





Policy

To provide for the continued expansion and improvement of the water, wastewater, surface water and flood alleviation services throughout the County to ensure that the growth of the County occurs in a sustainable and environmentally friendly manner.

8.1 Introduction

The sustainable growth of the County is dependent on the provision of services and infrastructure. A plan led approach, in accordance with the County's Core Strategy and Settlement Strategy is required for the delivery of such services in order to ensure that there is adequate capacity to support the further development of the County. Potential challenges to the future provision of services include the effects of climate change such as flooding or periods of drought, which would have impact on drinking water, water quality, foul drainage and wastewater.

The Council aims to deliver high standards of protection for water and air, promote sustainable waste management through education and regulation and to prevent and mitigate the anticipated impacts of Climate Change by reducing our dependency on finite resources and committing to a low carbon future.

Irish Water was formed in July 2013 as a semi state company under the Water Services Act 2013. As of January 2014, Irish Water replaced local authorities as a single provider of water and wastewater services. It is responsible for the operation of public water and waste water services including management of national water assets, maintenance of the system, investment and planning, and managing capital projects.

The protection of our surface and groundwater resources is one of the most fundamental challenges facing Cavan in the future, as it is directly related to our health, well-being and ultimately our quality of life.

In terms of the national planning policy context, the NPF emphasises the critical importance of investment in water services infrastructure to the implementation of the National Development Plan and the achievement of NSO 9 and NPO 63, which seek the sustainable management of water and other environmental resources. NPOs 72a and 72b prescribe the requirements for distinguishing between zoned lands that are serviced (Tier 1 lands) and zoned lands that are serviceable within the lifetime of the plan (Tier 2 lands).

The NPF also requires planning authorities and infrastructure delivery agencies to focus on the timely delivery of enabling infrastructure to priority zoned lands in order to deliver planned growth and development (NPO 73c).

The RSES acknowledges that the provision and maintenance of economic infrastructure, such as energy, water, and wastewater, are key to delivering compact growth and a connected, vibrant, inclusive, resilient and smart region. Irish Water is responsible for the provision of public water supply, wastewater collection and treatment services. It is an objective of Irish Water to provide both drinking water and wastewater capacity to facilitate growth in accordance with core strategies at county level, and with national and regional planning policies and objectives (subject to the constraints of the Irish Water Capital Investment Programme).

8.2 Policy Context

8.2.1 Water Services Act 2007-2014

These Acts provide the legislation basis in relation to the planning, operation, delivery and maintenance of water treatment and supply and wastewater collection and treatment services.

8.2.2 Water Framework Directive (WFD) (2000/60/EC)

Cavan County Council has a general statutory responsibility for the quality of river and lake water within its functional area. This responsibility is underpinned by legislation and in particular the Local Government (Water Pollution) Act, 1977 and 1990 and more recently The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000 and establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003).

The WFD requires the preparation of river basin management plans by Member States across three river basin planning cycles (2009-2015, 2016-2021 and 2022-2027) during which management measures must be implemented so as to achieve good ecological status in all waters and that existing status does not deteriorate in any waters. The WFD rationalises and updates existing legislation and provides for effective water management on the basis of River Basin Management Planning.

River Basin Management Planning takes an integrated approach to the protection, improvement and sustainable management of the water environment. The process revolves around a six year planning cycle of action and review, so that every six years a revised river basin management plan is produced.

On April 17th 2018, the Government published the River Basin Management Plan 2018-2021 The Plan set out the actions that Ireland would take to improve water quality and achieve 'good' ecological status in water bodies (rivers, lakes, estuaries and coastal waters).

8.3 Water Quality

The County has a rich and extensive aquatic environment consisting of rivers, streams, lakes, surface and groundwaters. The Council is responsible for maintaining, improving, enhancing and protecting the ecological quality of all waters in the County, by implementing pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental legislation.

8.3.1 3rd Cycle River Basin Management Plan 2022-2027

Work is near completion on the preparation of the third cycle RBMP covering the period up to the end of 2027. The RBMP will describe the main pressures and activities affecting water status, set out the environmental objectives to be achieved up to 2027 and identify the measures needed to achieve these objectives. The RBMP is due to be finalised in 2022.

Water quality in Ireland has deteriorated over the past two decades. The Plan will provide a more coordinated framework for improving the quality of our waters — to protect public health, the environment, water amenities and to sustain water-intensive industries, including agri-food and tourism, particularly in rural Ireland.

8.3.2 The Local Authority Waters Programme- LAWPRO

The Local Authority Waters Programme is a shared service working with Local Authorities and state agencies to develop and implement River Basin Management Plans in Ireland, as required under the EU Water Framework Directive. The core focus of this work is to protect and improve water quality in rivers, lakes, and groundwater.

Good water quality and a healthy water environment is vital for human health and a myriad of wildlife. It also underpins the local economy and supports local jobs in sectors such as tourism, agriculture and manufacturing. The three strategic aims of the programme are as follows:

- Support and coordinate public bodies and other stakeholders to achieve the objectives of the RBMP.
- Activate local communities to engage with river catchments in line with the integrated catchment management approach
- Build a foundation and momentum for long-term improvements and inform the development and implementation of the 3rd Cycle RBMP.

Priority Areas for Action (AFAs) to be included in the River Basin Management Plan 2022-2027 plan for County Cavan are identified in the map opposite.

8.3.3 'Blue Dot' Catchments Programme:

The EPA assigns the colour blue to river waters at high quality in water quality maps. The aim of the 'Blue Dot' programme is to protect and restore high ecological status to a network of river and lake catchments. The overarching aim of the Blue Dot Catchments Programme is to protect or improve Irelands highest quality waters. To achieve this, the programme requires the cooperation of local and public authorities and communities living and working in blue dot catchments and all those who support them, such as Catchment Groups, River Trusts, Tidy Towns and others. A work programme has been developed by the newly established Blue Dot Catchments Programme to begin the process of developing strengthened actions in these catchments. The work of LAWPRO in PAAs will guide the level of local catchment assessment and actions required in these catchments.

The 3rd Cycle Areas For Action (AFA) selection list for Cavan is divided into the subcategories:

- LA Areas for Restoration Local Authorities
- Public Health Areas for Protection NFGWS, IW, HSE, LAs, SFPA
- Blue Dot Areas for Protection LAWPRO and Others
- Blue Dot Areas for Action LAWPRO and Others
- Prioritised Areas for Action LAWPRO

Fig 8.1

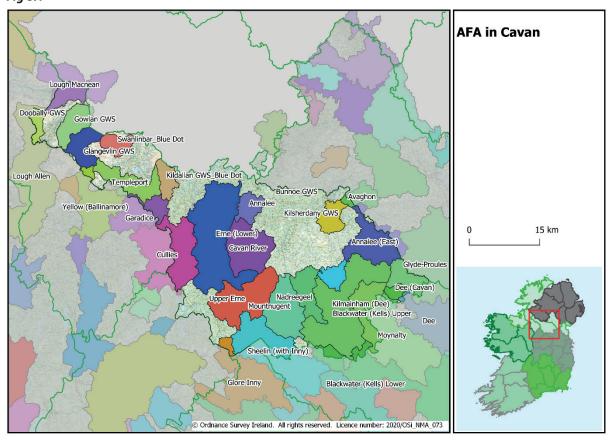
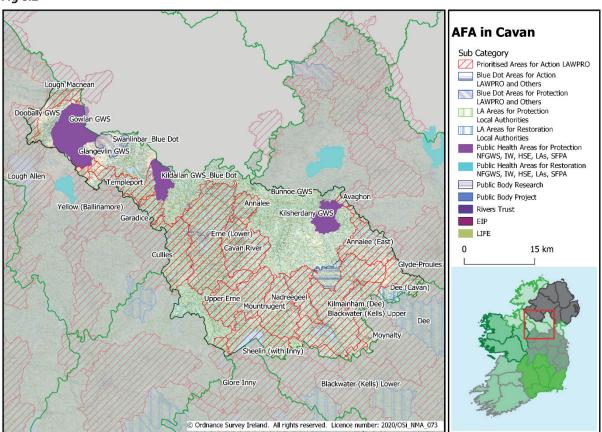


Fig 8.2



These Priority Areas for Action were selected through consultation with various stakeholders (LA's, IW, IFI, NPWS, etc) when the current River Basin Management Plans were being devised. These are the areas in which the Local Authority Waters Programme (LAWPRO) operate and carry out investigations, implementing measures to improve and protect water quality. The work undertaken in these areas is cognisant of the pressures identified i.e. if the pressure is agriculture, then the Agricultural Sustainability Support and Advisory Programme (ASSAP) team will work in an area with farmers to figure out the best way to protect and improve water quality, whilst still undertaking the required agricultural activities on the farm. Other pressures could be forestry, fish barriers, septic tanks, wastewater treatment plants and misconnections in urban areas.

8.4 River & Lake Monitoring

River and lake samples are taken across County Cavan by Environment Section field staff. These samples were undertaken in accordance with the Water Framework Directive National Monitoring Programme. The results of analysis from these samples, combined with other biology, ecology & hydromorphology data available to the EPA, is used to classify the water quality of the rivers and lakes for the purposes of the Water Framework Directive. There are a number of different types of pressures on water quality including, urban waste water, agriculture and forestry.

Pressures can be in the form of

- Point source pollution
- Diffuse source pollution
- Pressures on the quantitative status of water including abstractions
- Pressures of other impacts of human activity on water status.

Pressures on water quality are diverse and most of the "at risk" waterbodies are subject to more than one pressure.

Development management can play a significant role in the prevention of further deterioration of water status and in the protection of existing high and good quality waters. Water protection measures are best incorporated into site selection and site design plans. Therefore, developers should adequately assess environmental risks, take account of site limitations and prepare a water protection plan. Site selection should take account of sensitive areas and sensitive water bodies.

Water Protection plans should aim to prevent contamination of storm water, minimise soiled and waste waters, install proper containment for material storage, install appropriate treatment and disposal arrangement for soiled and waste waters and take account of legal requirements for discharges to ground and surface waters.



8.4.1 Ground Water and Surface Water

Ground waters are of importance as a water source for private wells, group schemes and local authority supplies and for use in a range of commercial activities. Groundwater directly and indirectly contributes to and sustains a variety of important ecosystems. If groundwater becomes contaminated, surface water quality can also be affected and so the protection of groundwater resources is an important aspect of sustaining surface water quality.

The council ensures that groundwater is protected by ensuring compliance with the following:

- The appropriate control of development in areas of high groundwater vulnerability.
- Implementation of the Programme of Measures as required in the River Basin Management Plan

- Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010)
- Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 610 OF 2010, which give effect to several EU Directives, including in relation to protection of waters against pollution from agricultural sources ('the Nitrates Directive'), dangerous substances in water and protection of groundwater.
- It is essential that ground water resources and abstraction points are recognised, and as such ensures sources and their zones of contribution are protected and safeguarded in the interests of common good and public health.



Groundwater Development Objectives It is a development objective of Cavan County Council to:

GW 01 Ensure that groundwater is protected by ensuring compliance with the following:

- The appropriate control of development in areas of high groundwater vulnerability.
- Implementation of the Programme of Measures as required in the River Basin Management Plans
- Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010)
- Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 610 OF 2010, which give effect to several EU Directives including in relation to protection of waters against pollution from agricultural sources ('the Nitrates Directive'), dangerous substances in water and protection of groundwater.



Protect ground water resources and abstraction points, and this ensures such sources and their zones of contribution are protected and safeguarded in the interests of common good and public health.



Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on water quality, the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands, species and wetlands, in County Cavan and in any areas that are hydrologically or hydro geologically linked, including areas in Northern Ireland.

GW 04

Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). The European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same, to have cognisance of, where relevant, the EUs Common Implementation Strategy Guidance Document No. 20 and No. 36 which provide guidance on exceptions to the environmental objectives of the Water Framework Directive).

GW 05

In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018 (and any subsequent update) in the establishment and maintenance of water sources in the County.

GW 06

Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021, and any subsequent local or regional plans.

GW 07

Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.

GW 08

Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.

GW 09

Protect both ground and surface water resources including taking account of the impacts of climate change, and to support Irish Water in the development and implementation of Drinking Water Safety Plans and the National Water Resources Plan.

GW 10

Promote water conservation and demand management measures among all water users and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements.

GW 11

Promote measures to prevent siltation of water courses from developments including planting and clear felling of commercial forests.

GW

Promote measures to prevent acidification of water courses.

8.4.2 Foul Drainage and Wastewater Treatment

Since 2014 Irish Water is responsible for the waste water infrastructure and treatment facilities where public waste water facilities exist in towns and villages. It is the policy of Cavan County Council to work in conjunction with Irish Water to protect existing wastewater infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new wastewater services infrastructure to facilitate future growth.

The Council acknowledges that the provision of a well maintained quality waste water treatment infrastructure is essential to facilitate sustainable development of the County in line with the Core Strategy while also protecting the environment and public health and the requirements of the River Basin Management Plan.

Cavan County Council operates 26 No. Wastewater Treatment Plants and manages associated collections infrastructure, (sewers, rising mains and pumping stations), under Service Level Agreement (SLA) with Irish Water. It also carries out the monitoring of the inflows and outflows on receiving waters both upstream and downstream of discharges under the SLA. This data is submitted to the EPA.

The following 16 No. Wastewater Agglomerations are subject to Wastewater Discharge Licences issued by The Environmental Protection Agency.

Licence Ref. No.	Agglomeration Name
D0020-01	Cavan Town
D0082-01	Cootehill
D0083-01	Kingscourt
D0084-01	Belturbet
D0085-01	Bailieborough
D0252-01	Mullagh
D0253-01	Ballyconnell
D0255-01	Virginia
D0256-01	Ballyjamesduff
D0495-01	Shercock
D0496-01	Ballyhaise
D0497-01	Arvagh
D0498-01	Blacklion
D0499-01	Killeshandra
D0500-01	Kilnaleck
D0501-01	Ballinagh

The remaining 10 No. Wastewater Agglomerations are subject to Certificates of Authorisation issued by the Environmental Protection Agency.

Cert. Ref. No.	Agglomeration Name
A0296-01	Butlersbridge
A0297-01	Bawnboy
A0298-01	Crosskeys
A0299-01	Dowra
A0300-01	Gowna
A0301-01	Mountnugent
A0302-01	Redhills
A0303-01	Swanlinbar
A0304-01	Stradone
A0536-01	Kilcogy

8.4.3 Wastewater – Capital Investment Plan, Wastewater Treatment Plant Early Contractor Involvement (CIP WWTP ECI) programme

This investment programme includes for County Cavan, the following wastewater treatment plants - Bailieborough, Ballyjamesduff, Kingscourt, Cootehill, & Virginia. Bailieboro, Kingscourt and Cootehill projects are currently at Gate 1 stage (Feasibility study) and Virginia and Cootehill are at Gate 2 stage.

ECI contractor has been appointed (VWI) and will now progress the work packages from gate 2 stage to completion and has received the following Project Brief packages;

- 1. **Virginia**: Increase current capacity from 2000 PE to 6000PE- Upgrade process to meet the current WWDL requirements.
- **2. Ballyjamesduff:** Increase current capacity from 2200 PE to 5200PE Upgrade process to meet the UWWTR requirements

Ongoing projects beings progressed as part of Irish Water's 2020-2024 Capital Investment Plan includes upgrades at the following Wastewater Treatment Plants- Virginia, Bailieborough, Cootehill, Kingscourt, Ballyjameduff, Bailieborough, Mullagh, Ballyconnell.



Foul Drainage and Wastewater Development Objectives It is a development objective of Cavan County Council to:

FDW 01 Collaborate with Irish Water in contributing towards compliance with the relevant provisions of the Urban Wastewater Treatment Regulations 2001 and 2004 and the Waste Water Discharge (Authorisation) Regulations 2007, as amended

FDW 02 Ensure that development will only be permitted in instances where there is sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) of wastewater.

FDW 03 Liaise with and work in conjunction with Irish Water during the lifetime of the plan for the provision, extension and upgrading of wastewater collection and treatment systems in all towns and villages and Rural Community Nodes of the County, to serve existing populations and facilitate sustainable development of the County, in accordance with the requirements of the Settlement Strategy and associated Core Strategy.

FDW 04 Support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface networks to accommodate future growth in the County

FDW 05 Ensure new developments provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm.

FDW 06 Incorporate the requirement for Sustainable Urban Drainage Systems where appropriate in local authority projects and private development sites.

FDW 07 Prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection for foul water. Support the Assessment of the need for upgrades of drainage systems, including separation of sewer and surface water required to reduce risk of capacity pressure on drainage systems.

FDW 08 Ensure all new developments connect to the public wastewater infrastructure, where available, and to encourage existing developments that are in close proximity to a public sewer to connect to that sewer, subject to connection agreements with Irish Water. New developments connecting to Irish Water network shall be assessed through Irish Water's New Connection Process.

FDW 09 Protect against development proposals, involving individual treatment systems, which would increase effluent loading within existing housing clusters located within areas of high groundwater vulnerability.

FDW 10 Ensure that private wastewater treatment plants, where permitted, are operated in compliance with EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), or any updates thereafter.

FDW 11 Incorporate considerations of the impact of climate change into proposals submitted under the OPW Minor Works Programme.

FDW 12 Support appropriate options for the extraction of energy and other resources from sewerage sludge in the County.

FDW 13 Support the servicing of rural villages (serviced sites) to provide an alternative to one-off housing in the countryside in line with the Regional Spatial and Economic Strategy.

FDW 14 $\label{linear Liaise with Irish Water with regard to the installation of a wastewater treatment facility in Miltown.$

FDW 15 Ensure new developments provide adequate storm water infrastructure in order to accommodate the planned levels of growth and ensure there is appropriate flood management measures implemented to protect property and infrastructure.

FDW 16 Support Irish Water in the promotion of effective management of trade discharges to sewers in order to maximise the capacity of existing sewer networks and minimise detrimental impacts on sewerage treatment works.

FDW 17

Development proposals in close proximity to Wastewater Treatment Plants shall provide, where deemed necessary, for a minimum buffer of 50 metres (for smaller WWTP's) and greater for WWTP's that are greater than 1500PE.

FDW 18

Development proposals including those for linear parks and wildlife corridors along riverbanks shall plan for access and maintenance of existing Irish Water Infrastructure.

8.5 Water Supplies

Raw water for drinking water is sourced from both surface and ground water. The principal drinking water sources for major public and private drinking water supplies are listed in Appendix 6.

Cavan County Council supplies water via 16 No. Public Water Supply Schemes. Of these 16 schemes Cavan County Council operates treatment plants under Service Level Agreement with Irish Water on 8 of these schemes, 1 No. plant is operated under a 20-year contract by a water services contractor and 7 No. schemes are supplied by Group Water Schemes. In the case of all 16 public water supply schemes, Cavan County Council manages associated distribution infrastructure, (mains, rising mains chlorine booster stations and pressure boosting stations), again under Service Level Agreement with Irish Water.

8.5.1 National Water Resources Plan (NWRP)

The NWRP is the 25-year strategic plan for all water supplies. The NWRP is Irish Water's plan to identify how we will provide a safe, sustainable, secure and reliable water supply to their customers in County Cavan for now and into the future, whilst safeguarding the environment. The NWRP will set out how they balance the supply and demand for drinking water over the short, medium and long term. It is a 25-year strategy to ensure we have a safe, sustainable, secure and reliable drinking water supply for County Cavan. The development of the NWRP will take place in two phases. The draft Framework Plan identifies how we assess needs across all of our water supply schemes and the process that we will use to find solutions to address those needs. The NWRP draft Framework Plan is published with an accompanying Strategic **Environmental Assessment Environmental** Report and Natura Impact Statement, which looks at how the Plan considers its impact on the environment.

Each public water supply in County Cavan has been reviewed with Irish Water, assessing current Supply / Demand balance issues that exist or that have the potential to develop over the next 25-year period. This updated list, developed in collaborative partnership with IW, has been assessed under the headings of scheme appraisal, modelling, design and costing. It is envisaged that further consultation will be required to agree and adopt a suitable methodology as to how best develop and implement preferred solutions for these schemes with deficits going forward.

8.5.2 Leakage Reduction Plan

IW have produced a leakage reduction plan for County Cavan. Due to the exceptional work that has been carried out in this area over the past 15 years, Cavan is ahead of its targets with regard to leakage reduction. It will continue to work on leakage reduction programme utilising existing resources. Cavan County Council will continue to promote the take up of Irish Water's First Fix Free Scheme which addresses the issue of consumer side leaks.

8.5.3 Rural Water Programme

The Rural Water Programme was established by the Government to improve the quality and efficiency of Ireland's Group Water schemes. Through this programme, the construction of new group water and group sewerage schemes, the update of group water schemes and taking in charge of existing group water schemes are undertaken, together with grants towards provision of new or upgrade of existing private water supply wells and upgrades of existing water services infrastructure under the Small Schemes Programme

Cavan County Council's role in regard to the group water sector is basically two-fold.

The administration of government funding through two avenues:

- The administration of government funding through two avenues:
 - a. Funding for Capital Works under the Department of Housing, Planning & Local Government's Multi-Annual Rural Water Programme (MARWP). We are currently in the midst of the 2019-2021 MARWP which has been extended until the end of 2022. A New MARWP is set to be rolled out which is likely to cover the period 2022-2024/2025.
 - b. Administration of and processing of funding towards Operational costs of the group water schemes under the Subsidy scheme.
- The regulation of Group Water Schemes

This essentially is a focus on the quality of drinking water provided. Under the terms of the Drinking Water Regulations (S.I. No. 122 of 2014) as amended in 2017 (S.I. No. 464 of 2017). Cavan County Council is the Water Supervisory Authority for the group water scheme sector. This is a role similar to that which the EPA has in respect of Irish Water. In the main, this encompasses the monitoring of water quality supplied by group water schemes. This monitoring will from time to time detect noncompliance with regulatory standards.



Water Development Objectives
It is a development objective of
Cavan County Council to:



In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018' (and any subsequent update) in the establishment and maintenance of water sources in the County.

W 02 Ensure that in assessing applications for development, consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.

W 03 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.

W 04 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.

W 05 Support the development of group water supplies and public drinking water supplies throughout the county.

W 06 Support the development in the County of green infrastructure, river walkways (in accordance with the principles of Planning for Watercourses in the Urban Environment, A guideline Developed by Inland Fisheries) and access from amenities, residential areas and community services to the town centre.

8.6 Flooding

8.6.1 Introduction

In order to comply with *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular (*PL 2/2014*) and contribute towards flood risk management within the Plan area, the recommendations below have been made by the SFRA process and integrated into the Plan.

8.6.2 Land Use Zoning

That the Flood Zones identified by the SFRA (see Appendix II and III of the SFRA report that accompanies the Plan) are used in line with the requirements provided for by the Flood Guidelines for land uses in Flood Zones A and B.

Land use zoning objectives provided for by the Plan are subject to the following strict conditions:

 Undeveloped land in Flood Zone A that is the subject of any zoning objective shall only be developed for water compatible uses as identified in the Guidelines.

- Undeveloped land in Flood Zone B that is the subject of any zoning objective shall only be developed for water compatible or less vulnerable uses as identified in the Guidelines.
- With respect to lands that have already been developed in Flood Zone A or B the potential conflict (between zoning and highly or less vulnerable development in Flood Zone A and between zoning and highly vulnerable development in Flood Zone B) will be avoided by applying the following zoning approach:
 - The Council will facilitate the appropriate management and sustainable use of these areas. This will mean generally limiting new development, but facilitating existing development uses that may require small scale development such as small extensions. Development proposals within these areas shall be accompanied by a detailed Flood Risk Assessment, carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development.
- Proposals shall only be considered favourably where it is demonstrated to the satisfaction of the Planning Authority that they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities, or increase the risk of flooding to other locations and be in accordance with the proper planning and sustainable development of the area. The nature and design of structural and non-structural flood risk management measures required for development in such areas (please refer to the Development Management Chapter 13) will also be required to be demonstrated, to ensure that flood hazard and risk will not be increased. Measures proposed shall follow best practice in the management of health and safety for users and residents of the development.



8.6.3 Integration of other provisions relating to flood risk management into the Plan

Other provisions relating to flood risk management, including the following, have also been integrated into the Plan.



Flood Risk Management Development Objectives It is a development objective of Cavan County Council to:



Support, in co-operation with the OPW, the implementation of the EU Flood Risk Directive, the Flood Risk Regulations (S.I. No. 122 of 2010) and the 'The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and Department Circular PL2/2014 or any updated / superseding version. This will include the following:

- Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines, the risk
 of flooding within the flood risk areas indicated in the accompanying Strategic Flood Risk
 Assessment report, including fluvial, pluvial and groundwater flooding, and any other flood
 risk areas that may be identified during the period of the plan or in relation to a planning
 application.
- Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a site-specific Flood Risk Assessment, and Justification Test where appropriate, in accordance with the provisions of The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009, (or any superseding document) and Circular PL2/2014 (as updated/superseded). Any flood risk assessment should include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of flooding, and any associated measures necessary to address these impacts.
- Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted.
- 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 Appropriate Assessment, as appropriate.

FRM 02 Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Chapter.

FRM 03 Site-specific Flood Risk Assessment (FRA) is required for all planning applications in areas at risk of flooding (fluvial, coastal, pluvial or groundwater), even for developments appropriate to the particular Flood Zone. The detail of these site-specific FRAs will depend on the level of risk and scale of development. A detailed site-specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The assessments shall consider and provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) and available information from the CFRAM Studies shall be consulted with to this effect.

FRM 04 Development proposals will need to be accompanied by a Development Management Justification Test when required by the Guidelines in addition to the site-specific Flood Risk Assessment. Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order to seek to ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development, such as Open Space, would be permitted for the lands which are identified as being at risk of flooding within that site.

FRM 05 In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed. The County Plan SFRA datasets and the most up to date CFRAM Programme climate scenario mapping should be consulted by prospective applicants for developments in this regard and will be made available to lower-tier Development Management processes in the Council.

FRM 06 Applications for development in flood vulnerable zones, including those at risk under the OPW's Mid-Range Future Scenario, shall provide details of structural and non-structural risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-resilient construction, emergency response planning and access and egress during flood events.

FRM 07 Protect water bodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include buffers in riverine and wetland areas as appropriate. Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible, and retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.

FRM 08 Recognise the important role of peatland and other wetland areas in flooding patterns. Development in these areas shall therefore be subject to a Flood Risk Assessment.

FRM 09 Work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the county, from risk of flooding and to ensure the sustainable development of flood risk management infrastructure and practices.

FRM 10 Where resources are available and subject to compliance with the Habitats and Birds Directives, the Council will contribute towards the improvement and / or restoration of the natural flood risk management functions of flood plains.

FRM 11 Take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and reducing flood risk.

FRM 12 Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.

FRM 13 Any potential future variations to the Plan shall consider, as appropriate any new and/or emerging data, including, when available, any relevant information contained in the CFRAMS Flood Risk Management Plans and as recommended in the SFRA for the Plan.

FRM 14 Applications for development on land identified as benefitting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.

FRM 15 Co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes. The Council will seek to ensure that zoning and development proposals support and do not impede or prevent the progression of schemes. The Council will also seek to ensure that existing and future key flood risk infrastructure will be protected from interference and removal.

8.7 Waste Management in County Cavan

County Cavan forms part of the Connacht-Ulster waste region which is one of three waste regions covering the state. It is a legal requirement that Waste Management Plans are produced and revised or replaced every six years. The current plan which is operation is the Connacht-Ulster Region Waste Management Plan 2015-2021. The review process is currently being examined and the production of one national waste management plan is under consideration, which will incorporate the three regional waste management plans. All local authorities are key stakeholders in terms of plan development, but each also have obligations under these plans which contain multiple objectives, targets and actions to be met and completed across a range of thematic areas.

Approaches to how we manage waste are being constantly re-examined and this process has been initiated through European policy and legislation and national policy and associated legislative instruments. The current waste plan for the region places a strong emphasis on preventing waste generation in the first instance to seeing 'waste' as a valuable resource. Therefore, the strategic vision of this and the next generation of waste management plans is and will continue to be the creation and progressing of a Circular Economy approach to waste management.

The new national waste policy document 'A Waste Action Plan for a Circular Economy 2020-2025' was published on the 04th September 2020. All revised or new waste management plans will have to incorporate the requirements of this new policy into such plans. The move to a circular economy will prove challenging, but there will be new opportunities that can be availed of.

The existing Connacht-Ulster Region Waste Management Plan 2015-2021 requires that local authorities as well as other stakeholders undertake a number of measures to ensure that we are all meeting our obligations under national waste policy and waste legislation –

- Undertake waste prevention initiatives
- Provide bring centres and civic amenity facilities
- Engage in communication and awareness activities

- Increase levels of kerbside & commercial collection and source segregation of waste including food waste
- Conduct waste enforcement activities to ensure compliance with waste legislation
- Support the development of waste treatment and recovery infrastructure and associated employment opportunities
- Ensure waste management is carried out in a sustainable manner and does not cause environmental or human health issues

Cavan County Council will continue to meet its obligations under the existing Connacht-Ulster Region Waste Management Plan 2015-2021 and any such revised or replacement plans. Such new plans will take account of the requirements of the new national waste policy document 'A Waste Action Plan for a Circular Economy 2020-2025' which will place new obligations on local authorities, businesses, industry and the citizens of County Cavan.

Significant progress has been made by Cavan County Council in terms of meeting its obligations under the current plan across a number of areas including –

- Provision of public waste management infrastructure including new bring bank facilities
- Participation in the Green Schools Programme
- Expansion of the County Tidy Town networks
- Introduction of new technology to aid Waste Enforcement Activity e.g. drones, CCTV.
- Increased Waste Awareness Initiatives and participation in Regional Awareness Campaigns
- Participation in the Annual Anti-Dumping Awareness Initiatives funded by the DCCAE/ WERLA's
- Continued focus on illegal waste operators and their activities with successful legal proceedings initiated
- Introduction of bye-laws by our elected members 'County of Cavan (Segregation, Storage and Presentation of Household and Commercial Waste) Bye-laws, 2019.
- Advising on and supporting the development of new indigenous waste treatment and recovery infrastructure in the County
- Adoption of new 'Climate Change Adaptation Strategy' by our elected members.

Cavan County Council and its elected members will embrace the new national waste policy and regional/national waste management plans and we will continue to adopt a collaborative approach in terms of working with our citizens, local businesses, industries, community groups and external agencies to ensure that waste is managed appropriately, in a sustainable manner and without endangering human health or the environment. The new waste policy also recognises that poor waste management practices contributes to climate change and Cavan County Council will continue to keep this new environmental challenge on the agenda as we plan for the future.

The new waste action plan for a circular economy, which will form a key element of the next Regional/National Waste Management Plans, is very comprehensive and detailed and will involve multi-stakeholder engagement and resources to implement. It will require a major cultural change from household level up to large industry level and beyond in how we act and behave so that we can reduce our environmental footprint, protect our natural environment and its resources, while still ensuring that development and job creation continues in a sustainable manner – which Cavan County Council continues to pursue under its local government remit.

The overall vision of the new plan is to transition to a circular economy and it contains a number of wide ranging objectives and actions that will have inform the development of the new National/Regional Waste Management Plans –

Some of the key areas that the new plans will take account of include –

- The Circular Economy
- Municipal Waste Management (Household & Commercial Waste)

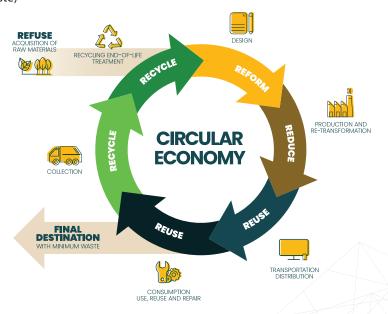
- Food Waste Management
- Plastic & Packaging Waste Management
- Construction & Demolition Waste Management
- Supporting Indigenous Treatment Capacity
- Waste Regulation & Enforcement
- Green Public Procurement

Cavan County Council has made significant progress to date across many of these areas and will continue to do so and in addition support and work towards the change to a circular economy.

This new waste action plan and the new national/regional waste management plans is an opportunity to ensure that our County is developed in a sustainable manner with resulting new opportunities for job creation and growth of our county, while ensuring we protect and enhance the natural environment.

Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.

All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant, incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives, that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas.





Waste Management Development Objectives It is a development objective of Cavan County Council to:



Support the implementation of the Connacht-Ulster Region Waste Management Plan 2015-2021 and any updates made thereto.

WM 02 Implement EU and national waste and related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.

WM 03 Prioritise waste prevention through behavioural change activities to decouple economic growth and resource use.

WM 04 Encourage the transition from a waste management economy to a green circular economy to enhance employment and increase the value recovery and recirculation of resources

WM 05 Promote sustainable waste management treatment in keeping with the waste hierarchy and the move towards a circular economy and greater self sufficiency.

WM 06 Encourage and support waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.

WM 07 Facilitate the transition from a waste management economy to a green circular economy to increase the value recovery and recirculation of resources.

WM 08 Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.

WM 09 Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives, that will lead to local sustainable waste management practices.

WM 10 Ensure that the Council fulfils its duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No. 524 of 2008) including those in relation to the identification and registration of closed landfills.

WM 11 Encourage and promote technologies, for example anaerobic digestion, that will contribute positively and grow the Circular and Bio-economy to promote sustainable rural and urban economic development, as part of the overall aim of transiting to a low carbon economy with reduced green house gases.

WM 12 Ensure that the local authority is cognisant of targets under EU Circular Economy proposals, landfill capacity limitations and proper management of soil, stone and C&D materials

WM 13 To require developers to prepare construction and demolition waste management plans for new construction projects over certain thresholds which shall meet the relevant recycling/recovery targets for such waste in accordance with the national legislation and national and regional waste management policy.

WM 14 Treatment and/or management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.

8.8 Air Quality

Poor air quality both in the urban and rural environment can lead to major environmental problems and be detrimental to the health of citizens of the County. The most sensitive areas in relation to air quality are built up areas and major transport developments. Air pollution continues to present challenges including:

- Transport emissions, especially road transport emissions of NOx, fine particulate matter (PM2.5) and black carbon arising from increase use of diesel cars and buses in our towns.
- Power generation and emissions from industry, agriculture and agricultural activities that lead to methane and nitrous oxide emissions.
- Burning of fossil fuels e.g. gas, peat, and coal resulting in carbon dioxide emissions and the persistent problem of 'smoky' emissions from the use of solid fuel in homes and backyard burning

Air pollution is monitored by the Environmental Protection Agency (EPA) in conjunction with Cavan County Council. The Council recognise the need to ensure the highest standards of air quality.



Air Quality Development Objectives
It is a development objective of
Cavan County Council to:

AQ 01 Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/5/0/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards, as set out in the Air Quality Standards Regulations 2011 (S.I. No. 180 of 201) (or any updated/superseding documents).

8.9 Noise Pollution

The impact of noise pollution is an important consideration in assessing all new development proposals as it can impact on people's quality of life and health. The Environmental Noise Regulations 2006 give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. The Council will seek through the Development Management process, to reduce noise and/or vibration at sites boundaries or within adjacent sensitive areas, especially residential areas, by measures such as layout, design and/or attenuation mechanisms.

The Council will require the submission of Noise Impact Assessments where it is proposed to introduce noise creating uses in proximity to noise sensitive uses, such as residential areas, and if permission is being granted, may impose conditions mitigating the impact. Similarly, where noise sensitive uses are proposed within proximity to a noise source, such as national roads, proposals shall include noise and/or vibration attenuation measures in any planning application.

The Roads Department developed a Noise Action Plan for Cavan County Council aimed at strategic long term management of environmental noise from traffic along the major routes, with greater than 3 million vehicle passages per year within Co. Cavan. These include part of the N3 and N55.



Noise Development Objectives
It is a development objective of
Cavan County Council to:



Support the implementation of the Noise Directive 2002/49/EC and all associated Environmental Noise Regulations 2006.

N 02 Require all developments to be designed and operated in a manner that will minimise and contain noise levels having regard to relevant national guidelines and in the absence of national guidelines, to relevant international standards, where appropriate. Seek identification and implementation of noise mitigation measures, where warranted, for developments proposed in the vicinity of existing or proposed national roads.

8.10 Light Pollution

While adequate lighting is essential for a safe and secure environment, light spillage from excessive or poorly designed lighting is increasingly recognised as having the potential to cause adverse effects to surrounding properties, human health, amenity, energy use and the natural environment, including biodiversity & ecosystems. The Council will consider the potential problems of light pollution relating to a new development and the intensification or alteration of existing development. The limitation of light pollution is important in the interests of nature conservation, residential amenity, human health and energy efficiency.



Lighting Development Objectives
It is a development objective of
Cavan County Council to:

LP 01 Control lighting in urban, rural and sensitive areas in accordance with Euronats and Darksky Circular, in order to minimise impacts on residential amenity, habitats and species of importance.

LP 02 Require the use of energy efficient public lighting in all new development proposals.

LP 03 Ornamental lighting of public buildings, bridges, monuments and public spaces must not fall beyond the area intended or directed skywards. Architecturally sensitive tones such as passive, warm coloured lights should be considered before blue or rich white lights and only used where necessary in accordance with Eurobats and Darksky Circular.

LP 04 Require that the design of lighting schemes minimises the incidence of light spillage or pollution into the surrounding environment. New schemes shall ensure that there is no unacceptable adverse impact on neighbouring residential or nearby properties, visual amenity and biodiversity in the surrounding areas.

8.11 Human Health

New development proposals shall be assessed with regard to their potential impact on existing adjacent developments, existing land uses and/ or the surrounding landscape. Where proposed developments would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air, water and/or soil, mitigation measures shall be introduced in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level.



Human Health Development
Objectives
It is a development objective of
Cavan County Council to:

HH 01 Ensure new developments will not have significant adverse effects on the amenities of an area through pollution by noise, fumes, odours, dust, grit or vibration or cause pollution of air, water and or soil unless mitigation measures eliminate adverse environmental impacts or reduce them to an acceptable operating level.

HH 02 Ensure the implementation of the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding regulations that may be published within the lifetime of this Plan).

8.12 Environment, Water and Waste Water Climate Context and Development Objectives

In accordance with the format set out in Chapter 5: Climate Change of this Plan, the following is an assessment of the content of this chapter in a climate context and associated development objectives.

Waste is an inevitable part of our daily lives but the more we buy, the more waste we generate, so our priority is first to reduce, followed by reuse, and only then recycle. Recycling offers a way to keep useful resources working for use, while providing a safe and regulated systems for dealing with hazardous waste, that could otherwise end up in landfill (DCCAE).

The NPF acknowledges the necessity to provide adequate capacity and systems to manage waste in an environmentally safe and sustainable manner.

Internationally 95% of the value of the material from plastic packaging for example, up to €120 billion a year, is lost after its first use, while textile production is said to contribute more to climate change than international aviation and shipping combined¹⁵. By 2030, the CAP 2019 has proposed a reduction in food waste by 50%, waste packaging by 70% and plastic packaging by 55%, along with a ban and elimination on single use and nonrecyclable plastic. Each year, Irish households produce around one tonne of waste¹⁶. Whether it is recycled or ends up in landfill, all that waste must be transported, treated and disposed.

Through its 'Climate Change Education for Sustainable Development' (2010) programme UNESCO aims to make climate change education a more central and visible part of the international response to climate change, helping people better understand the impact of global warming and increasing 'climate literacy' among young people. Similarly, a Climate Change Charter signed on 29th October 2019 by Minister for the Department of Communications, Climate Action and Environment (DCCASE) and Minister of State, committed all local authorities to deliver upon effective climate action, including building local citizen engagement, particularly with the young, and partner and collaborate on climate action initiatives with local community groups, local enterprise, local schools and higher-level institutions. Education plays and important role in tackling waste. A study conducted by the Environment Protection Agency (EPA) in 2018 of our commercial waste identified approximately 70% of material in the black bin could be diverted to recycling or composting, with plastic waste double to what it was ten years ago.



Environment, Water and Waste Water Climate Context and Development Objectives It is a development objective of

Cavan County Council to:

EWC 01

Require in accordance with the Department of the Environment, Heritage and Local Government's 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects (2006), the submission of a Construction and Demolition Waste Management Plan (CDWMP) for any project in excess of:

- aggregate floor area in excess of 1250 sq. m;
- demolition or refurbishment of 100 m3 of Construction of Demolition waste; or
- civil engineering projects in excess of 500 m3 of waste.

EWC 02 Require all future, primary, secondary and special school planning applications to be accompanied by evidence of Eco-Schools / Green-Schools Programme (Green Flag) registration and conditioned for its continued enrolment.

EWC 03 Promote 23rd March every year as a climate change action day, internally and amongst the wider community through local media platforms.

EWC 04 Undertake annual monitoring and spot checks of its existing refuse and segregation at all local authority owned and operated locations.

¹⁵ Ellen MacArthur Foundation (2016), 'The New Plastics Economy – Rethinking the Future of Plastics', World Economic Forum.

 $https://www.newplasticseconomy.org/assets/doc/Ellen MacArthur Foundation_The New Plastics Economy_Pages.pdf$

¹⁶ Department of Communications, Climate Action and Environment (2019), 'Climate Action – what you can do about waste', Publication, 17 June 2019. https://www.gov.ie/en/publication/climate-action-waste/