

10

Environmental Infrastructure and Flood Risk





Construction at
Cherrywood

10.1 Introduction

The availability of high-quality infrastructure networks and environmental services is critical in delivering on the Development Plan Vision of creating sustainable and attractive places, in ensuring health and well-being, attracting an innovative economy and protecting the environment.

Overall policy in relation to environmental infrastructure and flood risk in this Plan is to:

- Support Irish Water in their role in relation to water supply and wastewater treatment.
- Manage surface water in a sustainable manner.
- Minimise waste in accordance with the principles of the circular economy approach.
- Provide flood protection measures and reduce flood risk as far as possible.

Delivering on the policy approach above will contribute towards mitigating and adapting to the impacts of climate change. The synergies between having strong policies on management of water, waste, flooding and delivering on climate action are multiple – for example policies that reduce the risk of flooding and/or provide for coastal protection benefit communities and are climate action measures.

Sustainable management of water, waste and other environmental resources is supported in both National Strategic Outcome 9 of the National Planning Framework (NPF) and Regional Strategic Outcome 7 of the Regional Spatial and Economic Strategy (RSES). National Policy Objectives 5 of the NPF also advocates enhanced water quality and resource management by way of flood risk management, consideration of River Basin Management Plan objectives and use of Sustainable Drainage Systems (SuDS).

It is acknowledged that water services, energy supply and telecommunications all fall outside the direct remit of DLR but yet have implications for sustainable planning in the County.

The following Chapter sets out the Policy Objectives of the Council in relation to a range of infrastructure, pollution, flood risk and coastal protection as follows:

- Water and Wastewater
- Waste
- Pollution
- Telecommunications
- Flood Risk
- Coastal Protection



10.2 Water and Wastewater

10.2.1 National and Regional Context

DLR need water and wastewater infrastructure in the right locations to support climate resilient growth in accordance with the regional settlement strategy and also to protect the environment. Provision of waste and wastewater infrastructure in the south of the County 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 in water and wastewater infrastructure over the ten years from 2018 – 2028.

From the 1st January 2014, Irish Water became responsible for all public water services, involving the supply of drinking water and the collection, treatment and disposal of wastewater. All capital investment decisions and implementation of the capital programme delivery is carried out by Irish Water.

The Water Framework Directive (2000/60/EC) provides the overarching set of arrangements governing the management of water quality across Europe. In addition to the Water Framework Directive, relevant policy on water services includes the Urban Waste Water Treatment Directive, the Drinking Water Directive, the Birds and Habitats Directives, obligations under the Aarhus Convention, the EU Action Plan for the Circular Economy, and the United Nations Sustainable Action Plan, Sustainable Development Goals. National legislation includes the Water Service Acts 2008 – 2018, Water

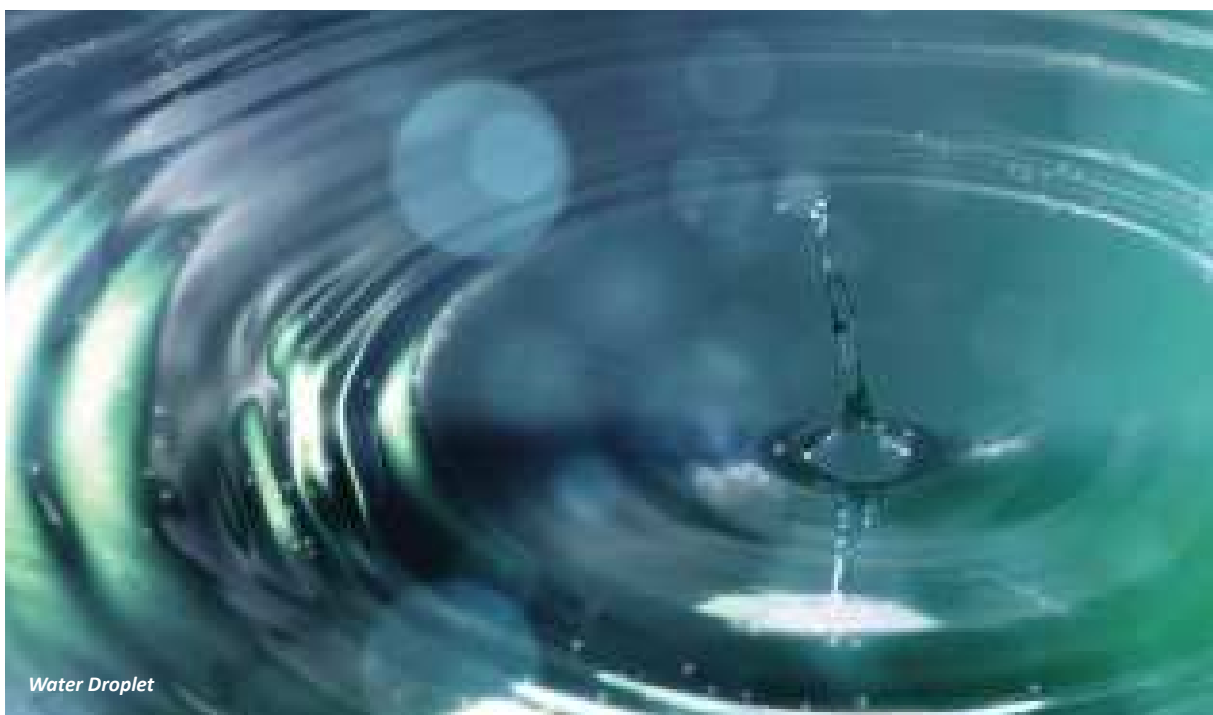
supplies Act 1942, the Planning and Development Act 2000 (as amended), European Union (Drinking Water) Regulations 2014, Waste Water Discharge (Authorisation) Regulations 2008 and the Climate Action and Low Carbon Development Act 2015. Reports by the Environmental Protection Agency (EPA) on drinking water and wastewater also feed into policy.

10.2.1.1 Water Services Policy Statement 2018 – 2025

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.

10.2.1.2 Water Service Strategic Plan (2020)

Irish Water’s ‘Water Services Strategic Plan’ (2020) (WSSP) sets out strategic objectives for the delivery of water services up to 2040. Objectives include ensuring a safe and reliable water supply and providing effective management of wastewater. Specific priorities include delivery of improved services, remediation of drinking water quality problems, complying with the Urban Waste Water Treatment Directive, reducing leakage and catering for growth. One important target of the WSSP is to increase the number of treatment plants that meet target capacity headroom so as to meet “core strategy” requirements in Development Plans.



Water Droplet

Protection of the environment is also a key objective of the WSSP.

The WSSP sets out some key regional water and wastewater projects including the Vartry Water Supply Scheme, the Eastern Midland Region Water Supply Project, Irish Water's programme of Investment in leakage, the Greater Dublin Drainage Study and the Ringsend Waste Treatment Plant upgrade.

10.2.1.3 National Water Resources Plan

Work is currently ongoing on Irish Water's National Water Resources Plan which will be a 25-year strategy to ensure a secure and reliable drinking water supply.

10.2.1.4 River Basin Management Plan for Ireland 2018 – 2021

Under the Water Framework Directive there is a legal obligation to protect and improve the status of water bodies. The Directive is implemented via the 'National River Basin Management Plan for Ireland 2018 – 2021' (RBMP) which is the second cycle of plans produced under the Directive. The RBMP sets out and seeks supporting measures to improve water quality in water bodies. DLR is the competent authority for the purposes of implementation of the RBMP within the functional area of the County. Consultation is currently ongoing for the third cycle of the RBMP which will run from 2022 – 2028. The Council will have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.

10.2.1.5 Irish Water Capital Investment Plan 2020 – 2024

Sitting below the WSSP is Irish Water's Investment Plan 2020 – 2024, which is aligned with the strategic objectives of the WSSP. The funding for this programme, which has been approved by the Commission for Regulation of Utilities in 2020, includes a number of projects critical for the Region and also a number of projects specific to DLR (see Appendix 1 for projects in DLR).

10.2.1.6 Challenges

The key challenge is ensuring continuing build out of enabling infrastructure to allow compact growth.

In the wider Dublin area, water supply is at a critical level and provision of investment in a secure regional water supply is necessary in order to allow compact urban employment and residential growth in line with the NPF and RSES. Project Ireland 2040 includes Irish Water projects, the major one in relation to water supply being the Water Supply Project of the Eastern and Midland Region which is required for long term growth up to 2050.

10.2.2 Water and Wastewater - Policy Objectives

10.2.2.1 Policy Objective EI1: Sustainable Management of Water

It is a Policy Objective to work with Irish Water:

- To ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water in a manner that supports climate action, the circular economy, a healthy society and protection of the environment. (Consistent with NSO 9 of the NPF, RSO 7, RPO 10.1 of the RSES)
- To continue the development and improvement of the water supply and wastewater systems throughout Dún Laoghaire-Rathdown in order to meet the anticipated water and wastewater requirements of the County.
- To ensure facilities comply with the Water Framework Directive and the River Basin Management Plan or any updated version of the document, 'Water Quality in Ireland 2013-2018'(2019) or any updated version of the document, Pollution Reduction Programmes for Designated Shellfish Areas, the Urban Waste Water Treatment Directive and the Habitats Directive.

The Council - with Irish Water – will ensure conformity with the objectives set out in the Water Services Strategic Plan and the forthcoming National Water Resources Plan. The Core Strategy which aligns growth areas with infrastructure accords with the Irish Water Capital Investment Plan 2020 – 2024.

The Council will work with Irish Water in undertaking any improvement works required by the EPA's Remedial Action List. Existing and new populations proposed in the County Development Plan shall be served with clean drinking water. The Council will support Irish Water to ensure that compliance is achieved, as a minimum, with regard to the parameters set out under the European Union (Drinking Water) Regulations 2014. Protocols are in place to manage any incident of non-compliance and ensure a return to compliance as soon as possible.

It is Council policy to encourage the advancement of rain water harvesting systems, grey water re-use systems and other water conservation measures in the County, in accordance with best practice and subject to compliance with Ministerial Guidelines/Regulations.

10.2.2.2 Policy Objective EI2: Irish Water Enabling Policies

Irish Water's Plans and Programmes

It is a Policy Objective - in conjunction with the Eastern and Midland Regional Authority, where appropriate - to work with and 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 forthcoming National Water Resources Plan, so as to ensure provision of infrastructure to service settlements in accordance with the Core Strategy of this Plan, and the settlement strategy of the RSES. (Consistent with RPO 10.2, 10.3, 10.11, 10.16 of the RSES)

Reducing Leakage

It is a Policy Objective to work with Irish Water to reduce leakage in accordance with any forthcoming Irish Water Regional Water Conservation Strategy. (Consistent with RPO 10.4 of the RSES)

Water and Wastewater Network Design and Construction

It is a Policy Objective to support the provision of integrated and sustainable water services through consultation with Irish Water on the layout and design of water services in relation to the selection and planning of development areas and the preparation of plans.

Promote Water Conservation

It is a Policy Objective in conjunction with Irish Water to promote and support water conservation and demand management measures among all water users in existing and new developments. (Consistent with NSO 9 of the NPF, RSO 7 and RPO 10.1 of the RSES)

10.2.2.3 Policy Objective EI3: Wastewater Treatment Systems

It is a Policy Objective that all new developments in areas served by a public foul sewerage network connect to the public sewerage system, either directly or indirectly.

It is a Policy Objective to promote the changeover from septic tanks to collection networks where this is feasible and to strongly discourage the provision of individual septic tanks and domestic wastewater treatment systems in order to minimise the risk of groundwater and surface water pollution.

It is a Policy Objective to prohibit multiple dwelling units discharging to communal wastewater treatment systems.

Consideration of single dwelling domestic wastewater treatment systems in those areas not served by a public foul sewerage system will be subject to full compliance with the EPA Code of Practice Domestic Wastewater Treatment Systems (Population Equivalent ≤ 10) (March 2021), as may be amended or updated.

Consideration of non-domestic wastewater treatment systems in those areas not served by a public foul sewerage system will be subject to full compliance with EPA Wastewater Treatment Manuals ('Treatment Systems for Small Communities, Business, Leisure Centres and Hotels').

Wastewater treatment systems shall be located entirely within the site boundary.

The Council will liaise with Irish Water to ensure compliance with existing licenses, the Urban Waste water Directive and the EU Habitats Directive. See section 12.10.3 Waste Water Treatment Systems for detailed requirements.

10.2.2.4 Policy Objective EI4: Water Drainage Systems

It is a Policy Objective to require all development proposals to provide a separate foul and surface water drainage system – where practicable. (Consistent with RPO 10.12)

10.2.2.5 Policy Objective EI5: River Basin Management Plans (RMBPs)

It is a Policy Objective:

- To ensure the delivery of the relevant policies and objectives of the River Basin Management Plan for Ireland 2018 – 2021 and any subsequent plan, including those relating to protection of water status, improvement of water status, prevention of deterioration and meeting objectives for designated protected sites.
- To support Irish Water in its implementation of Water Quality Management Plans for ground, surface, coastal and estuarine waters as part of the implementation of the EU Water Framework Directive.
- To support Irish Water in the development of Drinking Water Protection Plans.

The 2nd Cycle 'River Basin Management Plan for Ireland 2018-2021' was published in April 2018. Ireland is now defined as a single River Basin District covering over 1000 water bodies. The previous Eastern River Basin Management Plan has therefore been replaced with a single national Plan. The Plan sets out the actions that Ireland will take to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, estuaries and coastal waters) by 2028. The Plan identified two priority areas for action within DLR: the Carrickmines River Catchment which has moderate ecological status and the Dodder Catchment which also has moderate ecological status. The Dargle river Catchment which include the Glencullen River was also identified. The process to produce the 3rd Cycle River Basin Management Plan for 2021 -2028 has already begun and further requirements for the improvement of water quality will be made in this Plan. The Council will have regard, where relevant, to the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.

The governance structures have also altered with the establishment of the Local Authorities Water and Communities Office who work with Local Authorities and other stakeholders to deliver on the objectives of the RBMP. The core focus of their work is to protect and improve water quality in rivers, lakes, groundwater, estuaries and coastal waters.

The national RMPB acknowledges the need for alignment and integration with the planning system so as to ensure effective water management

and compatibility between planned growth and environmental sustainability. The planning system can make a significant contribution to achieving the water objectives of the RBMP. Guidelines are to be prepared by the Department of Housing, Planning and Local Government to assist Planners in taking into account risks to RBMP objectives in decision making on planning applications. The Planning Authority shall have regard to any such forthcoming Section 28 Guidelines as appropriate.

The Council shall work alongside the relevant stakeholders, including Irish Water, to ensure the implementation of Water Quality Management Plans as required by the EU Water Framework Directive, as well as relevant recommendations contained within 'Water Quality in Ireland 2013-2018' (2019) and the six-volume Local Catchment Assessment Guidance (developed by the EPA) for the investigative assessment of catchments that have failed, or are at risk of failing, to meet the environmental objectives of the Water Framework Directive.

In the interests of protection of water abstraction sources development within 200m of any part of Glencullen River and Brockey tributary and a horizontal setback of 100m from any part of its tributaries at Boranaraltry and The Alleys up stream of the water intake locations for the Enniskerry Potable Water Supply shall not be permitted.

10.2.2.6 Policy Objective EI6: Sustainable Drainage Systems

It is a Policy Objective to ensure that all development proposals incorporate Sustainable Drainage Systems (SuDS).

Development will only be permitted where the Council is satisfied that suitable measures have been proposed that mitigate the impact of drainage through the achievement of control of run-off quantity and quality while enhancing amenity and habitat. In particular the requirements of the 'SUDS Manual' by the UK's Construction Industry Research and Information Association (CIRIA) shall be followed unless specifically exempted by the Council. (See also Section 12.8.6.2 SuDS (Sustainable Drainage Systems) and Appendix 7 Sustainable Drainage System Measures)

Any site-specific solutions to surface water drainage systems shall meet the requirements of the Water Framework Directive and the River Basin Management Plan 2018 – 2021 any subsequent RBMP and 'Water Quality in Ireland 2013 - 2018' (2019), or any updated version of the document.

10.2.2.7 Policy Objective EI7: Water Supply and Wastewater treatment and Appropriate Assessment

It is a Policy Objective to require that all developments relating to water supply and wastewater treatment are subject to screening for Appropriate Assessment to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any European sites¹ and that the requirements of Article 6 of the EU Habitats Directive are met. (Consistent with RPO 10.7 of the RSES).

10.2.2.8 Policy Objective EI8: Groundwater Protection and Appropriate Assessment

It is a Policy Objective to ensure the protection of the groundwater resources in and around the County and associated habitats and species in accordance with the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (Groundwater) Regulations, 2010. In this regard, the Council will support the implementation of Irish Water's Water Safety Plans to protect sources of public water supply and their contributing catchment.

In the Glencullen area, new development will not be permitted which could damage groundwater resources or prevent use of this resource. Regard should be had to the dlr commissioned "Groundwater Strategy for the Glencullen Aquifer" (2018).

10.2.2.9 Policy Objective EI9: Drainage Impact Assessment

It is a Policy Objective to ensure that all new development proposals include a Drainage Impact Assessment that meets the requirements of the Council's Development Management Thresholds Information Document (see Appendix 3) and the Stormwater Management Policy (See Appendix 7.1).

2.2.10 Policy Objective EI10: Storm Overflows of Sewage to Watercourses

It is a Policy Objective to work alongside Irish Water to minimise the number and frequency of storm overflows of sewage to watercourses and to establish, in co-operation with the adjoining Local Authorities and Irish Water, a consistent approach to the design, improvement and management of these intermittent discharges to ensure that the needs of the Region's receiving waters are met in a cost effective manner.

Stormwater overflows can have significant negative impacts on receiving waters in terms of both water quality and flooding. The Council, in conjunction with Irish Water, will endeavor to ensure Best Management Practices are utilised to protect receiving waters.



Water Infrastructure Costs

¹ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

10.3 Waste

10.3.1 Introduction, National and Regional Context

Waste management is an integral requirement essential in the promotion of sustainable development, enhancing good public health and the protection of environment. The County Development Plan must include objectives for waste recovery and disposal facilities (regard being had to the Waste Management Plan for the area).

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' sets out the strategic vision for the Region which is to rethink our approach to waste by viewing our waste streams as a valuable material resource. Management of these valuable

resources is integral to the promotion of sustainable development, the enhancement of good public health and the protection of the environment. It also seeks to further reduce the role of landfilling as an option for waste management in favour of recovery options e.g. the generation of energy from waste.

Evaluation of the Eastern - Midlands Region Waste Management Plan 2015–2021 will commence in 2020, culminating with the publication of a new Plan in 2022.

10.3.1.1 Circular Economy

The Regional Waste Plan, along with the NPF, the RSES, the national 'Climate Action Plan 2019' and the Government's 'A Waste Action Plan for a Circular Economy 2020 –2025' endorses a transition towards the principles of a circular economy, facilitating the use of materials at their highest value for as long as possible and then recycling or reusing them at the end of their service life with the end result being the generation of minimal waste.

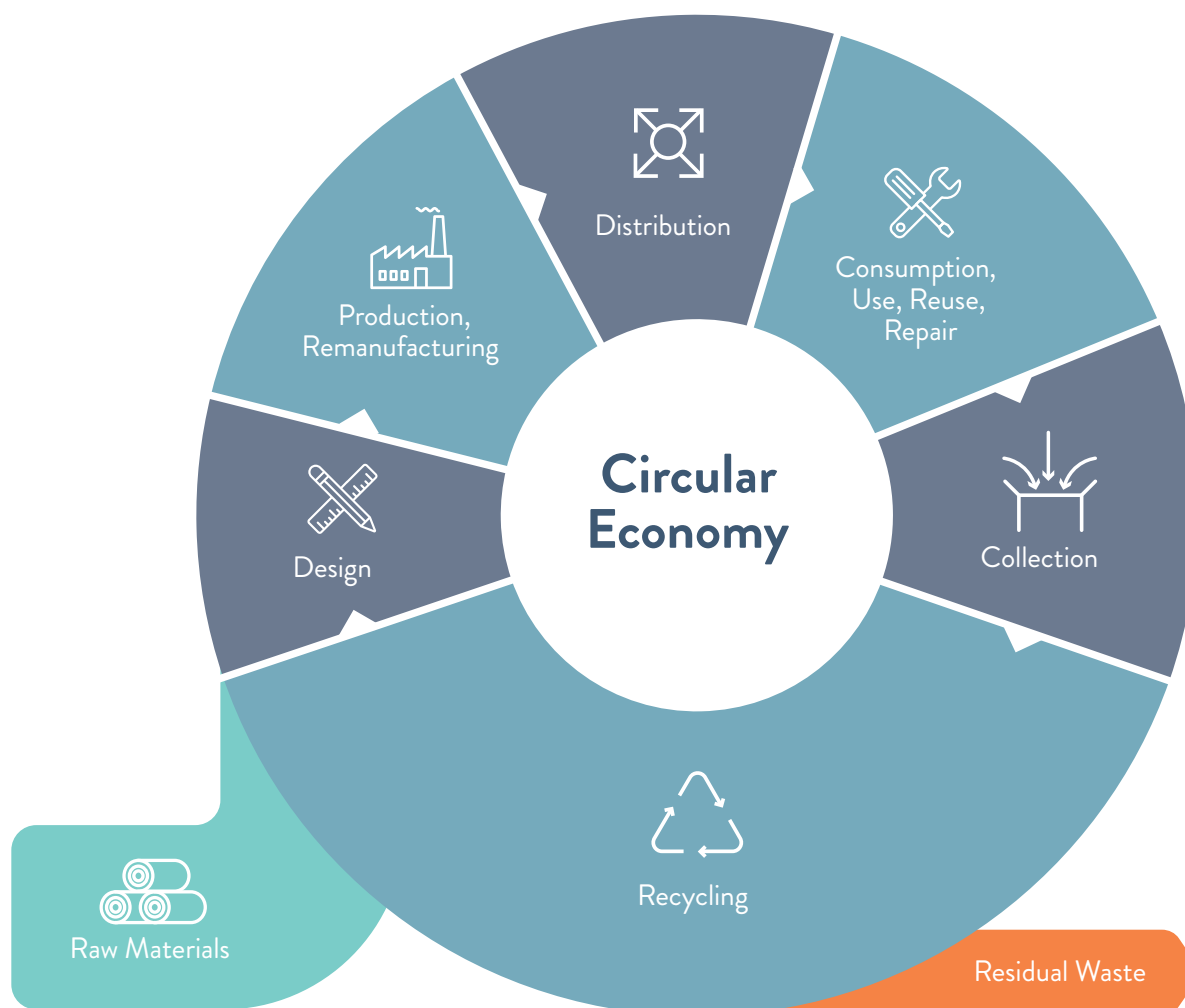


Figure 10.1 Circular Economy Approach (Source: National Waste Prevention Programme)

The waste management policy objectives contained within this Chapter are predicated on the Government's 'A Waste Action Plan for a Circular Economy 2020–2025' and the EU Waste Hierarchy of prevention, preparing for re-use, recycling, energy recovery and sustainable disposal. The policy objectives are reflective of the over-arching higher level documents and legislation which are outlined in Appendix 12. At the heart of these statutory documents is the overarching requirement to be fully consistent with the EU Waste Hierarchy.

10.3.2 Waste - Policy Objectives

10.3.2.1 Policy Objective EI11: Resource Management

It is a Policy Objective to implement the Eastern-Midlands Region Waste Management Plan 2015-2021 and subsequent plans, in supporting the transition from a waste management economy towards a circular economy, to enhance employment and increase the value recovery and recirculation of resources. Underpinning this objective is the requirement to conform to the European Union and National Waste Management Hierarchy of the most favoured options for waste as illustrated below subject to economic and technical feasibility and Environmental Assessment. (Consistent with RPO 10.25 of the RSES)

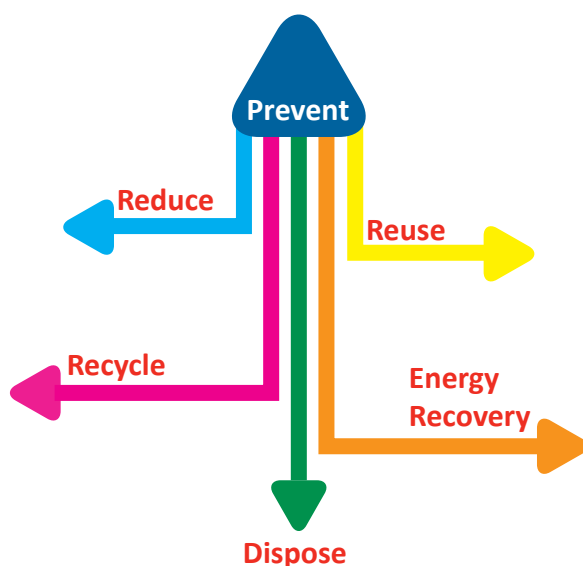


Figure 10.2: Waste Hierarchy (Source: EPA)

The Eastern-Midlands Region Waste Management Plan 2015–2021 also looks forward to 2030, with the following future goals:

- Absolute decoupling of household waste from economic growth and disposable income (this means that the economy continues to grow while waste reduces).

- Preparing for re-use and recycling rate of 60-100% of municipal waste by the end of 2030.
- Reduce and where possible, eliminate the landfilling of all major waste streams including municipal, industrial and construction and demolition wastes in favour of the recovery of residual wastes.

10.3.2.2 Policy Objective EI12: Waste Management Infrastructure, Prevention, Reduction, Reuse and Recycling (Circular Economy approach)

It is a Policy Objective:

- To support the principles of the circular economy, good waste management and the implementation of best international practice in relation to waste management in order for the County and the Region to become self-sufficient in terms of resource and waste management and to provide a waste management infrastructure that supports this objective.
- To aim to provide a supporting waste management infrastructure in the County for the processing and recovery of waste streams such as mixed municipal waste in accordance with the proximity principle.
- To provide for civic amenity facilities and bring centres as part of an integrated waste collection system in accessible locations throughout the County and promote the importance of kerbside source segregated collection of household and commercial waste as the best method to ensure the quality of waste presented for recycling is preserved.
- To ensure any waste amenity facilities adhere to the Waste Regional Offices Waste Management Infrastructure siting guidelines.
- To develop a County wide network of multi material recycling centres, bring centres and a re-use centre and to require the provision of adequately-sized recycling facilities in new commercial and large-scale residential developments, where appropriate.
- To require the inclusion of such centres in all large retail developments to maximise access by the public.
- To ensure new developments are designed and constructed in line with the Council's Guidelines for Waste Storage Facilities (an excerpt of which is contained in Appendix 6).

The Council will 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. Potential activities could include, but not be limited to, recycling/reuse waste enterprises, reprocessing or preparing for reuse, temporary storage of waste and materials and contingency capacity for crisis events such as risks to the environment and to the health of humans and livestock.

10.3.2.3 Policy Objective EI13: Hazardous Waste

It is a Policy Objective 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, to plan, organise, authorise and supervise the disposal of hazardous waste streams, including hazardous waste identified during construction and demolition projects.

The Council will have regard to the recommendations made by the Environmental Protection Agency, as appropriate, in relation to the effective management by the Council of hazardous waste, including the recommendations of the 'National Hazardous Waste Management Plan 2014-2020'.



10.4 Pollution

Clean air and water are important in ensuring a high quality environment in the County. Managing both is critical as they play a role in both climate action and achieving a healthy County. Set out below are the higher level strategic policies in relation to air, water, noise and light. More detailed standards are set out in Section 12.9 of Chapter 12 'Development Management'.

10.4.1 Policy Objective EI14: Air and Noise Pollution

It is a Policy Objective:

- 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)
- To maintain and manage a Dublin County ambient air quality monitoring network in conjunction with the EPA and TII and to make available to the public the resulting air quality measurements via the EPA website www.epa.ie/air/quality.
- To support the implementation of objectives of the 'Dublin Agglomeration Environmental Noise Action Plan 2018-2023'.

Air

DLR County Council has adopted the 'Dublin Regional Air Quality Management Plan 2009-2012' under the provisions of the Air Pollution Act 1987.

The Council has an established Primary Air Quality Station as part of the regional network of stations to monitor the extent of air pollution caused by Nitrogen Dioxide (NO₂) and Particulate Matter under the direction of the Environmental Protection Agency, in accordance with EU policy directives. This network will be extended as required.

Up-to-date information – related to monitoring results - including the Air Quality Index for Health is available at www.epa.ie/air/quality. DLR which is located within the Dublin City Air Quality Index for Health Region currently has a 'Good' air status.

Additional air quality monitoring stations throughout the County monitoring all five determinants of the Air Quality Index for Health (AQIH) shall be encouraged, with a special goal to improve air quality monitoring and resulting air pollution alleviation consideration adjacent to the M50 and N11.

Noise

DLR County Council adopted the 'Dublin Agglomeration Environmental Noise Action Plan 2018-2023' in December 2018.

The Action Plan 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 Directive applies to environmental noise (road, rail, aircraft) to which humans are exposed but excludes noise that is caused by the exposed person himself/herself, noise from domestic activities, noise created by neighbours, noise at work places or noise inside means of transport. (See Chapter 12 'Development Management Section 12.9.3 for further details in relation to uses which may cause noise, vibrations and air emissions - for example, gyms, public houses, leisure facilities and food outlets).

Noise can be characterised as unwanted sound or sound that is loud, unpleasant or unexpected and that can eventually cause disturbance, impairment or damage to health that can impact on the quality of life enjoyed by individuals and communities. The dominant source of noise in the County is traffic noise. Along major transport corridors, the



effect of traffic noise on new development must be considered and appropriate measures undertaken to mitigate same.

The key objective of the Noise Action Plan is to avoid, prevent and reduce, where necessary, on a prioritised basis the harmful effects including annoyance, due to long-term exposure to environmental noise.

10.4.2 Policy Objective EI15: Light Pollution

It is a Policy Objective to ensure that the design of external lighting schemes minimise the incidence of light spillage or pollution in the immediate surrounding environment and has due regard to the residential amenity of surrounding areas.

While adequate lighting is essential in the promotion of a safe and secure environment, light spillage from excessive or poorly designed lighting infrastructure is increasingly recognised as a potential nuisance to surrounding properties, a threat to wildlife and can reduce the visibility of the night sky.

Lighting columns and other fixtures can have a significant effect on the appearance of buildings and the environment and where proposals for new lighting require planning permission, the Council will ensure that they are carefully and sensitively designed. Lighting fixtures should provide only the amount of light necessary for the task/use/activity proposed and should shield light given out in order to avoid creating glare or emitting light above a horizontal plane (refer also to Sections 12.9.10).

10.4.3 Policy Objective EI16: Water Pollution

It is a Policy Objective to implement the provisions of water pollution abatement measures in accordance with national and EU Directives and other legislative requirements in conjunction with other agencies as appropriate.

In implementing this policy DLR County Council will endeavour to:

- Maintain the quality of seawater adjoining the County to the necessary standards, with particular reference to areas of the coastline where bathing takes place. Special emphasis will be devoted to beaches designated under the Quality of Bathing Water Regulations.
- Improve the water quality in rivers and other watercourses in the County, including ground waters (see also Policy Objective EI5 on the RBMP).

- Minimise the impact on ground water of discharges from septic tanks and other potentially polluting sources. The Council will comply with the Environmental Protection Agency's 'Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses' (2009).

10.4.4 Policy Objective EI17: Major Accidents

It is a Policy Objective to have regard to the provisions of the Major Accidents Directive (European Council Directive 2012/110/EU). This Directive relates to the control of major accident hazards involving dangerous substances and its objectives are to prevent major accidents and limit the consequences of such accidents.

This policy will be implemented through the Development Management process through controls on the siting of new establishments, on modifications to existing establishments and on development in the vicinity of an establishment which, by virtue of its type or siting, is likely to increase the risk or consequences of a major accident. At present, however, there are no 'Seveso' sites (defined within the Control of Major Accident Hazards Regulations as "locations where significant quantities of dangerous substances are stored") within DLR.



Construction at UCD

10.5 Energy Policies

10.5.1 Policy Objective EI18: Energy Facilities

It is a Policy Objective to encourage the provision of energy facilities in association with the appropriate service providers and in accordance with 'Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure' (2012). In addition, the Council will facilitate, subject to the proper planning and sustainable development of the area, the expansion of the services and infrastructure of existing service providers, notably Bord Gáis, Eirgrid, the Electricity Supply Board (ESB), other strategic electricity infrastructure developers and statutory undertakers, in order to ensure satisfactory levels of supply and to minimise constraints for development.

The provision of a wide range of energy facilities will ensure that the needs of all sectoral interests in the County can be provided for in a sustainable fashion. The Council will be open to the future requirements of the major service providers, such as Bord Gáis, Eirgrid and the ESB, where it is proposed to enhance or upgrade existing facilities or networks.

It is a general objective, where strategic route corridors have been identified, to support the statutory providers of national grid infrastructure by safeguarding such strategic corridors from encroachment by other developments that might compromise the provision of energy networks.

10.5.2 Policy Objective EI19: Overhead Cables

It is a Policy Objective to seek the undergrounding of all electricity, telephone and television cables wherever possible, in the interests of visual amenity and public health.

Overhead cables detract from visual amenity and therefore it is Council policy to seek the placing underground of cables. It is the intention of the Council to co-operate with other agencies as appropriate, and to use its development management powers in the implementation of this policy.

Where undergrounding of cables is being pursued, proposals should demonstrate that environmental impacts including the following are minimised:

- Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties);
- Short to medium term impacts on the landscape where, for example, hedgerows are encountered;
- Impacts on underground archaeology;
- Impacts on soil structure and drainage; and
- Impacts on surface waters as a result of sedimentation.



10.6 Telecommunications

10.6.1 Policy Objective EI20: Telecommunications Infrastructure

It is a Policy Objective to promote and facilitate the provision of an appropriate telecommunications infrastructure, including broadband, fibre optic connectivity and other technologies, within the County.

The widespread availability of a high-quality telecommunications network throughout DLR is critical to the development of a knowledge economy, will help attract inward investment

in hi-tech knowledge-based industries and will engender the image of the County as the premier entrepreneurial County in the State. It will also assist home working thereby reducing commuting.

The advantages of a high-quality telecommunications network must, however, be balanced against the need to safeguard the rural and urban environment, particularly in sensitive areas where the impacts on residential amenity and visual amenity of areas needs to be adequately assessed.

Masts at Three Rock

10.7 Flood Risk

Whilst not solely caused by climate change, one of the effects of climate change that can be anticipated, and a key adaptation issue, is the management of water and the maintenance of quality standards as the global temperature increases and rainfall patterns change. Flood risk needs to be considered at all stages of the land use planning process and managed in an environmentally sensitive way. The Strategic Flood Risk Assessment which forms Appendix 15 of this Plan and was reviewed and updated having regard to the Section 28 Government publication 'Flood Risk Management Guidelines' (2009), will ensure a rigorous and systematic approach to integrating flood risk management into the determination of individual planning applications.

10.7.1 Policy Objective EI21: Catchment Flood Risk Assessment and Management (CFRAM)

It is a Policy Objective to assist the Office of Public Works (OPW) in the design and construction of flood relief schemes approved in the ten-year Programme of Investment in Flood Relief Measures following from the recommendations and outputs of the CFRAM for the Eastern District that are relevant for DLR.

The CFRAM programme commenced in Ireland in 2011. The programme delivered on core components of the National Flood Policy and on

Flooding at Bullock Harbour



requirements of the EU Flood Directive. The CFRAM programme involves 3 phases: (i) Preliminary Flood Risk Assessment, (ii) CFRAM Studies and (iii) Implementation and Review. Stages (i) and (ii) have been completed.

10.7.2 Policy Objective EI22: Flood Risk Management

It is a Policy Objective to support, in cooperation with the OPW, the implementation of the EU Flood Risk Directive (20010/60/EC) on the assessment and management of flood risks, the Flood Risk Regulations (SI No 122 of 2010) and the Department of the Environment, Heritage and Local Government and the Office of Public Works Guidelines on 'The Planning System and Flood Risk Management' (2009) and relevant outputs of the Eastern District Catchment and Flood Risk Assessment and Management Study (ECFRAMS Study). Implementation of the above shall be via the policies and objectives, and all measures to mitigate identified flood risk, including those recommended under part 3 (flood risk considerations) of the Justification Tests, in the Strategic Flood Risk Assessment set out in Appendix 15 of this Plan.

The Council will ensure the implementation of the Guidelines 'The Planning System and Flood Risk Management' (2009) and Circular PL 2/2014 (or any updated/superseded document) in relation to flood risk management within the County. The existing Strategic Flood Risk Assessment of the County has been reviewed and updated as part of this County Development Plan process (refer to Appendix 15).

Implementation of the Guidelines will include the following:

- Through the policies and objectives set out in Appendix 15 (Strategic Flood Risk Assessment) in accordance with the over-arching sequential approach of Avoid, Substitute, Justify, and Mitigate. As set out in Section 5.1 of Appendix 15 all applications for development must be accompanied by an appropriately detailed SSFRA.
- Any other flood risk areas that may be identified during the period of the Plan or in relation to a planning application (refer to Section 6 of Appendix 15 Strategic Flood Risk Assessment).
- Support for mitigation measures as set out in Appendix 15 SFRA.
- Where certain measures proposed to mitigate or manage the risk of flooding associated

with new developments are likely to result in significant effects to the environment or European sites downstream, such measures will undergo environmental assessment and Habitats Directive Assessment, as appropriate.

- Flood Risk Management and Strategic Flood Risk Assessment shall be incorporated into the preparation of all statutory plans.
- Regard shall be had to any future flood hazard maps, flood risk maps and flood risk management plans prepared as part of the Eastern District Catchment Flood Risk Assessment and Management Study and future iterations of other similar studies of impacts of climate change.
- Where flood protection or alleviation works take place the Council will ensure that the natural and cultural heritage and rivers, streams and watercourses are protected and enhanced.
- Existing wetland Habitats within the County which serve as flood protection/management measures shall be managed and enhanced.
- The Council will also require that all proposed flood protection or alleviation works will be subject to Appropriate Assessment to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any European Sites and that the requirements of Article 6 of the EU Habitats Directive are met¹.

10.7.3 Policy Objective EI23: Cross Boundary Flood Management

It is a Policy Objective to work with neighbouring Local Authorities when developing cross boundary flood management work programmes and when considering cross boundary development.



¹ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

10.8 Coastal Protection

10.8.1 Policy Objective EI24: Coastal Defence

It is a Policy Objective to implement and have regard to the recommendations of the Coastal Defence Strategy (2010) for the County where feasible. The Council will endeavour to (i) obtain funding from the OPW in order to undertake defence measures for specific areas as prioritised in the Strategy (ii) become part of any future national OPW Coastal Monitoring Survey Programme. Where feasible and appropriate the Council will endeavor to incorporate leisure and transport objectives with coastal protection.

A Coastal Defence Strategy Study was prepared for the County by specialist Consulting Engineers in 2010. The Study details a coastal protection strategy identifying specific coastal protection measures on a priority basis and undertakes a risk assessment of the vulnerability of the Study area and hinterland to both erosion and coastal flooding. During the course of the Study, areas were identified where it was considered that the risks relating to coastal defence issues were likely to be highest. Measures to be applied to these specific areas were prioritised.

Not all of these areas are in the ownership of the Council.

The OPW have initiated a Pilot Coastal Monitoring Survey Programme at a number of selected locations around the country and DLR will be liaising as appropriate with the OPW and Climate Action Regional Office on progressing with this pilot programme. The long-term aim of the pilot programme is to assist in the assessment of coastal erosion and other changes in the coastline and to help inform decisions on providing new coastal protection infrastructure and to assess the performance of existing coastal protection infrastructure. It is the intention that DLR will become a part of a wider national programme once the pilot survey has been completed, and this will inform future decisions on coastal management and defence measures in DLR.

It is considered appropriate that any coastal protection works should examine the feasibility of incorporating pedestrian and cycle routes. Policy Objective T13 Coastal Cycling Infrastructure Objective and SLO 17 should be referred to in the preparation of coastal protection works.



Surfers at Whiterock