# **SEA STATEMENT**

OF THE

# BALLYCULLEN-OLDCOURT LOCAL AREA PLAN 2014-2020



# STRATEGIC ENVIRONMENTAL ASSESSMENT

**JUNE 2014** 



# Section 1 INTRODUCTION

#### 1.1 Purpose of Report

This is the Strategic Environmental Assessment (SEA) Statement of the Ballycullen-Oldcourt Local Area Plan (LAP) 2014. The main purpose of the SEA Statement is to indicate how environmental considerations, the views of consultees and the recommendations of the Environmental Report have been incorporated within the decision making process in the formulation of the LAP.

# 1.2 Legislative Context

The requirement to carry out a Strategic Environmental Assessment stems from the Strategic Environmental Assessment Directive (2001/42/EC) which states:

'The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans...with a view to promoting sustainable development...'

The Directive was introduced into Irish Law in 2004, through the European Communities (Environmental Assessment of Certain Plans & Programmes) Regulations 2004, S.I. No. 435 of 2004 and the Planning and Development (Strategic Environmental Assessment) Regulations 2004, S.I. No. 436 of 2004 (additional supplementary Regulations were introduced in 2011).

Article 9 of the SEA Directive (2001/42/EC) provides that the environmental authorities and the public must be provided with an SEA Statement as soon as is practical after a plan is adopted. The SEA Statement is required to include information summarising:

- a) How environmental considerations have been integrated into the plan,
- b) How
  - The environment report,
  - Submissions and observations made on the Draft Plan and Environmental Report and
  - Any transboundary consultations
  - Have been taken into account during the preparation of the plan.
- c) The reasons for choosing the plan, as adopted, in the light of the other reasonable alternatives and
- d) The measures selected to monitor the significant environmental effects of implementation of the plan.

# 1.3 Implication of SEA for the Plan Making Process

While the requirement for a mandatory Strategic Environmental Assessment for Local Area Plans applies only to areas in which the population is in excess of 5,000 persons, South Dublin County Council was of the opinion that development in the Ballycullen-Oldcourt Local Area Plan area was likely to potentially have significant effects on the environment: accordingly, an Environmental Report was prepared in parallel with the production of the Draft LAP and was submitted to the Elected Members alongside the Draft Plan. The purpose of the report was to provide an understanding of the likely environmental consequences of various alternative scenarios and of the policies and objectives contained within the LAP.

Submissions on the Environmental Report and the draft LAP were evaluated in order to ascertain any further environmental consequences to those already identified. These evaluations were included within the Manager's Report to Council Members on the proposed amendments to the Plan. The Elected Members were required by the legislation to take into account the Environmental Report before the adoption of the Plan.

#### 1.4 Production of the SEA

The Strategic Environmental Assessment of the Ballycullen-Oldcourt Local Area Plan 2014 was undertaken internally in the Council.

# Section 2 HOW ENVIRONMENTAL CONSIDERATIONS WERE INTEGRATED INTO THE PLAN

Environmental considerations were integrated into the LAP process at a number of stages in the SEA i.e. the Scoping stage, at the Environmental Report Stage and following the submissions and observations from the Environmental Authorities and the public.

In addition, the environmental sensitivities of the LAP area were communicated to the Planpreparation team on a regular basis from the outset of the Plan preparation process. This process helped identify those areas with the most limited carrying capacity and helped ensure that either future was diverted away from these areas or that appropriate mitigation measures were integrated into the Plan.

The Local Area Plan was also subject to Appropriate Assessment Screening under the Habitats Directive (92/43/EEC) at both the draft and amendment stage.

# 2.1 Scoping Report

An SEA Scoping Issues Paper was sent to the designated Environmental Authorities on 26<sup>th</sup> March 2013. The Paper set out a description of the Ballycullen-Oldcourt LAP area and a baseline of environmental data (grouped under the environmental themes/receptors – population, biodiversity, flora and fauna, landscapes/geology, agriculture, water, air quality and noise pollution, waste management, material assets, cultural assets, climate change and sustainability). Submissions were received from the Environmental Protection Agency (EPA) and the Department of Agriculture, food and the Marine.

The most important strategic environmental issues in the Ballycullen-Oldcourt LAP area arising from the scoping exercise and from the consultations were identified as follows:

- Potential for significant loss to the biodiversity network
- Problem of flooding just outside the area due to inadequate surface water infrastructure
- Noise issue along the M50
- Low usage of public transport and non-vehicular means of travel by the existing population.
- Potential for archaeological impact on sites which are not entered into the Record of Sites and Monuments.

#### 2.2 Environmental Report

The Environmental Report was prepared alongside the LAP and investigated, described and evaluated the effects of implementing the LAP on the receiving environment. The report also identifies and assesses development for the LAP area and identifies the most sustainable development strategy.

Overall, the preparation of the Environmental Report influenced the formulation of the Local Area Plan as follows;

- It raised the awareness of the existing level of environmental information in the LAP area and also the EU and National legislation governing the environment.
- It facilitated the introduction of the concept of Green Infrastructure into the LAP.
- It raised awareness of the need for measures relating to sensitivity in the development of the foothills of the Dublin Mountains.
- It provided a transparent assessment of each proposed policy and objective which allowed further fine-tuning to reduce negative environmental impacts.

The details of these influences are expanded on in Section 2.2.1

# 2.2.1 Baseline

The Environmental Report contains a range of baseline information in the Ballycullen-Oldcourt LAP area on key environmental headings such as:

- 1. Population and Human Health
- 2. Biodiversity (Flora and Fauna)
- 3. Landscape
- 4. Geology/Soil
- 5. Agriculture and Forestry
- 6. Water Quality
- 7. Air Quality and Noise Pollution
- 8. Cultural and Material Assets
- 9. Climate Change and Sustainability

# 2.2.2 Mapping of Environmental Sensitivities

Geographical Information System (GIS) software was used in order to weight a number of environmental sensitivities and map them in layers; this allowed for the identification of concentrated areas of sensitivity within the area. Environmental sensitivities are indicated by colours which range from extreme vulnerability (red) to high vulnerability (orange) to moderate vulnerability (yellow) and low vulnerability (grey).

Where the mapping shows a concentration of environmental sensitivities, there is a likelihood that development will conflict with these sensitivities and cause environmental deterioration. The map (see below), was utilised in the evaluation of policies and objectives and in association with the assessment of alternative development scenarios (see Section 4 of this report).

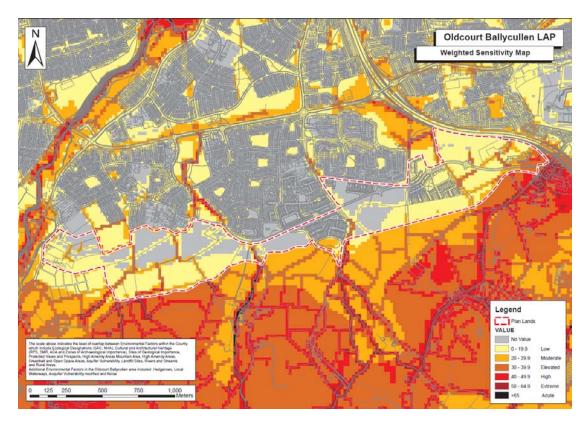


Figure 3: Environmental Sensitivity Map

# 2.2.3 Key Environmental Issues Identified

The key environmental issues in the Ballycullen Oldcourt LAP area were identified in the Environmental Report as:

- The landscape character of the foothills of the Dublin Mountains.
- The need to use Sustainable Urban Drainage Systems in the management of all surface water on the Plan Lands rather than the use of underground attenuation tanks and the use of culverts as means of dealing with surface water run-off.
- The need to create a robust biodiversity network within the Plan Lands by enhancing ecological connectivity, preventing further habitat fragmentation through the removal of hedgerows and the culverting of water courses.
- The opportunity to provide enhanced walking and cycling routes in the form of Tracks and Trails connecting with the Dublin Mountain amenity and linking existing communities.

There are still a number of data gaps in the Baseline information for Ballycullen-Oldcourt. These are detailed below:

- The lack of a Biodiversity Plan for South Dublin
- An incomplete Landscape Character Assessment for South Dublin
- Lack of information on air quality in the vicinity
- The lack of archaeological data
- Flood Risk information is confined mainly to the OPW's Preliminary Flood Risk Assessment (PFRA). While the Draft LAP lands are within the Dodder Catchment, no flood risk modelling was carried out for the sections of streams that traverse the Plan Lands under the CFRAMS.

A biodiversity Plan will be commencing shortly and is expected to be finalised by the end of 2014.

# 2.2.4 Strategic Environmental Objectives (SEO)

The SEOs, listed below, are measures against which the environmental effects of the Ballycullen-Oldcourt Local Area Plan can be tested in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated. The SEOs are objectives derived from international, E.U. and national strategies, policies, directives and plans that are relevant to the LAP. The SEOs are linked to indicators and targets which facilitate monitoring of the implementation of both the LAP and County Development Plan (the SEA Monitoring System<sup>1</sup> initiated by the Council following the adoption of the County Development Plan is also suitable for use at the LAP level) and are as follows:

Biodiversity 1 (B1)	To avoid loss of relevant habitats, geological features, species or their sustaining resources in designated ecological sites	
Biodiversity 2 (B2)	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites	
Biodiversity 3 (B3)	To sustain, enhance or - where relevant - prevent the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity	
Human Health 1 HH1	To protect human health from hazards or nuisances arising from traffic and incompatible land uses	
Soil 1 (S1)	To maximise the sustainable re-use of brownfield lands and the existing built environment, rather than developing greenfield lands	

<sup>&</sup>lt;sup>1</sup> As the Development Plan SEA Monitoring Framework included a range of indicators for which there was no existing source, the Council has created an SEA Monitoring System using Development Management derived Indicators to both monitor the significant environmental impacts of Development Plan policies and to begin the process of introducing meaningful indicators to monitor spatial planning. The system became operational at the start of 2011 and records all planning applications made since the coming into operation of the County Development Plan in October 2010.

Soil 2	To maximise waste production and reduce the volume of waste to
(S2)	landfill and to operate sustainable waste management practices
Water	To maintain and improve, where possible, the quality of rivers, lakes
(W1)	and surface water
Water 2	To prevent pollution and contamination of ground water
(W2)	
Water 3	To prevent development on lands which pose - or are likely to pose in
(W3)	the future – a significant flood risk
Climate and Air	To minimise increases in travel related greenhouse emissions to air i.e
(C1)	minimise travel demand
Climate and Air	To reduce car dependency within the County by way of, inter alia,
(C2)	encouraging modal change from car to more sustainable forms of public
· · ·	transport and encouraging development which will not be dependent on
	private transport
Material Assets 1	To serve new development under the CDP with appropriate waste water
(M1)	treatment
Material Assets 2	To maintain and improve the quality of drinking water supplies
(M2)	
Cultural Heritage 1	To protect the archaeological heritage of South Dublin with regard to
(CH1)	entries to the Record of Monuments and Places - including Zones of
	Archaeological Potential - and the context of the above within the
	surrounding landscape where relevant
Cultural Heritage 2	To preserve and protect the special interest and character of South
(CH2)	Dublin's architectural heritage with regard to entries to the Record of
	Protected Structures, Architectural Conservation Areas, and their
	context within the surrounding landscape where relevant
Landscape 1	To protect and avoid significant adverse impacts on the landscape,
(L1)	landscape features and designated scenic routes; especially with regard
	to areas of high amenity of the Dublin Mountain Area
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# 2.2.5 Environmental Assessment

The policies and objectives of the LAP were assessed against the SEOs at a number of stages during the process. This allowed for early identification and mitigation of environmental conflicts, which resulted in amendments to existing policies and the addition of environmentally beneficial policies. Local Area Plan policies were also assessed for secondary, cumulative, synergistic, short, medium and long term, permanent and temporary, positive, neutral and negative effects as required under the SEA Directive.

Assessment of each Local Area Plan policy is contained within the Environmental Report (October 2013).

The policies and objectives proposed in the Manager's Report and agreed by the Elected Members after the Draft Plan went on public display ( $18^{th}$  October 2013 –  $28^{th}$  November 2013) were also assessed and incorporated into the amended Plan. The motions proposed by the Elected Members were also assessed.

# 2.2.6 Mitigation

The introduction of the concept of Green Infrastructure to the Ballycullen-Oldcourt LAP at the draft stage ensured the conservation and enhancement of biodiversity, the provision of accessible tracks and trails, open spaces and recreational facilities, the sustainable management of water, the maintenance of the important landscape of the Dublin Mountains.

A series of policies/objectives evolved in discussion between the LAP and SEA Teams and these were recommended as mitigation measures in the Environmental Report for integration into the Local Area Plan; a selection of these are listed below.

Selected Mitigation Measures		
Creen		
Green Infrastructure - Water and Water Management	Ensure that a linked SUDS network shall be implemented fully across the Plan Lands in accordance with the requirements of the Greater Dublin Strategic Drainage Study (2005). All proposed developments shall contribute to the achievement of this integrated network in order to reduce surface water run-off and to minimise the risk of flooding. This shall include for a series of attenuation areas (ponds, basins and reedbeds) set within parklands and wetland areas within linear green spaces. <b>(Objective Gl2)</b>	
	Ensure that existing natural streams and drainage ditches shall be retained and augmented with grassed swales within a series of green corridors, wetland areas and parks to form an integral conveyance and attenuation system as part of the overall SUDS network. (Objective GI3)	
	Prohibit the culverting of watercourses and require structures adjacent to watercourses to be set back a minimum distance of 10 metres from the top of the bank. These corridors shall be landscaped to aid in the absorption of storm water flows and should also accommodate tracks and trails where possible. <b>(Objective GI15)</b>	
Green Infrastructure - Landscape	Development along and near the southern boundary of the Plan Lands shall include for a continuous and linked green buffer to the Dublin Mountains. This buffer shall include for the planting of woodlands where the buffer widens and the preservation and integration of existing hedgerows and streams. Narrowed areas of this buffer shall be no less than 15 metres in width. ( <b>Objective GI28</b> )	
Noise	Development along and near the boundary with the M50 motorway shall include a green corridor and wetland area that will mitigate against noise through the planting of semi-mature trees and incorporation of soft landscaped mounding/berms. Narrowed areas of this buffer shall be no less than 20 metres in width. All planning applications for development in close proximity to the M50 should be accompanied by a report, prepared by a qualified person, detailing noise levels and mitigating	

	measures for noise. (Objective GI29)	
Transportation and Climatic Factors	<ul> <li>measures for noise. (Objective GI29)</li> <li>Cycling and walking shall be encouraged within and through the Plan Lands by creating a connected network of safe and accessible pedestrian and cycle routes that serve all streets and spaces including existing streets. All neighbourhood blocks shall be afforded direct pedestrian and cyclist access to Main Link and Local Link Streets and direct or indirect routes to schools and community facilities especially parks, open spaces, local shopping facilities and public transport. There shall be no barriers to pedestrian or cyclist movement between housing developments including between new and existing developments and no barriers shall be erected along streets with limited exceptions for garden boundaries. (Objective AM9)</li> </ul>	
Biodiversity	New housing schemes should be designed in accordance with passive solar design principles as set out under the <i>Urban Design Manual</i> (2009) and the Standards Section of this LAP (Appendix 2). The orientation of dwellings and internal layouts should therefore be arranged to maximise solar gain but in a balanced manner that does not significantly impact on the topography of the Plan Lands, conflict with Sustainable Urban Drainage Systems or significantly impinge on the successful creation of streetscapes in terms of good street frontage and passive surveillance. ( <b>Objective BF15</b> )	
	proposals maximise the opportunities for enhancement of existing biodiversity and are accompanied by a full ecological assessment, carried out by a suitably qualified professional, that includes measures to enhance biodiversity and avoid or minimise loss of biodiversity. ( <b>Objective GI9</b> )	

# Section 3 SUBMISSIONS AND OBSERVATIONS DURING PROCESS

# **3.1 Introduction**

The following section details the significant issues which were raised by the Environmental Authorities prior to, during and after the preparation of the Draft Ballycullen-Oldcourt Local Area Plan and the accompanying Environmental Report and how these were incorporated into the Plan. The submissions range from the initial scoping responses on environmental issues from the Statutory Authorities (March/April 2013) to submissions on the Draft Plan Report (January 2014). A number of submissions from the non-environmental authorities which resulted in amendments to the Plan are also included.

# 3.2 SEA Scoping Consultations

An SEA Scoping Issues Paper was sent to the designated Environmental Authorities on 26<sup>th</sup> March 2013. The responses to the issues paper were taken into account during the carrying out of the Strategic Environmental Assessment.

# 3.3 Submissions and Observations on the Draft Plan and the Environmental Report

The written submissions received from the Environmental Authorities following the public display period (18<sup>th</sup> October 2013 to 28<sup>th</sup> November 2013) of the Draft Ballycullen-Oldcourt Local Area Plan (and accompanying Environmental Report and Appropriate Assessment Screening) and the Manager's responses were summarised below. The full response to the submissions from both the Environmental Authorities and the non-environmental submissions is available in the Managers Report January 2014.

SUBMISSION SUMMARY	COMMENT
Environmental Protection Agency Section 1: Ballycullen Oldcourt LAP In considering additional connections to the Dublin Hills it should be ensured that appropriate mitigation measures are incorporated to protect designated habitats and species. Sympathetic lighting should be considered for walking and cycling routes to minimise disturbance to bats/other mammals and the potential effects on habitats and species should be assessed.	Response: It is the intention of the Draft Local Area Plan to link tracks and trails with existing pathways/roads which will in turn link to the Hellfire Club and Dublin Mountain Way. The standards section of the Local Area Plan (Appendix 2 – Street Furniture and Lighting) states lighting should be sensitively designed to ensure that pedestrian and cycle paths are well lit and also stated that due regard should be had to the impact of lighting on foraging routes for bats and bat roosts in particular and that planning applications for development in the vicinity of bat roosts and flight and feeding paths shall be accompanied by a specialised lighting strategy and design details that demonstrate mitigations measures.
	Whilst the above was considered sufficient to introduce mitigation measures to protect designated habitats and species, it was recommended that the 'Tracks and Trails' sections of the Plan be altered to highlight the importance of protecting species and their habitats and the importance of introducing mitigating measures to protect them through sensitive design, lighting and construction methods.
In relation to the SEA Environmental Report, consideration should be given to describing the evolution of the Plan Area in the Non Technical Summary.	<b>Response:</b> The evolution of the Plan Area in the absence of the Plan is included in Section 1.5.14 of the Non Technical Summary as follows; <i>"In the absence of a Local Area Plan development would continue to expand into the already zoned</i>

	greenfield lands and the opportunity to create a robust Green Infrastructure network within the LAP lands would be lost.
	Ecological connectivity would not be provided, resulting in further habitat fragmentation through the removal of hedgerows.
	The use of Sustainable Urban Drainage Systems (SUDS) in Ballycullen Oldcourt would not be prevalent; the use of underground attenuation tanks, if continued, would negatively impact on water quality and flood risk.
	If new development was not accompanied by appropriate waste water infrastructure /capacity then the likelihood of water bodies in South Dublin achieving WFD commitments would be reduced. Significant adverse impacts upon the biodiversity and flora and fauna of the County and wider impacts upon the transitional waters of the Liffey, and Dublin Bay might be expected.
	In addition, the opportunities to provide enhanced walking and cycling routes would be less likely without the provision of a Plan.
	It is not considered that the Water Supply aspects would be significantly affected in the absence of a Local Area Plan."
The submission indicated that the EPA's real time data on air quality is available on the EPA website.	<b>Response:</b> Section 3.8.2 of the Environmental Report will be updated to include the following information on PM10 - " <i>There have been 5 exceedances to date in 2013.</i> "
Consideration should be given to carrying out an updated Landscape Character Assessment as the existing one was carried out in 2003 and also to establishing a County Biodiversity Plan	<b>Response:</b> The Environmental Report commented on the incomplete Landscape Character Assessment 2003 and on the absence of a County Biodiversity Plan as follows;
	"There are still a number of data gaps in the Baseline information for Ballycullen Oldcourt. These are detailed below;
	<ul> <li>The lack of a Biodiversity Plan for South Dublin.</li> <li>An incomplete Landscape Character Assessment for South Dublin.</li> </ul>
	• Lack of information on air quality A Biodiversity Plan will be commencing shortly and is expected to be finalised by 2014. Some, though not all, of the information gaps caused by the absence of a Biodiversity Plan and a detailed Landscape Character Assessment have been addressed in the Heritage Plan."
The submission suggests that consideration be	Response: The plans contained within the NTA Draft

given to taking the National Transport Authority (NTA) Draft Cycle Network Plan for the Greater Dublin Area into account in relation to transport infrastructure in Section 3.9.6 of the Environmental Report.	Cycle Network Plan for the Greater Dublin Area including the Ballycullen Oldcourt area were examined in relation to (i) existing routes, (ii) designed routes and (iii) future routes. It is recommended that the Environmental Report be amended to reflect this.
The submission suggests taking the higher sensitivity of the Dublin Mountains into account in any proposals to increase tourism and recreation access/activity in terms of protecting environmental sensitivities.	<b>Response:</b> The approach adopted in the draft Ballycullen LAP includes preserving and maintaining existing trees and hedgerows, streams etc including in all of the areas adjoining proposed trails and footpaths. This approach also includes the reduction of dwelling densities in the lower and upper slope land as a means of protecting sensitive landscape areas.
The submission suggests including an additional indicator under Population and Human Health (SEO HH1) for numbers of houses developed in areas of known flood risk.	<b>Response:</b> South Dublin County Council's SEA Monitoring System for both the County Development Plan and all Local Area Plans is operational with the existing environmental indicator "To prevent development on lands which pose - or are likely to pose in the future – a significant flood risk". All planning applications are assessed for potential impact in potential flood risk areas.
The submission suggests taking the zoning of lands into account in relation to the risk of flooding under SEO W3.	<b>Response:</b> South Dublin County Council's SEA Monitoring System for both the County Development Plan and all Local Area Plans is operational with the existing environmental indicator SEO W3 "To prevent development on lands which pose - or are likely to pose in the future – a significant flood risk". All planning applications are assessed for potential impact in potential flood risk areas.
The submission suggests monitoring both negative and positive effects, the inclusion of the on-going review of environmental targets and indicators in the monitoring programme and the inclusion of monitoring frequencies. The Monitoring Programme should be flexible and be able to deal with the cumulative effects.	<b>Response:</b> South Dublin County Council's SEA Monitoring System for both the County Development Plan and all Local Area Plans is operational at present. An <u>SEA Monitoring Report</u> has been produced for the Development Plan 2010 to 2016 which indicates the success of the system. An opportunity for review of the environmental targets and indicators in the monitoring programme and the inclusion of monitoring frequencies will be presented during the next Development Plan Review which will commence in 2014.
Geological Survey of Ireland GSI Datasets	<b>Response:</b> These datasets have been utilised for the Maps in the Environmental Report as stated in
The Geological Survey of Ireland (GSI) has datasets on Bedrock, Geology, Quaternary	Section 3.5 Geology and Soils;
Geology, Mineral deposits, Groundwater Resources, Geological Heritage, Landslides and the Irish Seabed. Maps/databases are available on the GSI website.	"The Geological Survey of Ireland GSI has provided information on Bedrock, Soils, Groundwater Classification and Aquifer Vulnerability in the Ballycullen Oldcourt Area (www.gsi.ie)."
Office of Public Works (OPW)	<b>Response:</b> An Initial Strategic Flood Risk Assessment of the Ballycullen Oldcourt Local Area
Flood Risk Assessment The Ballycullen – Oldcourt plan requires a Stage 2 FRA. Where there is a suspected flood risk to a proposed development, the authority	Plan (LAP) was undertaken by South Dublin County Council in parallel to the production of the LAP. This assessment is a requirement for Local Area Plans as set out in "The Planning System and Flood Risk

should apply the appropriate level of assessment recommended in the guidelines, which may mean a Stage 3 FRA in certain cases. The PFRA draft report maps are indicative and are not suitable for a Stage 2 FRA. The CFRAMS will identify areas at significant risk and deliver draft flood maps appropriate to a Stage 2 Flood Risk Assessment (FRA) by the end of 2013. Until then, it still remains the Local Authority's responsibility to assign appropriate development in flood risk areas. The OPW welcomes South Dublin County Council's commitment to adhere to the 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' and the inclusion of a Strategic Flood Risk Assessment. The SFRA indicates two areas at risk of flooding and flood extent maps indicate that parts of these lands are within flood zone A and B. If the planning authority is considering proposals to change these parcels of land from open space to residential development, the planning authority will need to complete a justification Test for Development Plans with evidence of such included in the SFRA. Should the Justification Test be passed any development in the area should be subject to a site specific floor risk assessment.	Management – Guidelines for Planning Authorities 2009". The SFRA reviews the requirements of the Guidelines, the existing policies of the Regional Authority and South Dublin County Council Development Plan 2010 – 2016. All available information on potential Flood Risk i.e. the OPW's Preliminary Flood Risk Assessment modelling, the stream catchments, flooding events and site walk-through are outlined. Local area flood reports available on the OPW's National Flood Mapping website were also been reviewed. All of this information was utilised by the LAP team in drawing up a Sustainable Urban Drainage strategy for the plan lands and in formulating a series of objectives that are embedded within the LAP. The Initial SFRA has been updated to incorporate information in relation to flooding events following the public consultation including additional recommended objectives. South Dublin County Council is not proposing to change the zoning of undeveloped lands within the boundary of the Plan Lands. These lands are already zoned as 'Objective A1' (To provide for new residential communities in accordance with approved action plans) under the current County Development Plan 2010 – 2016. While it is uncertain whether or not those areas which are identified as moderate to high risk of flooding (based on the OPW preliminary Flood Risk Assessment PFRA) or the GAA lands where flooding has already occurred would pass the Plan Justification Test (the uncertainty arises over the possibility that the flooding on the Oldcourt GAA pitches and households adjoining was caused by either the blockage or inadequate size of adjoining culverts), it is not possible to rezone or downzone land under the local area plan process as this can only happen as part of the County Development Plan process. The approach proposed by the County Council is precautionary and involves the designation of particular zones that will require Site Specific Stage 3 Detailed Flood Risk Assessment including the likely impact of any displaced flood water on third par
Department of Arts, Heritage and the Gaeltacht The submission noted that Otters have not	<b>Response:</b> It was recommended that the following statement be included at the end of Section 3.3.3.2 Fauna (General); "While Otters have not been recorded from the LAP site, Otters are present along
been mentioned in the SEA and it is recommended that the SEA be amended to	parts of the Dodder, a proposed Natural Heritage Area (pNHA) and within the Glenasmole Special Area of

include such protected species. SEOs for biodiversity and Flora should be amended that protected species are included.	of the EU Habitats Directive and is listed as Internationally Important in the Irish Red Data Book (Whilde 1993)."
DepartmentoftheEnvironment,Communications and Local GovernmentThe Department acknowledges that the draftLocal Area Plan is a well written and legibledocument.FloodingThe Flood Risk Assessment in the SEA	<b>Response:</b> The two areas of potential flood risk identified in the Draft LAP, the accompanying SEA Environmental Report and the Initial Strategic Flood Risk Assessment relate to lands along the Oldcourt Stream and Ballycullen Stream that the OPW has identified under its Preliminary Flood Risk Assessment Modelling for 100 year events.
indicates areas of pluvial and fluvial flooding, and indicates that a SUDS approach will be used. However, when these areas of flood are related to the zoning of lands, two residential areas would appear to be partially in the flood zone. This requires some clarity as residential use is indicated as a vulnerable use under Table 3.1 (Planning System and Flood Risk	South Dublin County Council is not proposing to change the zoning of undeveloped lands within the boundary of the Plan Lands. These lands are already zoned as 'Objective A1' (To provide for new residential communities in accordance with approved action plans) under the current County Development Plan 2010 – 2016.
Management Guidelines) and there may be difficulty fulfilling the requirements of Box 4.1 of these Guidelines.	These lands have subsequently been included in the Draft Local Area Plan and identified as being at flood risk. Further to the SUDS strategy for the Plan Lands, Objective GI7 of the Draft Local Area Plan requires all planning applications in areas at risk of potential flooding to be accompanied by a Flood Risk Assessment carried out at site specific level in accordance with <i>The Planning System and Flood Risk Management – Guidelines for Planning Authorities</i> (2009).
The Council should liaise with the OPW on the matter to ensure that any residential development is not unnecessarily within a flood zone. The Council is advised that where any residential zoning objective or zoning objective which permits significant residential development is located in a flood zone A or B, the relevant policies and findings of the Justification Test in the Flood Risk Management Guidelines 2009 must be applied and the details of working through of that test be included in the amendments to the Plan.	Refer to response to OPW (Page 14-15).
In addition, the Council is advised, in consultation with OPW, to ensure that the measures necessary for a Stage 2 Flood Risk Assessment as per the Flood Risk Management Guidelines have been applied to establish flood zones and thereby guide future development in historically zoned areas, as well as those under consideration for future development.	

# 3.4 Additional Recommended Amendments to the Draft Local Area Plan as outlined in the Manager's Report

The Manager's Report on the submissions made to the Draft LAP also included a series of recommendations to the LAP following reconsideration by the LAP Team. The recommendations were subjected to AA Screening and environmental assessment: the environmental assessments of the main proposed amendments were as follows:

Water & Water	Ballycullen Stream Catchment
<u>Water &amp; Water</u> <u>Management</u>	Ballycullen Stream Catchment Alter Draft Local Area Plan in a manner that requires any development proposed within the catchment of the Ballycullen Stream to demonstrate that the majority of surface water generated by the development will be dealt with on-site and that any additional run-off will be directed to a surface water drainage system outside of the Ballycullen Stream catchment. If it is proposed to discharge surface water via the private drainage system that serves Stocking Avenue and Stocking Wood to the east of the Ballycullen Road, this shall be accompanied by documentation that demonstrates consent to access and utilise the
	private drainage system. No development that proposes to discharge additional surface water run-off to the Ballycullen Stream shall occur until such time as an appropriate Ballycullen Stream Flood Alleviation Scheme in place.
Flood Risk	Insert a specific objective and map into Appendix 1 (specific objectives) that identifies the area of potential flood risk around the existing Oldcourt GAA pitches and requires any proposed development that is potentially sensitive to flooding to be subject to the sequential approach of avoid, substitute, justify, mitigate and (where the Justification Test has been passed) manage flood risks in accordance with <i>The Planning System and Flood Risk Management– Guidelines for Planning Authorities</i> (2009). These areas will require Site Specific Stage 3 Detailed Flood Risk Assessment including the likely impact of any displaced flood water on third parties. Include a requirement that if it cannot be demonstrated that both the actual and residual flooding issues can be dealt with in an acceptable manner including the impact of any displaced flood water on third parties, then the development of these lands shall be confined to water compatible development only (in accordance with the precautionary approach) such as amenity spaces, outdoor sports and recreation spaces that include SUDS elements and integrate with the SUDS strategy for the Plan Lands.
Biodiversity	Alter the Tracks and Trails sections of the Draft Local Area Plan (5.3.4 and Appendix 1 – Plan Objectives) to highlight the importance of protecting flora and fauna including habitats and the introduction of mitigating measures to protect ecosystems through the sensitive design, lighting and construction of tracks and trails with reference to the requirements of the standards section of the Draft Local Area Plan. Amend Objective SSP14 of the Draft Plan to allow for the provision of floodlighting for the proposed replacement Gunny Hill Playing Pitches subject to the submission of a Bat Survey, the retention and augmentation of hedgerow boundaries (to provide for uninterrupted wildlife corridors/foraging routes and reduce visual impacts) and the provision of specialist lighting that will limit any adverse impacts on bat species, which shall be all sufficiently demonstrated and detailed at planning application stage. Alter Draft Local Area Plan (Accessibility and Movement Strategy, Land Use and Density Strategy and Artist's Impression) to replace the
	Wood via Stocking Wood Drive with a pedestrian and cyclist link. Amend Accessibility and Movement Framework (Fig 5.1), Landuse and

The environmental assessment of the Manager's recommended changes to Draft LAP (Manager's Report, January 2014) indicated that most of the proposed changes were likely to have a positive effect on the environment. In the two instances where there was a potential conflict, ie the replacement of the proposed vehicular link street to zoned lands to the south of Stocking Wood via Stocking Wood Drive and the objective to allow for the provision of floodlighting for the proposed replacement Gunny Hill Playing Pitches which are at a high elevation, any significant impact is likely to be reduced by the inclusion of the recommended mitigation measures as stated.

3.5 Additional Recommended Amendments to the Draft Local Area Plan arising from the Special Meeting of the Council held 28<sup>th</sup> January 2014, which were deemed material:

Material Alteration	Environmental Assessment of
	the material alteration
To increase the Oldcourt/Gunny Hill School Site designated on land zoned Objective B (to protect and improve Rural Amenity and provide for the development of Agriculture) by approximately 1.2 acres to allow for two primary schools on this site i.e. the provision of a third school site on the Plan Lands.	The expansion of the school site is to cater for the location of a school that is intended to service the Firhouse area. As the site is outside the required catchment area, this would encourage additional car journeys, increase green house gases and increase the likelihood of injuring human health from hazards or nuisances arising from traffic. C1C2HH1. The use of Site B would result in the removal of a significant portion of hedgerow ,B3, and as the site is located on an elevated site, above the 120m contour, its development would have a negative impact on the amenity of the Dublin Mountains, L1.
	The hedgerow, which would have to be removed, forms part of the existing natural drainage network that carries surface water from the Dublin Mountains and exists throughout the Plan Lands. This would be contrary to the Plan's objectives which seek to enhance and augment the existing natural drainage network by intercepting, absorbing and slowing down the flow of surface water emanating from the foothills of the Dublin Mountains W1.
	HH1, C1, C2, L1, W1, B3,
Delete Stocking Wood Permeability.	The removal of the through street between Stocking Wood Drive and the lands zoned for new residential communities to the south (Objective A1) would limit pedestrian and cyclist permeability in a manner that significantly increases walking and cycling distances to proposed recreational and education amenities including the Knocklyon Park. The removal of the through street will therefore encourage additional car journeys and increase green house gases. <b>C1, C2.</b>
	In terms of improving human health, there is a likelihood of both positive and negative impacts; the removal of vehicular traffic

through Stocking Wood Drive will lessen the likelihood of injuring human health from hazards or nuisances arising from traffic in the immediate vicinity while the removal of pedestrian and cyclist permeability will increase the likelihood of persons using private cars to make the longer journeys and consequently will raise the likelihood of injuring human health from hazards or nuisances arising from traffic in the wider area. HH1.
C1, C2, HH1.

# Section 4 ALTERNATIVES AND THE PLAN

### 4.1 Alternatives

An evaluation of the likely environmental consequences of a range of alternative strategies for accommodating future development in the Ballycullen-Oldcourt area was part of the SEA process. The scenarios were derived taking into account higher level strategic plans as well as the geographical scope of the area.

The scenarios provide alternative visions of how the future development of the Ballycullen-Oldcourt area might occur. They reflect a range of development pressures and responses that reflect current practice and conditions. The scenarios chosen were;

Scenario 1 – Extend the lifespan of the Ballycullen-Oldcourt Action Area Plan 2000

- Scenario 2 Market-led growth
- Scenario 3 Preservation/limited development approach

Scenario 4 – Sustainable development with strong Green Infrastructure Framework

**Scenario 1** - This scenario involves the continuation of the implementation of the Ballycullen-Oldcourt Action Area Plan 2000 and the extension of those policies and objectives into the adjoining areas subsequently zoned for development. Higher residential densities would be prevalent throughout the Plan Lands and would lead to the removal of existing hedgerows in the Oldcourt area which would also impact on the biodiversity network in the area. Higher density development would also have an impact on the landscape. Surface water drainage would be guided by policies with the County Development Plan and the Greater Dublin Drainage Strategy rather than within the LAP itself; the opportunity to implement Sustainable Urban Drainage Systems (SUDS) would be lessened.

**Scenario 2** – This scenario involves allowing growth to follow the demands of the market, facilitating flexibility with planning guidelines, infrastructure capacity or environmental constraints. The location and nature of development would be completely dependent upon market demand and applications would be evaluated on a case by-case basis by the Council. The relaxation of planning controls throughout the plan lands would led to the continued expansion and demand for the provision of housing permeating throughout the residentially zoned land in this scenario, with little or no provision of community infrastructure to accommodate the existing and future population. There would be little attempt made to integrating adjoining existing development both within and outside the LAP area with new development into a coherent urban fabric. The development of all of the land at very low densities would increase the likelihood of displacement of housing into other, possibly unzoned land, outside the LAP area.

**Scenario 3** – This scenario prioritises the amenity and character of existing residential areas together with the protection of the land adjoining the foothills of the Dublin Mountains (although this land has already been zoned for residential development). This option would result in either the lands being de-zoned (through a variation of the current Development Plan) or the incorporation of policies into the plan providing for the preservation and protection of the existing built and the rural environment by limiting development to very low densities apart from the land where permissions have already been granted. While the Plan Lands would remain substantially undeveloped, this would hinder the chances for the provision of greatly needed open space/parkland, community (including the primary school) and retail facilities to meet the existing population in the area. This would also hinder opportunities to create a softer edge between the urban and rural environment.

The Council are also required to meet the housing figures as outlined in the Regional Planning Guidelines. A portion of the council's required housing numbers is accounted for on the subject lands (100ha). If the lands were to be de-zoned, it would remove the possibility of developing the land at medium to low densities currently favoured by developers and would create pressure to provide such housing on land more suitable of support densities required to make public transport efficient at locations where major infrastructural investment has been made.

**Scenario 4** – This scenario would involve the development of the Ballycullen-Oldcourt LAP lands using the concept of Green Infrastructure as a guiding theme for development and also as a means of integrating adjoining existing development both within and outside the LAP area with new development into a coherent urban fabric. The components of Green Infrastructure are green spaces, greenways, parks, the Ballycullen and Oldcourt Streams and tributaries, hedgerows and trees, areas around community and institutional land, such as schools. Allowance is made in this scenario for limited trade off between development and environmental protection with mitigation measures ameliorating any negative environmental impacts.

This scenario seeks to focus on the multi-functionality of Green Infrastructure, which when planned in a coherent manner provides social and economic benefits for the surrounding communities. It provides a holistic approach to developing the landscape inclusive of other influences such as ecological development, improving air, water and soil quality, flood protection access provision and linkages, climate change/amelioration, pollution control and quality of life issues. It can be recognised as a significant element within sustainable communities, contributing directly or indirectly to economic development and delivering real benefits to people's quality of life.

This scenario would safeguard the distinctive character and openness of the area and would conserve the natural and cultural heritage. The existing streams and hedgerows which traverse the plan lands would be safeguarded, enhanced and maintained with cycle/pedestrian routes provided in strategic locations throughout the plan lands, enabling recreation whilst providing a pleasant environment for the existing and future populations and maintaining opportunity to access the Dublin Mountain foothills. The SUDS approach sets out to ensure that developments do not generate any additional surface water discharge over the baseloads of existing greenfield sites.

The scenario provides for the development of land already with planning permissions to be developed as lower densities but in a manner that still provides for a significant number of new dwellings and allows for the provision of phased infrastructure for new and existing housing.

# 4.2 Assessment of Alternatives

# 4.2.1 Evaluation using the SEOs

The scenarios were evaluated using the SEOs and the Baseline information. The full description of the impacts of implementing the differing development alternatives on the receiving environment is contained within Section 7 of the Environmental Assessment Objectives (SEOs) is set out below:

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Alternative Scenario 1 Extend the lifespan of the Ballycullen Oldcourt Action Area Plan 2000 and include adjoining zoned land		B3 L1 W3	M1 M2 W1-W2 CH1 B2	HH1 C1 C2 CH2		B1
Alternative Scenario 2 Market Led Growth		L1 W1 W2 W3 B3 C1 C2 HH1	B2 CH1			B1 CH2
Alternative Scenario 3 Preservation / Limited Development Approach	M1 M2 L1 HH1	S1 C1C2HH1	B1B2B3L1CH1 CH2W1-W3M1M2(Blueindicatesindicatesindirectimpact)			B1 CH2
Alternative Scenario 4 Sustainable Development with strong Green Infrastructure Framework	B3 L1 S1 C1C2HH1		W1 W2 W3 CH1			B1 B2

B1Avoid loss of habitats etc in designated ecological sitesB2Avoid impacts by development within or beside these designated ecologiB3Prevent loss of ecological networksHH1Protect human health – traffic/incompatible landuses	ical sites
B3 Prevent loss of ecological networks	ical sites
<b>HH1</b> Protect human health – traffic/incompatible landuses	
S1 Re-use of Brownfield lands	
<b>S3</b> Operate sustainable waste management practices	
W1 Maintain and improve river, lake and surface water quality	
W2 Prevent pollution of ground water	
W3 To prevent floodplain development	
C1 Reduce greenhouse emissions from travel	
C2 Reduce car dependency and improve modal choice	
M1 Provide appropriate waste water treatment for new development	
M2 Maintain and improve the quality of drinking water	
CH1 Protect archaeological heritage	
CH2 Protect architectural heritage	
L1 Protect and avoid significant adverse impacts on the landscape	

#### 4.2.2 Evaluation of Alternative Plan Scenarios

Scenario 1 – This scenario would require that the densities envisaged in the previous plan be delivered and could result in an additional 3,600 dwellings being built. With such high densities, there is likely to be significant negative impact on the landscape and on the biodiversity network with this scenario. The use of an effective Sustainable Urban Drainage Systems (SUDS) would be unlikely with the use of underground attenuation tanks required to deal with increased surface water run-off: flood risk would be likely, both in and downstream of the LAP lands.

Scenario 2 – Overall, many of the impacts that might result from development would be uncertain depending on the nature of the development as determined by the market, very low or high densities. The relaxation of planning controls throughout the plan lands would lead to significant impacts on the Biodiversity network and the absence of SUDS measures would compromise the quality of groundwater, surface water and the likelihood of pollution/contamination and also increase the likelihood of flood risk. There would be little attempt made to integrating adjoining existing development both within and outside the LAP area with new development into a coherent urban fabric, with little or no provision of community infrastructure to accommodate the existing and future population. There would be an increase in unsustainable car based transport, thus impacting on/increasing air quality/emissions.

Scenario 3 – This scenario prioritises the amenity and character of existing residential areas together with the protection of the land adjoining the foothills of the Dublin Mountains. This option would result in either the lands being de-zoned (through a variation of the current Development Plan) or the incorporation of polices into the plan providing for the preservation and protection of the existing built and the rural environment by limiting development to very low densities apart from the land where permissions have already been granted.

While the impact on the SEO's within the plan area would be positive, it is likely that the housing would be displaced into other areas, some zoned and others unzoned and thus have significant indirect negative impact in those areas

Scenario 4 – Sustainable Development with strong Green Infrastructure Framework is more likely to bring about better environmental outcomes because of its ability to provide for sustainable development and integrate it into the biodiversity networks and SUDS provision in the Plan Lands, as well as providing for increased connectivity and permeability thereby improving the surrounding environment.

# Summary

The Proposed Local Area Plan option that has emerged from the Plan preparation process has a close correlation to Alternative Scenario 4.

#### 4.2.3 Effects of Amendments on Preferred Alternative

The amendments to the Draft Ballycullen-Oldcourt Local Area Plan made by the Elected Members in the Special Council Meeting 28<sup>th</sup> November 2014, as recommended in the Manager's Report, resulted in a small number of changes to the objectives proposed within the Plan. Most of the proposed changes are likely to have a positive effect on the environment. In the two instances where there is a potential conflict, i.e. the replacement of the proposed vehicular link street, with pedestrian and cyclist link, to zoned lands to the south of Stocking Wood via Stocking Wood Drive and the objective to allow for the provision of floodlighting for the proposed replacement Gunny Hill Playing Pitches which are at a high elevation, any significant impact is likely to be reduced significantly by the inclusion of the recommended mitigation measures.

### 4.2.4 Effects of Material Alterations on Preferred Alternative

The Material Alterations agreed by the Elected Members, at the Council Meeting on the 6<sup>th</sup> May 2014 will have a negative effect on the Preferred Alternative – Scenario 4.

The first Material Alteration, to expand the Oldcourt school site into Site B, will result in the removal of hedgerow and also a section of the SUDS network on the Plan Lands. The location of two school buildings at this location, to cater for the wider Firhouse area will encourage additional car journeys.

The second Material Alteration will limit pedestrian and cyclist permeability in a manner that will significantly increase walking and cycling distances to recreational and educational amenities and giving rise to increased traffic at other locations.

# Section 5 SUMMARY OF INFLUENCE OF THE SEA PROCEDURE ON THE PLAN

Overall, the influence of the SEA process on the Ballycullen Oldcourt LAP has been positive. The early identification of the important environmental issues within the Plan area and refinement of those issues during the scoping process and production of the Environmental Report allowed for the adoption of meaningful environmental protection policies into the LAP. Continual assessment of policies and motions, as well as submissions and observations from interested parties also resulted in modification of policies for the benefit of the environment of South Dublin.

# Section 6 MONITORING

### 6.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This SEA Statement identifies the proposals for monitoring the Plan which were adopted alongside the Plan.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Plan is achieving its environmental objectives and targets – measures which the Plan can help work towards – whether these need to be re-examined and whether the proposed mitigation measures are being implemented.

# 6.2 Indicators and Targets

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives used in the evaluation. Focus has been given to indicators which are relevant to the likely significant environmental effects of implementing the Plan. The Council has introduced a series of measures (mainly GIS based) to allow monitoring through the Development Management system.

Each indicator to be monitored is accompanied by targets which are derived from the relevant legislation and the advice of the EPA, see Section 10 of the Environmental Report. The table below summarises the indicators and information sources which have been selected with regard to the monitoring of the Plan.

SEO	Indicators	Information Sources
B1:	Percentage of relevant habitats and designated ecological sites lost	SDCC
B2:	No. of significant adverse impacts to relevant habitats, geological features, species or their sustaining resources in designated ecological sites	SDCC
B3:	Area of Biodiversity Network (County's primary ecological corridors) which has been lost without mitigation	SDCC
HH1	Indicator HH1: No of occasions that PM10 limits have been exceeded in at Air Monitoring stations	EPA
	Indicator HH2: Percentage of population that are exposed to unacceptable <sup>2</sup> levels of traffic noise	Dublin Agglomeration Local Councils
S1:	S1i: Area of brownfield land redeveloped	SDCC
	S1ii: Area of greenfield land developed	SDCC
	S1iii: Number of contaminated sites identified and remediated	SDCC
W1	Indicator W1i: Biotic Quality Rating (Q Value) and risk assessment	EPA, Eastern River Basin
	Indicator W1ii: EPA Trophic Status of Lakes	District Reports
W2	Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	As above
W3	Number of developments granted permission on lands which pose - or are	SDCC

<sup>&</sup>lt;sup>2</sup> As defined by the Dublin Agglomeration Noise Action Plan 2008 - 2013

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	likely to pose in the future - a significant flood risk	
C1	C1i: Percentage of population within the County travelling to work or school by public transport or non-mechanical means	Census information
	C1ii: Average distance travelled to work or school by the population of the County	As above
C2:	Extent of developments built within areas served by high quality public transport	SDCC
M1:	Number of new developments granted permission which cannot be adequately served by a public waste water treatment	SDCC
M2	Drinking water quality standards, (Microbiological, Chemical and Indicator parameters)	EPA
CH1	Number of unauthorised developments occurring which result in full or partial loss to entries to the Record of Monuments and Places - including Zones of Archaeological Potential	SDCC
CH2	CH2i: Number of unauthorised developments occurring which result in physical loss or loss entries to the Record of Protected Structures	SDCC
	CH2ii: Number of additions to the Record of Protected Structures and the number of additional ACAs	SDCC
L1:	L1i: Number of developments permitted in the Mountain, High Amenity, Liffey Valley and Rural zones	SDCC
	L1ii: Percentage of developments permitted in the Mountain, High Amenity, Liffey Valley and Rural zones that have carried out landscaping proposals as required by condition	SDCC

# 6.3 Reporting

An SEA Monitoring Report, evaluating the effects of implementing the LAP, will be prepared within two years of the making if the Plan.

# 6.4 Responsibility

South Dublin Council is responsible for gathering the monitored data, the preparation of the interim report and the implementation of corrective actions, where necessary.