildings | No. |
| 31 | Maintain and increase Green Schools Programme participation | No. |
| 32 | Engage with residents and relevant stakeholders on climate change and biodiversity to incorporate their ideas into council strategies and plans | No. |
| 33 | Assess the benefit of increasing buffer distance of 10m from water courses to protect biodiversity and provide greater flood attenuation for distances of 20m, 50m and 100m | No. |
| | Resource Management | |
| 1 | Monitor and enforce waste regulation | No. |

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| 2 | Introduce measures to reduce waste in Council buildings | No. |
| 3 | Introduce measures to increase recycling in Council buildings | No. |
| 4 | Civic amenity waste stations | No. |
| 5 | Apply for Local Authority Prevention Network grants | No. |
| 6 | Create Stop Food Waste campaign for businesses and schools | No. |
| 7 | Promote Eco-Week | No. |
| 8 | Promote Re-Use Month annually | No. |
| 9 | Use Eco-Merit programme to advise businesses on reducing waste | No. |
| 10 | Recycling Ambassador Programme | No. |
| 11 | Reduce single-use plastics at Council organised events | No. |
| 12 | Ongoing support of the Conscious Cup Campaign / promotion of reusables over disposables | No. |
| 13 | Ongoing Support of the Small Business Innovation Research (SBIR) for illegal dumping | No. |
| 14 | Run anti-dumping/anti-litter campaigns | No. |

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| 15 | Waste Prevention Fund | No. |
| 16 | Introduce measures to reduce waste and increase recycling | No. |
| 17 | Provide more glass recycling in public realm | No. |
| 18 | Introduce leaf composting programme | No. |
| 19 | Support and promote tidy towns initiatives in County | No. |
| 20 | Examine the potential of Arthurstown landfill for development of green energy uses | No. |
| 21 | Implement water conservation campaign in civic buildings | No. |
| 22 | Identify pilot locations for water access points | No. |
| 23 | Trial of low-flush toilets in Council headquarters and social housing | No. |
| 24 | Research feasibility of rainwater harvesting in Council buildings | No. |