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# Infrastructure & Environmental Services



## Chapter 6 Infrastructure & Environmental Services

***Aim:** To create an environment characterised by high quality infrastructure networks and environmental services that complement the overall settlement and economic strategy and ensures the health and wellbeing of those who live and work in the County, also securing the economic future of the County.*

### 6.1 Background

The availability of high-quality water, drainage infrastructure and environmental services are necessary to facilitate the sustainable development of the county and to protect the environment.

While Irish Water is responsible for all aspects of public water services planning, delivery and operation, Kildare County Council, as an agent of Irish Water continues to provide certain water services functions for County Kildare.

The Council is responsible for the management of surface water, with the Office of Public Works (OPW) having overarching responsibility for flood risk management. The Council also has a statutory role in regulating waste management and pollution in conjunction with the Environmental Protection Agency (EPA) and in co-operation with regional support organisations such as the Local Authority Waters Programme (LAWPRO) and the Waste Enforcement Regional Lead Authority (WERLA) offices.

It has and will continue to be a policy of the Council to support Irish Water and their role in relation to water supply and wastewater treatment, to manage surface water in a sustainable manner, to minimise waste in accordance with the principles of the circular economy approach and to provide flood protection measures and to reduce flood risk as far as possible. This chapter sets out specific policies and objectives in relation to the following:

- Water
- Wastewater
- Surface Water and Flooding
- Pollution (waste, water, air, noise, and light).

### 6.2 Planning Policy Context

The policies and objectives set out in this chapter are consistent with national and regional planning policy outlined in the National Planning Framework (NPF) and the Eastern Midlands Regional Spatial and Economic Strategy 2019-2031 (RSES).

The NPF includes objectives relating to, inter alia.

- the sustainable management of waste generation,
- enhancing water quality and resource management,
- ensuring the efficient use of water resources,
- improving air quality, and
- managing noise.

- The RSES includes objectives relating to, inter alia.
- proposals to ensure the efficient and sustainable use of water resources,
- addressing water leakage,
- the facilitation of strategic wastewater treatment infrastructure,
- addressing areas at risk of flooding, and
- the integration of sustainable water management solutions.

### **6.3 Other Relevant Policy and Legislative Context**

In addition to the planning policy context outlined above this chapter has also had regard to the policy and legislative provisions outlined in the documents listed below:

- Water Services Act (2017).
- Water Framework Directive (2000)
- River Basin Management Plan for Ireland (2018-2021).
- Water Services Policy Statement 2018-2025'
- Irish Water's 'Water Services Strategic Plan' (2015) (WSSP)
- EPA - Code of Practice for Domestic Wastewater Treatment Systems (pe≤10) (2021)
- Greater Dublin Area Strategic Drainage Study (2005)
- EU Floods Directive
- National Flood Policy Review Report (2004)
- The Planning System and Flood Risk Management Guidelines for Planning Authorities, DECLG and OPW (2009)
- Implementing the National Flood Risk Policy (2018)
- Eastern-Midlands Regional Waste Management Plan 2015-2021
- A Waste Action Plan for a Circular Economy 2020-2025.
- Kildare Litter Management Plan 2020-2023.
- Environmental Protection Agency's Water Quality in Ireland Report 2013-2018.
- European Communities (Environmental Noise) Regulations 2018.
- Kildare Noise Action Plan 2019-2023.
- EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC).
- Nitrates Directive (91/676/EEC)
- Ireland's Nitrates Action Programme 2017-2021

### **6.4 Infrastructure Strategy**

The Council recognises the importance of the continued development of sustainable wastewater, water supply, and drainage services in the county to facilitate economic development and to provide a high quality of life for a growing population.

Alleviation of flood risk and the consequences of flooding including the provision of Flood Management Systems throughout the county is also a key component of the County's Infrastructure strategy.

## **6.5 Water and Wastewater Services**

As outlined in 6.1 above, 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. Kildare County Council remains the designated Water Authority for the assessment and approval of on-site wastewater treatment systems and is responsible for monitoring Group Water Schemes, surface water drainage, and administering the Rural Water Programme.

The Water Services Act (2017) provides the legislative framework in relation to the planning management and delivery of water supply and wastewater collection and treatment services. It incorporates a comprehensive review, update and consolidation of all existing water services legislation and facilitates the establishment of a comprehensive supervisory regime to ensure compliance with specified performance standards.

The '*Water Framework Directive (2000/60/EC)*' provides the overarching set of arrangements governing the management of water quality across Europe. It is a single piece of legislation covering water bodies such as rivers, lakes, and groundwater, with its remit being to protect and restore water quality with the aim of achieving at least "good" ecological status within the lifetime of the WFD. Management of water quality is centred on regions, through the implementation of the River Basin Management Plan (RBMP). Kildare is included in two of the regions, the Southeast Region, and the Midlands/East Region. Ireland is now preparing for the 3<sup>rd</sup> cycle, which will propose a River Basin Management Plan for 2022 to 2027.

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 objectives for the delivery of water and wastewater services up to 2025. Three themes are identified: quality, conservation, and future proofing.

### **6.5.1 Water Services**

Irish Water's '*Water Services Strategic Plan*' (2015) (WSSP) sets out strategic objectives for the delivery of water services up to 2040.

The WSSP identifies current and future challenges regarding the provision of water services and identified priorities to be tackled in the short to medium term. 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 Wastewater Treatment Directive, reducing leakage and catering for growth.

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 to the Region. The Water Supply Project remains the project identified to deliver a ‘new source’ of water supply for the Eastern and Midlands area 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 to termination points in the Eastern and Midlands area. Whilst further assessment is required it is anticipated that planning permission will be sought from An Bord Pleanála for this Strategic Infrastructure Project.

Irish Water, working in partnership with Kildare County Council and Dublin City Council, is progressing with the Barrow Water Supply Scheme Area Extension project. Once completed, this project will extend the water supply from Srowland Water Treatment Plan in Kildare and facilitate a strategic link with the Ballymore Eustace Water Treatment Plant. With the demand for water increasing, it is essential that water resilience projects are progressed to ensure that there is an adequate supply of treated water for now and into the future, to support population growth, and social / economic development. This project will increase the security and resilience of the drinking water supply for Kildare and the wider Greater Dublin Area (GDA). On completion it will decrease the dependence in Kildare on the River Liffey water supply.

According to Census 2016, almost 90% of households in Kildare obtained their water supply from a public source (86% from the public main, 3.5% from a public group water scheme) while just over 7% of households in the county source their water privately.

**Policies**

It is a policy of the Council to:

<b>IN P1</b>	Ensure that water supply infrastructure is sufficient to meet the growing needs of the population and facilitate economic development within the county.
<b>IN P2</b>	Ensure the protection and enhancement of water quality throughout Kildare in accordance with the EU WFD and facilitate the implementation of the associated programme of measures in the River Basin Management Plan 2018-2021 (and subsequent updates).

**Objectives**

It is an objective of the Council to:

<b>IN O1</b>	Work with Irish Water to protect existing water infrastructure, reduce leakage, improve water quality and upgrade water supply infrastructure throughout Kildare.
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<b>IN O2</b>	Support Irish Water in delivering key water service projects in the county as set out in the Water Services Strategic Plan (2015) including: <ul style="list-style-type: none"> <li>• The Eastern and Midlands Regions Water Supply Project and to preserve the corridor for this scheme free of development.</li> <li>• The Barrow Water Supply Scheme Area Extension Project.</li> </ul>
<b>IN O3</b>	Promote water conservation and best practice water conservation in all developments, including rainwater harvesting and grey water recycling.
<b>IN O4</b>	Ensure that adequate water services will be available to service development prior to the granting of planning permission and to require developers to provide evidence of consultation with Irish Water regarding capacity in the network prior to applying for planning permission.
<b>IN O5</b>	Manage, protect, and enhance surface water and groundwater quality to meet the requirements of the EU Water Framework Directive.
<b>IN O6</b>	Require an undisturbed edge or buffer zone to be maintained, where appropriate, having regard to the riparian buffer zones (Table 12.4 refers) to maintain the natural function of existing ecosystems associated with water courses and their riparian zones, and to enable sustainable public access. The width of the edge or buffer zone shall be determined during the appropriate environmental assessment such as EclA or AA.
<b>IN O7</b>	Protect recognised salmonid water courses in conjunction with Inland Fisheries Ireland such as the Liffey catchment, which are recognised to be exceptional in supporting salmonid fish species.
<b>IN O8</b>	Support the implementation of Irish Water's Water Safety Plans to ensure that public drinking water sources and their contributing catchments are protected from pollution.
<b>IN O9</b>	Actively implement the provision of public water fountains within town centres to help reduce plastic waste.
<b>IN O10</b>	Work with the Local Authority Waters Programme (LAWPRO) to identify issues affecting water quality in Kildare.
<b>IN O11</b>	Promote the protection of private water sources, and the development of community connections in accordance with national policy and regulations, and to administer the multi annual Rural Water Programme (2019-2021).

## Action

It is an action of the Council to:

<b>IN A1</b>	Install public water fountains in two towns as pilot schemes within 1 year of the adoption of this Plan.
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## 6.5.2 Wastewater Services

Irish Water is responsible for the collection, treatment, and disposal of wastewater throughout the county. According to Census 2016, almost 73% of households in Kildare were served by public sewerage connections, while almost 23% had septic tanks or other individual treatment systems.

The largest wastewater treatment plants in Kildare are located at Leixlip, (serving Kilcock, Maynooth, Celbridge, Leixlip, and Straffan) and Osberstown (serving Naas, Newbridge, Kilcullen, Athgarvan, Prosperous, Sallins, Clane, and Kill). While there are smaller plants located in Athy, Kildare, Monasterevin, Castledermot, Robertstown and Ballymore Eustace among others serving their local catchments.

In relation to domestic wastewater treatment systems (DWWTS) ‘*The EPA – Code of Practice – Domestic Wastewater Treatment Systems (pe≤10) 2021*’; published under Section 76 of the EPA Act 1992 provides guidance for single houses or equivalent developments with a population equivalent of less than or equal to 10. It sets out a methodology for site assessments, selection, installation, and maintenance of an appropriate DWWTS. This CoP replaces the previous 2009 CoP and applies to site assessments and subsequent installations carried out on or after 7<sup>th</sup> of June 2021.

### Policy

It is a policy of the Council to:

<b>IN P3</b>	Support Irish Water to ensure adequate and appropriate wastewater treatment infrastructure is available over the Plan period to service the projected growth of towns and villages throughout Kildare in accordance with the Core Strategy and Settlement Hierarchy.
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### Objectives

It is an objective of the Council to:

<b>IN O12</b>	(A) Work in conjunction with Irish Water to promote the ongoing upgrade and expansion of wastewater services to meet the future needs of the county and the region including facilitating the provision and zoning of appropriate sites required for wastewater services infrastructure as necessary. (B) Pursue with Irish Water, additional investment commitment in the provision of increased capacity of waste-water treatment plants (WWTPs), increasing the number of projects under the Small Towns and Villages Growth Programme (STVGP), so as to ensure sustainable growth patterns in the County.
<b>IN O13</b>	Ensure that adequate wastewater services will be available to service development prior to the granting of planning permission and to require developers to provide evidence of consultation with Irish Water regarding capacity in the network prior to applying for planning permission.
<b>IN O14</b>	Maximise the use of existing capacity in wastewater services in the planning of new development and to ensure that full consideration is given to the level of investment required in the provision of wastewater services, particularly in environmentally sensitive areas, when zoning for new development.
<b>IN O15</b>	Ensure all new developments connect to public wastewater infrastructure where available.

<b>IN O16</b>	Prohibit the discharge of additional surface water to combined (foul and surface water) sewers to maximise the capacity of existing collection systems for foul water.
<b>IN O17</b>	Promote the changeover from septic tanks to collection networks where feasible and desirable (subject to a connection agreement with Irish Water).
<b>IN O18</b>	Discourage the provision of single house septic tanks and treatment plants in the plan area to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards, including the EPA's Code of Practice for Wastewater Treatment and Disposal Systems Serving Single Houses (pe≤10), (2021) as may be amended, will be required.
<b>IN O19</b>	Ensure that existing and permitted private wastewater treatment plants are operated in compliance with their wastewater discharge licenses, to protect water quality.

### Action

It is an action of the Council to:

<b>IN A2</b>	Carry out on-going monitoring and registration of private septic tanks in the County in line with the Environmental Protection Agency's National Inspection Plan.
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## 6.6 Surface Water / Drainage

The Council is responsible for surface water drainage in the county. Management of surface and storm water is important to avoid increased flood or pollution risk in the storm water network, rivers, and streams throughout Kildare. Compliance with best practice guidance for the collection, reuse, treatment, and disposal of surface waters for all future development proposals is therefore imperative.

Groundwater is protected under EU and National legislation. Local Authorities and the Environmental Protection Agency (EPA) have responsibility for enforcing this legislation. The Geological Survey of Ireland (GSI), in conjunction with the DECLG and the EPA issued guidelines on the preparation of groundwater protection schemes. A Groundwater Protection Scheme for County Kildare was prepared by GSI in partnership with Kildare County Council and is updated regularly by GSI.

The '*Greater Dublin Area Strategic Drainage Study (2005)*' delivered an overview of the performance of the drainage infrastructure in the regions catchments and proposed infrastructural improvement works to facilitate the anticipated future growth in the catchment to 2031. Irish Water, with the support of Kildare County Council, now manages the major and minor capital works for combined (surface water) and wastewater networks.



The Council will seek to ensure the sustainable management of surface water discharges through Sustainable Urban Drainage Systems (SuDS). SuDS is a nature-based solution to water management that aims to manage surface water as close as possible to its origin by replicating the natural characteristics of rainfall run-off from any site ensuring water is infiltrated or conveyed more slowly to the drainage system and ultimately to water courses via permeable paving, swales, green roofs, rainwater harvesting, detention basins, ponds, and wetlands.

SuDS can achieve multiple objectives such as removing pollutants for urban run-off at source, improving water quality, controlling surface water run-off from developments, and ensuring flood risk does not increase further downstream. Furthermore, SuDS can offer the opportunity to combine water management with amenity/green spaces, which can increase amenity and biodiversity. The use of SuDS therefore complements a green and blue infrastructure planning approach.

Properly designed and located SuDS features can be incorporated within and can complement the amenity and aesthetic value of open spaces. SuDS areas do not form part of the public open space provision, except where they contribute in a significant way to the design and quality of open space as defined by the Planning Authority.

## Policy

It is a policy of the Council to:

<b>IN P4</b>	Ensure adequate surface water drainage systems are in place which meet the requirements of the EU Water Framework Directive and the River Basin Management Plan in order to promote the use of Sustainable Drainage Systems.
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## Objectives

It is an objective of the Council to:

<b>IN O20</b>	Maintain, protect and enhance capacity of the existing surface water drainage systems in the county.
<b>IN O21</b>	Facilitate the development of nature based Sustainable Urban Drainage Systems, including the retrofitting of SuDS in established urban areas. Culverting entire drains and streams will generally be prohibited; interference with natural drainage systems is to be minimised and the Council will explore opportunities to remove culverted drainage systems in favour of open, natural drainage systems.
<b>IN O22</b>	Require the implementation of Sustainable Urban Drainage Systems (SuDS) and other nature-based surface water drainage as an integral part of all new development proposals.

<b>IN O23</b>	<p>Require new developments to reduce the generation of storm water run-off and ensure all storm water generated is disposed of on-site OR attenuated and treated prior to discharge to an approved water system, with consideration for the following:</p> <ul style="list-style-type: none"> <li>• The infiltration into the ground through the provision of porous pavement such as permeable paving, swales, and detention basins.</li> <li>• The holding of water in storage areas through the construction of green roofs, rainwater harvesting, detention basins, ponds, and wetlands.</li> <li>• The slow-down in the movement of water.</li> </ul>
<b>IN O24</b>	<p>Only consider underground retention solutions when all other options have been exhausted. Underground tanks and storage systems will not be accepted under public open space, as part of a SuDS solution.</p>
<b>IN O25</b>	<p>Promote the use of green infrastructure (e.g., green roofs, green walls, planting, and green spaces) as natural water retention measures.</p>
<b>IN O26</b>	<p>Ensure as far as practical that the design of SuDS enhances the quality of open spaces. SuDS do not form part of the public open space provision, except where it contributes in a significant and positive way to the design and quality of open space. In instances where the Council determines that SuDS make a significant and positive contribution to open space, a maximum of 10% of open space provision shall be taken up by SuDS. The Council will consider the provision of SuDS on existing open space, where appropriate. The 'Sustainable Urban Drainage Systems Guidance Document' prepared as an action of this plan shall supersede this standard.</p>
<b>IN O27</b>	<p>Ensure that all development, including rural one-off residential developments will maintain existing surface water drainage systems, particularly at access points to the development.</p>
<b>IN O28</b>	<p>Ensure development proposals in rural areas demonstrate compliance with the following:</p> <ul style="list-style-type: none"> <li>• The ability of a site in an un-serviced area to accommodate an on-site wastewater disposal system in accordance with the County Kildare Groundwater Protection Scheme, and any other relevant documents and legislation as may be introduced during the Plan period.</li> <li>• The ability of a site in an un-serviced area to accommodate an appropriate on-site surface water management system in accordance with the policies of the Greater Dublin Strategic Drainage Study (2005), in particular those of Sustainable Urban Drainage Systems (SuDS).</li> <li>• The need to comply with the requirements of the Planning Systems and Flood Risk Management Guidelines for Planning Authorities, published by the Minister for the Environment, Heritage, and Local Government (2009).</li> </ul>
<b>IN O29</b>	<p>Support the conservation, protection and enhancement of Natural Water Retention Measures (NWRM), as appropriate to the individual catchment.</p>
<b>IN O30</b>	<p>Require all plans and projects to comply with the Best Practice Interim Guidance Document '<i>Nature-based solutions to the management of</i></p>

	<i>rainwater and surface water runoff in Urban Areas (2021)' published by the Department of Housing, Local Government and Heritage, or any subsequent updates to same.</i>
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### **Action**

It is an action of the Council to:

<b>IN A3</b>	Develop a 'Sustainable Urban Drainage Systems Guidance Document' for County Kildare within one year of the adoption of the Plan.
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## **6.7 Flood Risk Management**

Impacts arising from flooding can be minimised with proactive land use planning and sustainable management of catchments, identifying areas vulnerable to flooding and by taking measures to ensure development does not individually or cumulatively contribute to an increase in flood risk. Flood risk must be considered at all stages of the land use planning process and managed in an environmentally sensitive way.

The key sources of flood risk in Kildare are:

- Fluvial: Watercourse capacity is exceeded, or the channel is blocked and excess water spills from the channel onto adjacent floodplains.
- Pluvial: Resulting from high intensity rainfall which exceeds the infiltration capacity of the ground or drainage system to absorb it.
- Groundwater: Results when the level of water stored in the ground rises due to prolonged rainfall and flows out over the ground.

Very often flooding occurs not as a result of one but due to a combination of the above.

The Office of Public Works (OPW) is the lead agency for flood risk management in Ireland. The co-ordination of Government Policy in terms of flood risk identification, assessment, and management is the responsibility of the OPW, and as such it is primarily charged with ensuring Ireland's compliance with its legal obligations in relation to flood risk.

The *EU Floods Directive* and the recommendations of the *2004 National Flood Policy Review Report* are driving forces behind flood management in Ireland. While, the Planning System and Flood Risk Management Guidelines, DEHLG (2009) and DECLG Circular PL2/2014 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.

Kildare County Council has carried out a Strategic Flood Risk Assessment (SFRA) for this Plan in accordance with the Flood Risk Management Guidelines (2009). The SFRA is a separate document to be read in parallel with this Plan which identifies and maps flood risk in the County, supporting a sequential approach to planning. The SFRA is a live document and any updates to it including the identification of flood zones will inform future planning decisions throughout the county.

Climate change adaptation 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 having regard to the OPW climate change parameters stated in the '*Flood Risk Management Climate Change Sectoral Adaptation Plan*' (2019), as well as 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).

Catchment Flood Risk Assessments and Management Studies (CFRAMS) have also been completed and include the river catchments of the key water courses in the county. Areas including Naas North / Johnstown and Celbridge South / Hazelhatch are still under review. These studies also inform zoning and planning decisions in the county.

## Policy

It is a policy of the Council to:

<b>IN P5</b>	Ensure the continued incorporation of Flood Risk Management and National Flood Risk Policy (2018) into the spatial planning of Kildare, to meet the requirements of the EU Floods Directive and the EU Water Framework Directive and to promote a climate resilient County.
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## Objectives

It is an objective of the Council to:

<b>IN O31</b>	Support and co-operate with the Office of Public Works (OPW) in delivering the Flood Relief/Alleviation schemes and measures contained in the Flood Risk Management Plans adopted by the Council in July 2018, and in other flood management works and schemes, as may arise, through the OPW Non-Coastal Minor Works Programme.
<b>IN O32</b>	Support the implementation of the EU Flood Risk Directive (2007/60/EC) on the assessment and management of flood risks and the Flood Risk Regulations (SI No 122 of 2010).
<b>IN O33</b>	Manage flood risk in the county in accordance with the sequential approach and requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities, DECLG and OPW (2009) and circular PL02/2014 (August 2014), when preparing plans, programmes, and assessing development proposals. To require, for lands identified in the Strategic Flood Risk Assessment, a site-specific Flood Risk Assessment to an appropriate level of detail, addressing all potential sources of flood risk, demonstrating compliance with the Guidelines or any updated version of these guidelines, paying particular attention to avoidance of known flood risk, residual flood risks and any proposed site-specific flood management measures.

<b>IN O34</b>	Recognise the important role of boglands, rehabilitated peatlands and other wetland areas in filtering water and contributing to sound ecological status in rivers as well as flooding patterns. Development in these areas shall be subject to a Flood Risk Assessment in accordance with the relevant guidelines.
<b>IN O35</b>	Require development proposals which may affect canals and their associated infrastructure to prepare a Flood Risk Assessment in accordance with the relevant guidance.
<b>IN O36</b>	Require that development along urban watercourses comply with the Inland Fisheries Ireland Guidance: Planning for Watercourses in the Urban Environment (2020), including the maintenance of a minimum riparian zone of 35 metres for river channels greater than 10 meters in width, and 20 meters for river channels less than 10 metres in width. Development within this zone will only be considered for water compatible developments as defined in the OPW Planning System and Flood Risk Management Guidelines for Planning Authorities (2009).
<b>IN O37</b>	Protect any implemented/constructed flood relief schemes from inappropriate development or otherwise.
<b>IN O38</b>	Support Inland Fisheries Irelands' pilot projects to investigate the incorporation of habitat restoration measures into flood management schemes on the upper Barrow and its tributaries for native species such as salmon and to address invasive fish species, subject to all necessary planning and environmental assessments.

### **Actions**

It will be an action of the Council to:

<b>IN A4</b>	Map key flood risk infrastructure in the county where it is not otherwise readily identified or protected from interference or removal and to maintain the details of same on a County Register.
<b>IN A5</b>	Prepare and carry out any identified actions of a maintenance programme for river channels, including those identified as historical drainage districts, the responsibility for which lies with Kildare County Council. Such actions must be subject to Ecological Impact Assessment and Appropriate Assessment in accordance with the EU Habitats Directive.

## **6.8 Environmental Services Strategy**

Protection of the physical environment is of primary importance. With regard to sustainable environmental management this Plan seeks to conform to European and National Waste Strategies in matters relating to the production, handling, treatment, and disposal of waste within the county and to co-operate with and participate in the preparation of regional plans for the collection, treatment, handling, and disposal of waste.

The Council also seeks to improve noise impacts, light impacts, and air quality standards throughout the county and to control harmful emissions to water and air under the relevant regulations. Central to the strategy is a focus on the promotion of environmental protection through education.

### 6.8.1 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 Plan is required by *The Planning and Development Act (2000)* (as amended) to include appropriate objectives for waste recovery and disposal facilities.

National and Regional Policy on waste management is set out in several documents. These include the NPF, the RSES, the Regional Waste Management Plan, the National Climate Action Plan (2021) and the Government's policy document *A Waste Action Plan for a Circular Economy 2020-2025*. The 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. The policies and objectives emanating from these documents are consistent with the EU Waste Hierarchy approach to waste which endorses prevention, preparing for re-use, recycling, energy recovery and sustainable disposal.

The recently adopted Waste Action Plan for a Circular Economy 2020-2025, aims to shift the focus away from waste disposal and treatment to ensure materials and products remain in productive use for longer thereby preventing waste and supporting re-use.

The Eastern-Midlands Regional Waste Management Plan 2015-2021 provides the framework for waste management in Kildare 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 county transitions from a linear to a circular economy.

#### Policy

It is a policy of the Council to:

<b>IN P6</b>	Implement European Union, National and Regional waste related environmental policy, legislation, guidance, and codes of practice, in order to support the transition from a waste management economy towards a circular economy.
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#### Objectives

It is an objective of the Council to:

<b>IN O39</b>	Encourage a just transition from a waste economy to a green circular economy in accordance with ' <i>A Waste Action Plan for a Circular Economy 2020-2025</i> ' and the Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'.
<b>IN O40</b>	Provide, promote, and facilitate high quality sustainable waste recovery and disposal infrastructure / technology in keeping with the EU waste hierarchy to cater for anticipated population growth and the business sector in the County.

<b>IN O41</b>	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 to maximise access by the public.
<b>IN O42</b>	Require the appropriate provision for the sustainable management of waste within developments (particularly apartment buildings), including the provision of facilities for storage, separation, and collection of waste.
<b>IN O43</b>	Require the submission of either a certificate of exemption or a valid planning permission for a Waste Facility Permit or a Certificate of Registration application, in accordance with the Waste Management Regulations 2007 (as amended).
<b>IN O44</b>	Encourage waste prevention, minimisation, re-use, recycling, and recovery as methods for managing waste.
<b>IN O45</b>	Promote and facilitate communities to become involved in environmental awareness activities and community-based waste recycling and reduction initiatives, which lead to a circular economy and local sustainable waste management practices.
<b>IN O46</b>	Ensure the provision of waste management facilities in the county (both public and private) are subject to the specific requirements of the Eastern-Midlands Region Waste Management Plan 2015-2021 (or as amended / updated).
<b>IN O47</b>	Support and facilitate the separation of waste at source into organic and non-organic streams or other waste management systems that divert waste from landfill and maximise the potential for each waste type to be re-used, recycled or composted.
<b>IN O48</b>	Facilitate the development of waste management infrastructure and the ongoing operation of the Drehid waste facility at an appropriate scale to cater for the waste management needs of Kildare and the Eastern and Midlands Waste Region, subject to the protection of the environment, landscape character, road network and amenities of the area.
<b>IN O49</b>	Support the implementation of the actions outlined in the Kildare Litter Management Plan 2020-2023 (and any subsequent updates).
<b>IN O50</b>	Use statutory powers to prohibit the illegal deposit and disposal of waste, refuse and litter and to authorise and regulate waste disposal within the county in an environmentally sustainable manner.
<b>IN O51</b>	Encourage the use of CCTV at appropriate locations to discourage fly tipping and illegal dumping.
<b>IN O52</b>	Examine the possibility of providing a recycling facility in each Municipal District within the County and seek new markets for recycling in existing centres, including North Kildare.
<b>IN O53</b>	Ensure that hazardous waste is addressed through an integrated approach of prevention, collection and recycling and encourage the development of industry-led producer responsibility schemes for key waste streams.
<b>IN O54</b>	Support the implementation of the 'Deposit Return Scheme', currently being considered by Government, when it is published.
<b>IN O55</b>	Support 'repair cafes' and upcycling facilities throughout the county at appropriate locations, in order to reduce the quantum of waste going to landfill.

## Actions

It will be an action of the Council to:

<b>IN A6</b>	Achieve the vision of the Waste Action Plan for a Circular Economy 2020-2025 and the Eastern-Midlands Regional Waste Management Plan 2015-2021 (and future revisions) by meeting the following targets: <ul style="list-style-type: none"><li>• Ensure a 5% reduction per annum in the quantity of household waste generated per capita over the period of the Plan.</li><li>• Support the target to achieve a recycling rate of 55% of Managed Municipal Waste (household and commercial) by 2025 leading to 60% by 2030.</li><li>• Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill over the lifetime of this plan.</li></ul>
<b>IN A7</b>	Provide each town, village, or settlement as necessary with appropriate recycling facilities in the form of a kerbside collection, civic sites, and bring bank recycling facilities.

### 6.8.2 Pollution Control – Water, Air, Noise and Light

The Importance of a clean environment for the economic and social life of the county is well recognised. In relation to water, air, noise and light pollution, continuous effective monitoring, and enforcement in relation to pollution control measures is imperative and will continue over the period of the Plan.

**Water quality** is a key issue that affects everybody, and its protection is the responsibility of all sections of society. Ensuring that our local natural water bodies are clean and well protected is critically important to our health and wellbeing. According to the Environmental Protection Agency’s Water Quality in Ireland Report 2013-2018 there were no “High Status” (pristine), or “Bad Status” (seriously polluted) water bodies noted in Kildare. Most water bodies fall within the “Good Status” (unpolluted / satisfactory) and “Moderate Status” (slightly polluted / unsatisfactory).

The report also shows that some of our waterbodies have deteriorated in status from Moderate to Poor and from Good to Moderate. However, there are early indications that the actions being taken in the current River Basin Management Plan 2018-2021 in the ‘Areas for Action’ i.e., Blackwater (Longwood), Clonshanbo/Lyreen, Morell, Portarlinton (this includes Monasterevin and surrounding areas), Athy Stream, Graney/Lerr may be having a positive impact on water quality. Recent biological monitoring carried out by the EPA show improvements in several river water monitoring locations.

Significant pressures on our surface waters nationally include Agriculture, Hydromorphology, Urban Wastewater, Forestry, and Domestic Wastewater Treatment Systems (DWWTS). The Council continues to implement its work programme which includes monitoring water quality, carrying out detailed investigative assessments in



several water bodies, reviewing effluent discharge licences, resolving pollution complaints and continuing DWWTs inspections. The Council is also engaged with the EPA, LAWPRO and other public bodies to identify the actions required in the water bodies with less than Good Status.

**Clean Air** is essential in ensuring a high-quality environment for the wellbeing of the population. Air pollution can negatively affect human health and eco-systems. EU Directives set out air quality standards in Ireland and other member states for a wide variety of pollutants. The EPA is responsible for monitoring air quality in Ireland. An air quality station was commissioned in Naas in April 2021 and is currently noted as having ‘good’ air status.

**Noise**, which is continuous, repeated, and / or loud can have significant impacts on our quality of life. The Kildare Noise Action Plan 2019-2023, and subsequent next edition, Round 4, seeks to avoid, prevent, and reduce where necessary the harmful effects of long-term exposure to environmental noise. It primarily considers the long-term environmental noise impact from ‘Major Road’ and ‘Major Rail’ traffic noise sources (which are mapped) and sets out an approach to review noise impact levels. Environmental noise from major infrastructure (i.e., roads, railways, and airports) is governed by the EU’s Environmental Noise Directive as transposed into Irish Law as S.I. No. 549/2018 – European Communities (Environmental Noise) Regulations 2018.

**Lighting** is essential for a safe and secure environment. However, the control of light pollution is important in the interests of nature conservation, residential amenity, and energy efficiency. Light spillage is increasingly recognised as a potential nuisance to surrounding properties and a threat to light-sensitive wildlife with river corridors being particularly sensitive to light pollution. Urban and rural locations can suffer equally from this problem.

In this regard, continuous effective monitoring, and enforcement in relation to pollution control measures is imperative and will continue over the period of this Plan in addition to the promotion of environmental protection through education.

**Policies**

It is a policy of the Council to:

<b>IN P7</b>	Support the implementation of the Water Framework Directive, the River Basin Management Plan, and the Local Authority Waters Programme in achieving and maintaining at least good ecological status for all water bodies in the county.
<b>IN P8</b>	Implement the provisions of EU and National legislation on air, noise, and light pollution and other relevant legislative requirements, as appropriate.

## Objectives

It is an objective of the Council to:

<b>IN O56</b>	Protect water quality from pollution by agricultural sources and to promote the use of good farming practices in accordance with the Nitrates Directive (91/676/EEC) and Ireland's Nitrates Action Programme 2017-2021 (including any subsequent update).
<b>IN O57</b>	Assess applications for developments, having regard to the impact on the quality of surface waters and any targets and measures set out in the River Basin Management Plan and any subsequent local or regional plans. Where developments have the potential to impact the water quality of surface waters and/or any of the targets and measures set out in the RBMP, such a project should be subject to AA screening and where applicable, Stage 2 AA.
<b>IN O58</b>	Require development proposals which may have an impact on water quality to undertake site specific assessments to determine localised pressures and demonstrate suitable mitigation measures to protect water quality.
<b>IN O59</b>	Ensure that all future development is in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC).
<b>IN O60</b>	Continue to monitor air quality at selected locations throughout the county in co-operation with the Health Service Executive and the Environmental Protection Agency.
<b>IN O61</b>	Support the use of air quality monitors at schools throughout Kildare.
<b>IN O62</b>	Promote and support the ban on the use, marketing, sale, and distribution of bituminous coal in Naas, Newbridge, Celbridge, Leixlip and Maynooth.
<b>IN O63</b>	Implement the relevant spatial planning recommendations and actions of the Kildare Noise Action Plan 2019-2023 (and any subsequent update).
<b>IN O64</b>	Ensure that future developments are designed and constructed to minimise noise disturbance and consider 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).
<b>IN O65</b>	Ensure that noise levels caused by new and existing developments throughout the county do not exceed normally accepted standards.
<b>IN O66</b>	Enforce and comply with European Communities (Environmental Noise) Regulations 2018 by: <ul style="list-style-type: none"> <li>• Regulating and controlling activities likely to give rise to excessive noise (other than those activities which require regulation by the EPA)</li> <li>• Requiring new developments and / or activities likely to give rise to excessive noise to install noise mitigation measures and monitors.</li> </ul>

<b>IN O67</b>	Ensure noise sensitive development in proximity to national and other roads provides a noise impact assessment / Acoustic Design Statement to the requirements set out in the Noise Action Plan and Local Planning Advice Notes as may issue and includes appropriate spatial consideration in the design phase and, where necessary physical mitigation measures, such as noise barriers, set back landscaping and / or buffer zones between areas of land where development is proposed and existing / proposed national or other roads.
<b>IN O68</b>	Require the design of external lighting schemes to minimise the incidence of light spillage or pollution into the surrounding environment having regard to the residential amenity of surrounding areas and the need to mitigate adverse impacts on sensitive fauna and protected species.
<b>IN O69</b>	Investigate measures to improve the approach to street lighting and ensure new developments are lit appropriately protecting environmentally sensitive areas.