



Infrastructure and Environmental Services

Vision

Create an environment characterised by high quality infrastructure networks and environmental services to ensure the health and wellbeing of those who live and work in the County, securing also the economic future of the County.

11.0 Introduction

The quality of our environment has implications for our health and wellbeing. The availability of high-quality infrastructure networks and environmental services is critical to securing economic investment, creating sustainable and attractive places, in ensuring health and well-being, and in safeguarding the environment.

11.0.1 Climate Action

High level policy at European and national level reflects the role that a high-quality environment has in achieving our climate change targets and maintaining the health of the planet. Through sustainable planning we can ensure that our environment is a key element in our consideration of growth and development, at a strategic level and at the individual site level.

11.0.2 Planning Policy Context

National Strategic Outcome 9 (NSO9) of the NPF requires ‘Sustainable Management of Water, Waste and other Environmental Services.’

- **NPO 52** requires that the planning system will *‘be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital.’*
- **NPO 56** requires the sustainable management of water, investment in different types of waste treatment and support for the circular economy principles, prioritising prevention, reuse, recycling and recovery.
- **NPO 63** requires us to *‘Ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment.’*
- **NPO 64** requires us to *‘Improve air quality and help prevent people being exposed to unacceptable levels of pollution in our urban and rural areas through integrated land use and spatial planning that supports public transport, walking and cycling as more favourable modes of transport to the private car, the promotion of energy efficient buildings and homes, heating systems with zero local emissions, green infrastructure planning and innovative design solutions.’*
- **NPO 65** requires local authorities to *‘Promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life and support the aims of the Environmental Noise Regulations through national planning guidance and Noise Action Plans.’*

The RSES includes a number of policy objectives on natural resources recognising that we depend on them to protect public health, the environment, amenities and to

sustain certain employment sectors.

- **RPO 10.1:** Requires that Local Authorities *'shall include proposals in development plans to ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment.'*
- **RPO 10.4:** Requires Local Authorities to *'Support Irish Water and the relevant local authorities in the Region to reduce leakage, minimising demand for capital investment.'*
- **RPO 10.12:** Development plans shall support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface water networks to accommodate the future growth of the Region.
- **RPO 7.12:** Requires statutory land use plans to include Strategic Flood Risk Assessment (SFRA) and seek to avoid inappropriate land use zonings and development in areas at risk of flooding and to integrate sustainable water management solutions (such as SuDS, nonporous surfacing and green roofs) to create safe places in accordance with the Planning System and Flood Risk Assessment Guidelines for Local Authorities.
- **RPO 7.8:** Requires Local Authorities to incorporate the objectives of the EU Environmental Noise Directive into the preparation of strategic noise maps and action plans that support proactive measures to avoid, mitigate, and minimise noise, in cases where it is likely to have harmful effects.

There are many other relevant national and regional policy objectives. These are referenced by number within individual Development Plan policies and objectives in this chapter and are set out in full at Appendix 7.

Policy IE1: Overarching Policy

Ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital.

11.1 Water Supply and Wastewater

The *Water Framework Directive* (2000 / 60 / EC) provides the overarching set of arrangements governing the management of water quality across Europe. The Urban Wastewater Treatment Directive and the Drinking Water Directive set standards for wastewater and water supply respectively and have been transposed into Irish legislation through Regulations.

National policy for the delivery and development of water and wastewater services is set out in the *Water Services Policy Statement 2018-2025* (2018). This high-level

policy statement identifies key policy objectives for the delivery of water and wastewater services up to 2025. Three themes are identified: quality; conservation; and future proofing.

11.1.1 Irish Water

Irish Water is responsible for public water services in Ireland. This extends to all public water services, involving the supply of drinking water and the collection, treatment and disposal of wastewater.

The *Water Services Strategic Plan (2015) (WSSP)* sets out strategic objectives for the delivery of water services in Ireland up to 2040. The WSSP identifies current and future challenges regarding the provision of water services and identifies priorities to be tackled in the short to medium term. The WSSP provides the context for detailed implementation plans that address key water service areas such as water resource management, wastewater compliance and sludge management.

Irish Water must have cognisance of national and regional strategic plans, including River Basin Management Plans under the Water Framework Directive where there is a legal obligation to protect and improve the status of water bodies.

Provision of waste and wastewater infrastructure in the Dublin Region has been a challenge over the last three Development Plan cycles. The NPF and the National Development Plan 2018-2027 (NDP) has addressed this challenge by phasing the delivery of critical enabling infrastructure. The NDP has earmarked 10.5 billion euro in water and wastewater infrastructure over the ten years from 2018-2028. The WSSP must have cognisance of the Core Strategies of Development Plans including where there is need to increase the number of treatment plants to meet requirements.

Irish Water's National Water Resources Plan was adopted in 2021 and is a 25-year strategy to ensure a secure and reliable drinking water supply to the Region.

11.1.2 Water Supply

Water is currently supplied to South Dublin County from the Leixlip Water Treatment Plant and Ballymore Eustace Water Treatment Plant. Water supply within the wider Dublin area is at critical levels of demand. The Water Supply Project for the Eastern and Midlands Region is included in Project Ireland 2040. The project is intended to ensure sufficient treated water to meet the longer-term growth of the Region up to 2050 and to ensure resilience and security of supply.

The Parteen Basin option has been identified by Irish Water as the preferred water supply scheme to deliver the widest benefit to the greatest number of people, with the least environmental impact and in the most cost-effective manner. The scheme comprises the abstraction of water from the lower River Shannon at Parteen Basin in Co. Tipperary. Treated water will then be piped 170km to a termination point reservoir at Peamount in South Dublin, connecting into the Greater Dublin network. Irish Water is progressing a planning application for the scheme to An Bord Pleanála.

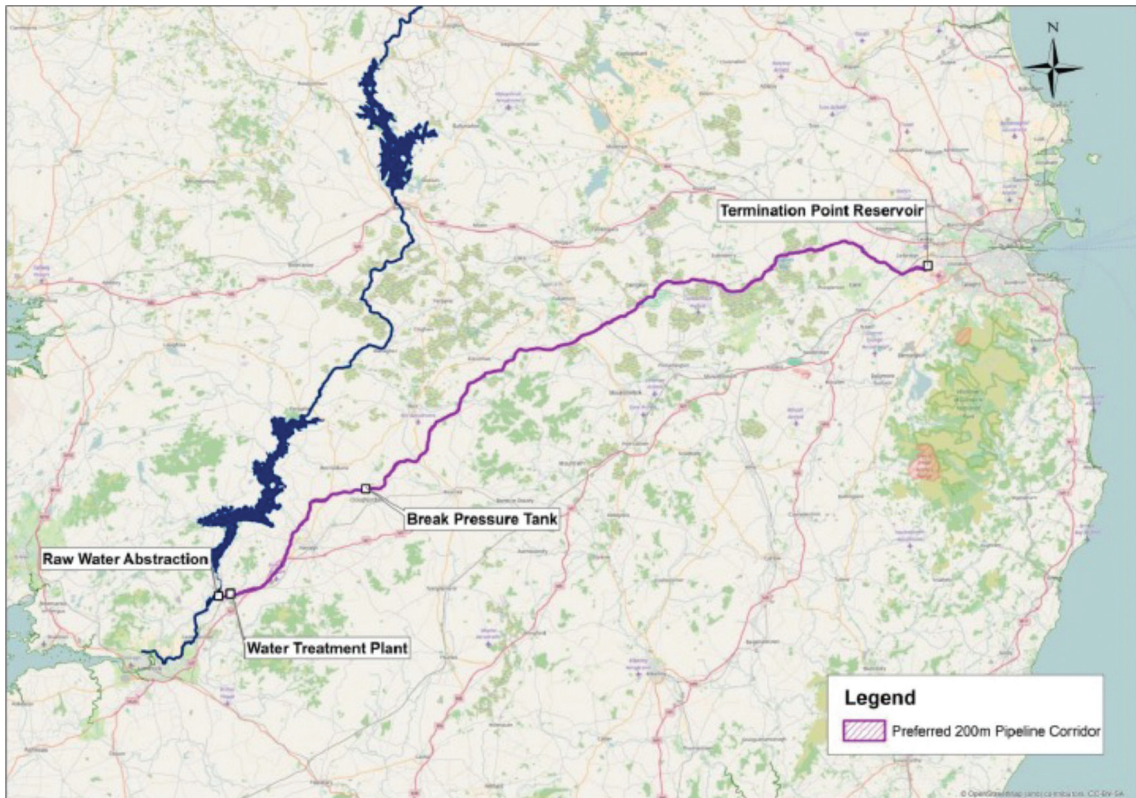


Figure 11.0 – Water Supply Project - Preferred Scheme Parteen to Peamount. Illustration taken from Final Options Appraisal Report (2016).

11.1.3 Wastewater

The Greater Dublin Strategic Drainage Study (GDSDS) was commissioned in 2001 to carry out a strategic analysis of the existing foul and surface water systems in Dublin City, Fingal, South Dublin, Dún Laoghaire-Rathdown, Meath, Kildare and Wicklow County Councils. It delivered an overview of the performance of the drainage infrastructure in the region’s catchments and proposed infrastructural improvement works to facilitate the anticipated future growth in the catchment to the year 2031 and beyond. Since the establishment of Irish Water (IW) the main elements of this policy have been incorporated into IW’s policy.

Policy IE2: Water Supply and Wastewater

Ensure that water supply and wastewater infrastructure is sufficient to meet the growing needs of the population and to support growth in jobs over the lifetime of the Development Plan facilitating environmental protection and sustainable growth.

IE2 Objective 1:

To work in conjunction with Irish Water to protect existing water and drainage infrastructure and to promote the ongoing upgrade and expansion of water supply and wastewater services to meet the future needs of the County and the Region.

IE2 Objective 2:

To support Irish Water in delivering key water service projects in the County including:

- The Water Supply Project Eastern and Midlands Region;
- Saggart Reservoir;
- Upgrade of the 9B foul sewer;
- Upgrade of the Dodder Valley Sewerage Scheme and work with Irish Water to tackle quickly the problems created by capacity issues regarding the Dodder Valley Sewer and in particular to encourage a pro-active response to surcharging into Dodder Valley Park to resolve the issue and mitigate the impacts on water quality, biodiversity, amenity and public health;
- Upgrades to regional networks and treatment.

IE2 Objective 3:

To promote and support the implementation of the Greater Dublin Strategic Drainage Study, Dublin Region Local Authorities (2005) GDSDS.

**IE2 Objective 4:**

To support Irish Water in the delivery of the strategic objectives and strategic water and wastewater projects and infrastructure as set out in the Water Services Strategic Plan (2015), any subsequent plan, Irish Water's Capital Investment Plan 2020-2024, any subsequent Capital Investment Plans and the National Water Resources Plan.

IE2 Objective 5:

To prohibit the connection of surface water outflows to the foul drainage network where separation systems are available.

**IE2 Objective 6:**

To work with Irish Water to reduce leakage in accordance with any forthcoming Regional Water Conservation Strategy.

**IE2 Objective 7:**

To promote water conservation and best practice water conservation in all developments, including rainwater harvesting, grey water recycling and supporting the implementation of BS8515:2009 Rainwater harvesting systems – Code of practice.

**IE2 Objective 8:**

To ensure on-going liaison and consultation with Irish Water to ensure that the water services infrastructure for the planned growth of the County, in line with the County's Core Strategy, is integrated into the relevant plans and capital programmes and to ensure that the design and layout of water services is fully considered to deliver sustainable growth.

**IE2 Objective 9:**

To ensure that all new developments in areas served by a public foul sewerage network connect to the public sewerage system.

IE2 Objective 10:

To require all development proposals to provide a separate foul and surface water drainage system – where practicable.



11.2 Surface Water and Groundwater

South Dublin County Council is responsible for surface water management and aquifer protection in the County, with the Office of Public Works (OPW) having responsibility for flood risk management. The main objective of the EU Water Framework Directive (WFD) is to protect and restore water quality in both surface and groundwater.

The WFD includes a requirement to ‘contribute to mitigating the effects of floods’, which has been enacted through the Floods Directive. The implementation of the Floods Directive and the development of Flood Risk Management Plans (FRMPs) are closely linked to the implementation of the Water Framework Directive (WFD).

11.2.1 Sustainable Urban Drainage Systems (SuDS)

The implementation of Sustainable Urban Drainage Systems (SuDS) is a nature-based solution to water management that aims to address surface water in a sustainable manner, by utilising and mimicking natural infiltration processes from the environment, reducing the rate of water run-off and improving water quality. The benefits of SuDS are addressed in detail in Chapter 4: *Green Infrastructure*, Section 4.2.2 Sustainable Water Management, where more detailed policy and objectives for SuDS are set out.

River Basin Management Plans 2009-2014 were completed under the Water Framework Directive covering eight River Basin Districts. The plans summarised the waterbodies that may not meet the environmental objectives of the WFD by 2015 and identified which pressures were contributing to the environmental objectives not being achieved. The plans described the classification results and identified measures that could be introduced to safeguard waters and meet the WFD objectives. Within South Dublin, the Camac and Dodder Rivers had poor to moderate status while the Griffeen, Liffey and Owendoher had good status (2013-2018). The third cycle of management plans (2015-2021) will cover a single River Basin District for Ireland.

Policy IE3: Surface Water and Groundwater

Manage surface water and protect and enhance ground and surface water quality to meet the requirements of the EU Water Framework Directive.

IE3 Objective 1:

To maintain, improve and enhance the environmental and ecological quality of our surface waters and groundwater by implementing the relevant programme of measures set out in the River Basin Management Plans.



IE3 Objective 2:

To maintain and enhance existing surface water drainage systems in the County and to require Sustainable Drainage Systems (SuDS) in new development in accordance with objectives set out in section 4.2.2 of this Plan including, where feasible, integrated constructed wetlands, at a local, district and County level, to control surface water outfall and protect water quality.

**IE3 Objective 3:**

To protect the regionally and locally important aquifers within the County from risk of pollution.

IE3 Objective 4:

To continue efforts to improve water quality under the Local Government (Water Pollution) Act 1977, as amended and by implementing the measures outlined under the Nitrates Directive (91 / 676 / EEC) and the current National Nitrates Action Programme (NAP) and all other relevant legislation.

IE3 Objective 5:

To generally prohibit development within restricted areas identified on the Bohernabreena / Glenasmole Reservoir Restricted Areas Map contained in Appendix 5.

**IE3 Objective 6:**

To protect salmonid water courses, such as the Liffey and Dodder River catchments (including Bohernabreena Reservoir), which are recognised to be exceptional in supporting salmonid fish species.

IE3 Objective 7:

To protect surface water quality by continuing to assess the impact of domestic and industrial misconnections to the drainage network in the County and the associated impact on surface water quality, and by implementing measures to address same, and to diagnose and repair any misconnections in Council housing stock as part of the re-letting process.

IE3 Objective 8:

Integrate Surface Water and Groundwater systems as an essential component of all new developments, in accordance with the requirements set out in Chapter 12: *Implementation and Monitoring* and the policies and objectives of this chapter.

11.3 Flood Risk Management

The EU Floods Directive and the recommendations of the 2004 National Flood Policy Review Report are driving forces behind flood management in Ireland. *The Planning System and Flood Risk Management Guidelines for Planning Authorities*, DECLG and OPW (2009) and DECLG Circular P12 / 2014 address the interface between flood risk management and the planning system. The guidelines state that the steps in the development plan process and its Strategic Environmental Assessment need to be supported by an appropriate analysis of flood risk.

The SFRA of the County has been carried out to support the Strategic Environmental Assessment of the County Development Plan. The assessment was carried out in accordance with the requirements of the Flood Risk Management Guidelines and the EU Water Framework Directive. The SFRA Report is a separate document to be read in parallel with this Plan.

The SFRA identifies and maps flood risk in the County and has supported a sequential approach to planning, in accordance with the recommendations of the Flood Risk Management Guidelines.

Climate change adaption and resilience has become one of the fundamental considerations for strategic planning. As such, an appraisal of the potential impacts of climate change was carried out as part of the Strategic Flood Risk Assessment with regard to the OPW climate change parameters stated in the *Flood Risk Management Climate Change Sectoral Adaptation Plan (2019)*, also international best practice within other European jurisdictions and the latest scientific studies.

There is an increasing likelihood that Ireland's climate will be similar to that depicted in the High-End Future climate change scenario by the year 2100. Therefore, High End Future Scenario (HEFS) parameters were used in the assessment process. This approach will also assist in achieving our obligations under the Water Framework Directive (WFD). The OPW is currently transitioning to regionally based climate models that reflect the likely varied impacts throughout the island of Ireland. These models will be implemented during the lifetime of the plan.

11.3.1 Riparian Corridors

Riparian corridors are now regarded as essential for ecosystem service provision. The benefits of Riparian Corridors are addressed in detail in Chapter 4: *Green Infrastructure*, Section 4.2.2 Sustainable Water Management, relevant policy and objectives are also set out in that section.

Hydromorphological Assessment and Riparian Corridor Designation

Hydromorphological integrity is identified in the WFD as one of the three key criteria for determining waterbody status (the others being ecology and chemical). A strategic hydromorphological assessment of major rivers within South Dublin County was undertaken for the County Development Plan in parallel to the SFRA. The outcome of this study was the mapping of riparian corridors of the major rivers of the County. It is an objective of the plan to require Hydromorphological Assessment of development proposals that are within riparian corridors to demonstrate how the integrity of the Riparian Corridor can be maintained and enhanced having regard to flood risk management, biodiversity, ecosystem service provision, water quality and hydromorphology (riparian corridors are identified on Development Plan maps). For policy on riparian corridors see Chapter 4: *Green Infrastructure*, Section 4.2.2 Sustainable Water Management and the Strategic Flood Risk Assessment carried out as part of the Development Plan process, Section 6, Riparian Corridors.

Policy IE4: Flood Risk

Ensure the continued incorporation of Flood Risk Management into the spatial planning of the County, to meet the requirements of the EU Floods Directive and the EU Water Framework Directive and to promote a climate resilient County.

IE4 Objective 1:

To require site specific flood risk assessments to be undertaken for all new developments within the County in accordance with The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009) and the requirements of DECLG Circular P12 / 2014 and the EU Floods Directive and Chapter 12: *Implementation and Monitoring* and the policies and objectives of this chapter.



IE4 Objective 2:

To require all developments in the County to be designed and constructed in accordance with the “Precautionary Principle” detailed in the OPW Guidelines.



IE4 Objective 3:

To continue to support and co-operate with the Office of Public Works in measures set out in the relevant Flood Risk Management Plan.

IE4 Objective 4:

To support and facilitate the delivery of flood alleviation schemes in South Dublin County, including the schemes listed, in as environmentally sensitive a way as possible and to ensure that zoning or development proposals do not impede or prevent the progression of these measures:

- Poddle Flood Alleviation Scheme;
- Camac Flood Alleviation Scheme;
- Whitechurch Flood Alleviation Scheme;
- Lucan to Chapelizod Flood Alleviation Scheme.

IE4 SLO 1:

To require the preparation of a site and catchment specific Flood Risk Assessment and Mitigation Strategy, prepared by a qualified person(s), to be submitted with any proposal for development on the ‘EE’ zoned lands at Moneenalion Commons Upper, Baldonnell (See Development Plan Map).

11.4 Information and Communications Technology

The continued widespread availability of high-quality Information and Communications Technology (ICT) networks within the County is critical to the development of the County’s economy and to social progress. It will ensure that the County remains attractive to hi-tech knowledge-based industries providing for high value employment. It is also a huge asset to the residents of the County encouraging home working and individual entrepreneurial activity.

Policy IE5: Information and Communications Technology (ICT)

Promote and facilitate the sustainable development of a high-quality ICT network throughout the County in order to achieve social and economic development, whilst protecting the amenities of urban and rural areas.

IE5 Objective 1:

To promote and facilitate the provision of appropriate telecommunications infrastructure, including broadband connectivity and other innovative and advancing technologies within the County in a non-intrusive manner.

IE5 Objective 2:

To co-operate with the relevant agencies to facilitate the undergrounding of all electricity, telephone and television cables in urban areas wherever possible, in the interests of visual amenity.

IE5 Objective 3:

To permit telecommunications antennae and support infrastructure throughout the County, subject to high quality design, the protection of sensitive landscapes and visual amenity.

IE5 Objective 4:

To discourage a proliferation of telecommunication masts in the County and promote and facilitate the sharing of facilities.

IE5 Objective 5:

To ensure that above ground utility boxes are sensitively located and finished to reduce their visual impact, designing out anti-social behaviour and promoting soft planting around existing and new ones where feasible.

IE5 Objective 6:

To require the identification of adjacent Public Rights of Way and established walking routes by applicants prior to any new telecommunication developments and to prohibit telecommunications developments that impinge thereon or on recreational amenities, public access to the countryside or the natural environment.

IE5 Objective 7:

Ensure that applications made in relation to the provision of overground telecommunications infrastructure, including planning applications and Section 254 licence applications, take into consideration and demonstrate compliance with the *'Guidance on the Potential Location of Overground Telecommunications Infrastructure on Public Roads'* (2015).

IE5 Objective 8:

To investigate the potential for the provision of fibre optic cables in the County to facilitate the delivery of high-speed broadband and to work collaboratively with providers in facilitating the same.

11.5 Electricity Infrastructure

In line with government policy, the development of energy networks in a safe and secure way to meet projected demand levels and to ensure a long-term, sustainable and competitive energy future for Ireland will be critical to our economy and to enabling the relevant grid connections for renewable energy. The protection of existing networks as well as expansion, where necessary, will enable energy service providers to deliver their statutory function. It is recognised that natural gas, particularly renewable and indigenous gas, will have a role to play in the transition to a low carbon economy. As such, renewable energy developments may require support from such sources in times of high energy demand.

Policy IE6: Electricity Infrastructure

Protect the existing electricity infrastructure and support the development of a safe, secure and reliable supply of electricity and the development of enhanced electricity networks as well as new transmission infrastructure projects subject to the relevant environmental assessments.

IE6 Objective 1:

To support roll-out of the Smart Grids and Smart Cities Action Plan enabling new connections, grid balancing, energy management and micro grid development in line with RPO 10.19.

IE6 Objective 2:

To support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission / distribution of a renewable energy focused generation in line with RPO 10.22

IE6 Objective 3:

To support the sustainable development of Ireland’s offshore renewable energy resources in accordance with the Department of Environment, Climate and Communications ‘Offshore Renewable Energy Development Plan’ and any successor thereof including any associated domestic and international grid connection enhancements in line with RPO 10.24

IE6 Objective 4:

To ensure that the design of energy networks achieves the least possible environmental impact and that where such impacts are inevitable, they are mitigated to the greatest possible extent.

IE6 Objective 5:

To protect existing infrastructure and strategic route corridors, where they have gone through appropriate social, environmental and cultural impact assessments, for identified energy networks from encroachment by development that might compromise the performance of the networks.

11.6 Waste Management

Waste Management is integral to sustainable development and is a key element of the circular economy, protecting public health and maintaining a high-quality environment.

The *Planning and Development Act (2000)* (as amended) states that a development plan shall include objectives for waste recovery and disposal facilities. By virtue of Section 22(10A) of the Waste Management Acts (1996-2008), the objectives of the relevant Waste Management Plan are deemed to be included in the Development Plan.

National and Regional policy on waste management is set out in a number of documents. These include the NPF, the RSES, the Regional Waste Management Plans, the *National Climate Action Plan (2021)* and the Government's policy document *A Waste Action Plan for a Circular Economy 2020-2025*. These policy documents require a transition towards the creation of a circular economy, requiring the long-term use of materials, promoting recycling and re-use, and minimising waste at the end of the cycle. All of these documents and the policies and objectives which flow from them are consistent with the EU Waste Hierarchy approach to waste which endorses prevention, preparing for re-use, recycling, energy recovery and sustainable disposal.

The *Government's Waste Action Plan for a Circular Economy 2020-2025* outlines the new focus which goes beyond simple management of waste and moves towards how we look at resources more broadly, thereby capturing the maximum value of all materials. The focus is on the circular economy approach.

The *Eastern Midlands Region Waste Management Plan 2015-2021 (EMRWMP)* provides the framework for waste management in South Dublin and the Region. It sets out a strategic vision with a focus on viewing waste as a valuable resource. It seeks to make better use of current resources, reduce the leakage of material including energy, as the country transitions from a linear to a circular economy.

Policy IE7: Waste Management

Implement European Union, National and Regional waste and related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.

IE7 Objective 1:

To encourage a just transition from a waste management economy to a green circular economy to enhance employment and increase the value, recovery and recirculation of resources through compliance with the provisions of the *Waste Action Plan for a Circular Economy 2020-2025* and to promote the use of, but not limited to, reverse vending machines and deposit return schemes or similar to ensure a wider and varying ways of recycling.



IE7 Objective 2:

To support the implementation of the *Eastern Midlands Region Waste Management Plan 2015-2021* or as amended by adhering to overarching performance targets, policies and policy actions.

IE7 Objective 3:

To provide for, promote and facilitate high quality sustainable waste recovery and disposal infrastructure / technology in keeping with the EU waste hierarchy and to adequately cater for a growing residential population and business sector.

IE7 Objective 4:

To provide for and maintain the network of bring infrastructure (for example, civic amenity facilities, bring banks) in the County to facilitate the recycling and recovery of hazardous and non-hazardous municipal wastes.

**IE7 Objective 5:**

To ensure the provision of adequately sized public recycling facilities in association with new commercial developments and in tandem with significant change of use / extensions of existing commercial developments where appropriate.

IE7 Objective 6:

To ensure that green waste centres are provided in suitable locations to augment the local house to house collection system for compostable waste.

IE7 Objective 7:

To require the appropriate provision for the sustainable management of waste within all developments, ensuring it is suitably designed into the development, including the provision of facilities for the storage, separation and collection of such waste.

IE7 Objective 8:

To adhere to the recommendations of the *National Hazardous Waste Management Plan 2014-2020* and any subsequent plan, and to co-operate with other agencies including the EPA in the planning, organisation and supervision of the disposal of hazardous waste streams, including hazardous waste identified during construction and demolition projects.

IE7 Objective 9:

To support the development of indigenous capacity for the treatment of non-hazardous and hazardous wastes where technically, economically and environmentally practicable subject to the relevant environmental protection criteria for the planning and development of such activities being applied.

11.7 Environmental Quality: Air, Noise and Light

Clean air is essential in ensuring a high-quality environment for the wellbeing of the residents and success of the economy of the County. It also plays a key role in managing climate action. The impact of noise on human health is increasingly being recognised by the World Health Organisation and others including the EU. As the world has urbanised, the level of light pollution has increased. Set out below are the

higher-level strategic policies in relation to air, noise and light. More detailed development management standards are set out in Chapter 12: *Implementation and Monitoring*.

It is noted that air quality, noise and light pollution control are primarily covered within air, light and noise control legislation.

11.7.1 Air

Ireland as an EU member state is obliged to implement EU Directive 2008 / 50 / EC on ambient air quality and cleaner air for Europe (also referred to as the CAFÉ Directive). These requirements were transposed into national legislation in Ireland by the Air Quality Standards Regulations 2011 (S.I.180 / 2011).

Air quality monitoring stations collect data on ambient air levels assessed against European legal limit values and World Health Organisation guideline values. The network is managed by the EPA, in partnership with Local Authorities and other public / semi-state bodies and universities.

The Council has a number of air quality monitoring stations in the County at Tallaght, Rathcoole and Walkinstown managed by the Environmental Health Team. Up to date information on air quality for the Dublin Area – which includes the four Dublin Local Authorities – together with the Air Quality Index for Health is available at www.epa.ie/air/quality.

11.7.2 Noise

The *European Communities (Environmental Noise) Regulations (2018)* (S.I. No. 549 of 2018), implements EC Directive 2002 / 49 / EC (END) on assessment and management of environmental noise in Ireland. The END requires Member States to prepare and publish, every 5 years, strategic noise maps and noise management action plans for transport noise sources (that is, roads, railways and airports) and industry. The *Dublin Agglomeration Environmental Noise Action Plan 2018-2023* was developed jointly by the four Local Authorities in the Dublin Region in their role as designated Action Planning Authorities under Article 10 of the *Environmental Noise Regulations (2006)*. The purpose of the *Noise Action Plan* is to avoid, prevent and reduce, where necessary, on a prioritised basis the harmful effects including annoyance, caused by long-term exposure to environmental noise. Under the Noise Regulations (2018), all Local Authorities will review strategic noise mapping of non-National major roads, that is, all roads with more than 3 million vehicle passages per year. The EPA is the national competent authority under the Regulations. Development Management Policies on noise are set out in Chapter 12: *Implementation and Monitoring*.

11.7.3 Light

Adequate lighting is essential for a safe and secure environment. However, light spillage from excessive or poorly designed lighting is increasingly recognised as a

potential nuisance to surrounding properties and a threat to light-sensitive wildlife. Light pollution can be defined as wasted light. While South Dublin is significantly urbanised, it has large areas of rural and mountain character, including river corridors, which are particularly sensitive to light pollution. Where proposals for new lighting require planning consent, the Council will ensure that they are carefully and sensitively designed. Development proposals which include external lighting should ensure that the proposed lighting scheme is the minimum required for reasons of public safety and security; there is no light spillage above the horizon; there is no unacceptable adverse impact on neighbouring or nearby properties or on the surrounding countryside; there is no dazzling or distraction to road users including cyclists and pedestrians; and road and footway lighting meets the Council’s standards.

Policy IE8: Environmental Quality

Seek to take appropriate steps to reduce the effects of air, noise and light pollution on environmental quality and residential amenity in line with European, National and Regional policy and legislation.

IE8 Objective 1:

To implement the provisions of national and EU Directives on air and noise pollution and other relevant legislative requirements in conjunction with other agencies as appropriate, consistent with RPO 10.10 of the RSES.

IE8 Objective 2:

To co-operate with the EPA and TII in the maintenance of a Dublin ambient air quality monitoring network.



IE8 Objective 3:

To implement the recommendations of the *Dublin Region Air Quality Plan 2021* to protect people from the harmful health effects associated with air pollution, to preserve good air quality where it exists and to improve air quality where it is unsatisfactory.

IE8 Objective 4:

To implement the relevant spatial planning recommendations and actions of the *Dublin Agglomeration Environmental Noise Action Plan 2018-2023* or any superseding action plan.

IE8 Objective 5:

To ensure that future developments are designed and constructed to minimise noise disturbance and take into account the multi-functional uses of streets including movement and recreation as detailed in the *Urban Design Manual (2009)* and the *Design Manual for Urban Roads and Streets (2013, updated 2019)*.

IE8 Objective 6:

To ensure external lighting schemes minimise light spillage or pollution in the immediate surrounding environment and do not adversely impact on residential or visual amenity and biodiversity in the surrounding areas having regard to the Institute of Lighting Engineers' Guidance Notes for the Reduction of Light Pollution (UK). (see section 12.11.4 (iii)).

IE8 Objective 7:

To ensure that noise sensitive development in proximity to national and other roads provides a noise impact assessment and includes appropriate mitigation measures, such as noise barriers, set back landscaping and / or buffer zones between areas of land where development is proposed and existing and proposed national and other roads.

IE8 Objective 8:

To work alongside relevant stakeholders NTA, TII, EPA to promote and improve safer noise protection infrastructure in line with population growth and traffic increases along all our national roads.

11.8 Airports and Aerodromes

This section sets out the general restrictions and requirements on development within the County for Dublin Airport, Casement Aerodrome and Weston Airport. The safeguarding requirements in the vicinity of civil aerodromes located in South Dublin (Dublin Airport and Weston Airport) are set out in:

- a. International Standards and Recommended Practices' within *Annex 14* to the *Convention on International Civil Aviation*, which is published by the International Civil Aviation Organisation (ICAO) and the Irish Aviation Authority Guidance Material on Aerodrome Annex 14 Surfaces (2015);
- b. Certification Specifications & Guidance Material for Aerodromes Design published in 2017 by the European Aviation Safety Agency (EASA).

Safeguarding is dealt with in more detail in Chapter 12: *Implementation and Monitoring*.

Casement Aerodrome is a fully equipped military base and includes the main centre for Air Corps Operations. Its operations and requirements are dealt with by the Department of Defence.

This section also addresses policy and objectives relating to airport noise and public safety issues relating to the operation of the airports and aerodromes within South Dublin, while also providing information on helipads within the County.

11.8.1 National Aviation Policy

National aviation policy highlights the importance of air transport for trade, inward investment and tourism. The *National Aviation Policy for Ireland* (2015) published by

the Department of Transport, Tourism and Sport, sets the policies for aviation in Ireland. The principal goals of National Aviation Policy are to:

- Enhance Ireland’s connectivity by ensuring safe, secure and competitive access responsive to the needs of business, tourism and consumers;
- Foster the growth of aviation enterprise in Ireland to support job creation and position Ireland as a recognised global leader in aviation;
- Maximise the contribution of the aviation sector to Ireland’s economic growth and development.

South Dublin is located approximately 10km from Dublin Airport at its boundary, as such the airport has limited direct implications for the county in respect of safety and noise. However, its overall importance for the economy and tourism of the Country as a whole is acknowledged.

Weston Airport provides what is referred to as ‘general aviation’ for commercial and economic activities within the aviation sector in Ireland. It is also the base for the National Flight Centre pilot academy.

Casement Aerodrome, being a military aerodrome, does not come under the control of the Irish Aviation Authority but the ICAO Standards and Recommended Practices are applied as policy by the Department of Defence. Additionally, the Department of Defence applies a ‘Security Zone’ closely aligned with the areas around the runways known as flight strips.

11.8.2 Casement Aerodrome

Casement Aerodrome is in continuous aviation use and is the only fully equipped military airbase in the State serving as the main centre of Air Corps operations. The aerodrome has two runways:

- 1 Runway 10 / 28: The existing main runway with east to west orientation (north of Newcastle and over Kingswood);
- 2 Runway 04 / 22: Existing secondary runway with a south-west to north-east orientation (04 over Rathcoole and 22 over Corkagh Park).

Policy IE9: Casement Aerodrome

Safeguard, having regard to the requirements of the Department of Defence, the current and future operational, safety and technical requirements of Casement Aerodrome and facilitate its ongoing development for military and ancillary uses.

IE9 Objective 1:

To ensure the safety of military and other air traffic, present and future, to and from Casement Aerodrome with full regard for the safety of persons on the ground as well as the necessity for causing the least possible inconvenience to local communities.

IE9 Objective 2:

To maintain the airspace around Casement aerodrome free from obstacles to facilitate aircraft operations to be conducted safely, as identified in the Development Plan Index map and Map 12 and as outlined in Chapter 12: *Implementation and Monitoring*.

IE9 Objective 3:

To implement the principles of shielding in assessing proposed development in the vicinity of Aerodromes, having regard to Section 3.23 of the Irish Aviation Authority *Guidance Material on Aerodrome Annex 14 Surfaces* (2015) (See Chapter 12: *Implementation and Monitoring*).

IE9 Objective 4:

To prohibit and restrict development in the environs of Casement aerodrome, where it may cause a safety hazard. (See also Policy IE13 Public Safety Zones and Chapter 12: *Implementation and Monitoring*).

11.8.3 Weston Airport

Weston Airport consists of one runway, designated as a Code 2B runway by ICAO and EASA definitions. Weston Airport obstacle limitations surfaces overlap with those of Casement Aerodrome. In instances of overlap, the more stringent requirements of the two Aerodromes shall apply.

Policy IE10: Weston Airport

Safeguard, having regard to the requirements of the Irish Aviation Authority (IAA), the current and future operational, safety and technical requirements of Weston Airport and prevent encroachment of development around the airport which may interfere with its safe operation, in the context of the proper planning and sustainable development of the area and the protection of surrounding amenities.

IE10 Objective 1:

To safeguard air traffic to and from Weston Airport while ensuring the least possible inconvenience to local communities and with full regard for the safety of persons on the ground (see also section 11.7.7 Public Safety Zones).

IE10 Objective 2:

To maintain the airspace around the airport free from obstacles so as to facilitate aircraft operations to be conducted safely, including restricting development in the environs of the aerodrome, as identified by the Obstacle Limitations surfaces shown on the Development Plan Index map and Map 12 and as outlined in Chapter 12: *Implementation and Monitoring*.

IE10 Objective 3:

To prohibit and restrict development in the environs of Weston Airport, where it may cause a safety hazard to the operation of the airport.

IE10 Objective 4:

To ensure a balanced approach to any further lengthening of the permitted runway or over-run areas having regard to the need for environmental and other assessments including noise and assessment of the impact on local communities.

IE10 Objective 5:

The Planning Authority will engage with Kildare County Council, to guide the consideration of applications for development at Weston Airport having regard to national, regional and local climate action plans.

11.8.4 Dublin Airport

The outer horizontal surface for Dublin airport overlaps a limited area to the north of the County. The area is delineated on the Development Plan Maps.

Policy IE11: Dublin Airport

Refer planning applications for development within the Outer Horizontal Surface of Dublin Airport (and of over 90m in height above ground level) to the airport operator and regulator (DAA and IAA) and to have regard to the requirements of the IAA and DAA in the assessment of development proposals (see Index Map and Map 12 for details).

IE11 Objective 1:

To limit building heights to 90m above ground level so as to prevent any object from penetrating the Outer Horizontal Surface for Dublin Airport (as defined in the 2017 *Certification Specifications* of the European Aviation Safety Agency, and in accordance with Irish Aviation Authority guidance material in relation to this Surface).

11.8.5 Helipads

There are two hospital helipads in South Dublin: at Tallaght University Hospital, and at the Hermitage private medical clinic. These are private helipads, for which no formal approach and departure routes or surfaces have been established. The helipad at Tallaght is used by the Emergency Aeromedical Service.

To safeguard the ongoing use of these helipads, (and pending the adoption of any more formal approach / departure surfaces, for example, per ICAO “Annex 14 – Volume II: Heliports”), it is proposed that a 1 in 8 slope in all directions around these helipads will be preserved free of any new obstacles, and that no overhead wires will be allowed in their vicinity (with similar restrictions to be considered for any future hospital helipad or any future heliport).

Policy IE12: Helipads

Provide protection for hospital helipads, in particular the existing helipads at Tallaght Hospital and at Hermitage Clinic, by ensuring that a 1 in 8 slope in all directions from the edge of the helipad is kept free of any new obstacles (and under any future Approach or Departure Surface which may be designated for such helipads), and by avoiding any overhead wires or masts in their vicinity.

11.8.6 Airport and Aerodrome - Noise

The areas within which aircraft noise may be significant in the vicinity of the airports and aerodromes is indicated on the Development Plan Maps and these noise significant areas may be subject to updating. For residential development and other noise vulnerable land uses, an appropriate noise assessment with accompanying mitigation measures to protect residential amenity should be submitted.

Policy IE13: Noise

Discourage noise-sensitive developments in the immediate vicinity of airports and aerodromes.

IE13 Objective 1:

To limit residential development and other land uses impacted by noise, such as nursing homes, schools, hospitals and conference centres within the Noise Significant Area Boundary delineated for Casement and Weston (See County Development Plan Index Map and relevant area maps) and ensure that any noise sensitive uses are subject to an appropriate noise assessment and mitigation measures to protect residential amenity.

11.8.7 Public Safety Zones

Public Safety Zones - General

Additional safety on the ground is provided by means of Public Safety Zones extending from the ends of runways, usually involving (i) an Inner Zone in which no new human occupancy is permitted (although existing occupancy may remain), and (ii) an Outer Zone in which limited occupancy is permitted (with different maximum occupancy figures for different types of development, taking into account likely duration / s of occupancy).

There are currently no set international standards or recommendations regarding Public Safety Zones at airports / aerodromes, and in practice these vary considerably in size at the international airports where they are provided. Public Safety Zones at airports were not mentioned in the recent National Aviation Policy for Ireland (published in 2015 by the Department of Transport, Tourism and Sport).

The Public Safety Zones proposed within the 2009 Review of Policy at Casement Aerodrome were particularly small, and fully contained within the aerodrome's "Red / Inner approach areas" (where no new development was permitted in any event), so that those Public Safety Zones had no additional effect.

Public Safety Zones for Casement and Weston

To more accurately make provision for safe air navigation and protection of people on the ground, the prohibition on new development in the immediate vicinity of runway thresholds is transferred to new Inner Public Safety Zones for Casement and Weston. Pending more detailed review and recalculation based on updated traffic figures, these Inner Public Safety Zones will all be of triangular shape 1000m long by 100m wide (that is, larger than any of the Public Safety Zones calculated in 2009 for Casement).

In addition, new Outer Public Safety Zones of double that size (2000m long by 200m wide) are to be provided, within which development containing limited human occupancy may be permitted. Pending more detailed review, the occupancy numbers to be permitted in these Outer Public Safety Zones will be the same as applied in other larger Outer Public Safety Zones in Ireland (pending review of these provisions), that is, <60 persons per half hectare for housing, <85 persons per half hectare for retail or leisure, and <110 persons per half hectare for working premises; (the half hectare to be centred on the proposed development, and not based on ownership or site-holding boundary).

These new Inner and Outer Public Safety Zones will apply at Casement and at Weston, and pending further review, will all be of the same size for all runways (in view of the broadly similar traffic figures at both aerodromes). Within these Inner and Outer Zones, development will also remain restricted to the maximum heights / elevations permitted under the runway's Approach or Take-off Climb Surfaces (per ICAO specifications).

Policy IE14: Public Safety Zones

Improve protection for the public on the ground, in the event of an aircraft crash occurring, through the provision of Inner and Outer Public Safety Zones around airports.

IE14 Objective 1:

To prohibit new development which would involve additional human occupancy within the Inner Public Safety Zones (PSZ) at Weston and Casement Aerodromes as identified on the Development Plan maps.

IE14 Objective 2:

To limit all new development in the new Outer Public Safety Zones at Weston and Casement Aerodromes to development with occupancies per half hectare of - 60 persons or less for housing / residential, 85 persons or less for retail or leisure, 110 persons or less for working premises, and with a prohibition (in the Outer Public Safety Zones) on sports stadia, and on any new sensitive / institutional development such as schools or medical facilities, and on any new development involving 24-hour occupancy such as retirement homes.

IE14 Objective 3:

To review, as appropriate, Public Safety Zone dimensions and occupancy limits in accordance with actual and predicted air traffic figures and with regard for any recommended international airport Public Safety Zone practice.

11.9 Climate Change Audit



Climate Action Audit

Potential role of Infrastructure and Environmental Services in climate action	Measures to Address Climate Impacts
<p>Delivering a high quality environment and adopting a sustainable approach to the delivery of the range of infrastructure that supports the County will impact hugely on achieving our climate change targets and protecting the planet. Through good planning we can ensure that our environment is a key element in future development and growth.</p>	<p>Policies and objectives contained in this chapter which address climate impacts include the following:</p> <ul style="list-style-type: none"> → Overarching policy requiring sustainable management of our natural capital and provision of infrastructure in tandem with development; → Supporting IW in their role in the sustainable management of water supply; → Incorporation of measures such as SuDS and Integrated Constructed Wetlands and similar into proposed developments; → Support the circular economy approach; → Requiring the incorporation of recycling, bring and green waste centres into new development; → Requiring limitation of air, noise and light pollution.

