STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

IN RESPECT OF MONAGHAN COUNTY DEVELOPMENT PLAN 2019 - 2025

Comhairle Contae Mhuineacháin

Arrence offer

March 2019

SEA STATEMENT

FOR THE

MONAGHAN COUNTY DEVELOPMENT PLAN 2019-2025

for:

Monaghan County Council

County Offices The Glen County Monaghan



by: CAAS Ltd.

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MARCH 2019

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Section 1 Introduction

1.1 Introduction and Legislative Context

This is the Strategic Environmental Assessment (SEA) Statement for the Monaghan County Development Plan 2019-2025.

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

2001/42/EC of Directive the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Regulations 2004 Programmes) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011.

1.2 Content of the SEA Statement

Where SEA is undertaken, the Regulations require that a Statement is made available to the public and the competent environmental authorities after the making of the Plan.

This Statement is referred to as an SEA Statement.

The SEA Statement is required to include information summarising:

- a) how environmental considerations have been integrated into the Plan;
- b) how the following have been taken into account during the preparation of the Plan:
 - the environmental report,
 - submissions and observations made to the planning authority on the Draft Plan and Environmental Report, and
 - any transboundary consultations.
- c) the reasons for choosing the Plan in the light of the other reasonable alternatives dealt with; and
- d) the measures decided upon to monitor the significant environmental effects of implementing the Plan.

1.3 Implications of SEA for the Plan

Article 7 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended requires that SEA is undertaken for the preparation of certain Development Plans.

The findings of the SEA are expressed in the SEA Environmental Report, an earlier version of which was updated to take account of both: recommendations contained in submissions; and changes that were made to the Draft Plan that was placed on public display. Members of Monaghan County Council have taken into account the findings of the SEA Environmental Report and other related SEA output during their consideration of the Draft Plan and before its adoption. This SEA Statement summarising how environmental considerations have been integrated into the Plan has been prepared at the end of the process.

Section 2 How Environmental Considerations were integrated into the Plan

2.1 Introduction

Environmental considerations were presented to the Council for its consideration through:

- 1. Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development
- 2. Consultations;
- Communication of environmental sensitivities throughout the SEA process;
- 4. Appropriate Assessment;
- 5. Strategic Flood Risk Assessment;
- 6. Consideration of alternatives; and
- 7. Integration of individual SEA and AA provisions into the Plan.

2.2 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval and the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Monaghan County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors including:

- Housing;
- Economic Development;

- Community;
- Heritage;
- Transport and Infrastructure; and
- Environment.

2.3 Consultations

As environmental authorities identified under Planning and Development (SEA) the Regulations, as amended, the following authorities were sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Monaghan County Council: Department of Agriculture, Food and the Marine; Department of Arts, Heritage, Regional, Rural and Affairs; Gaeltacht Department of Climate Action and Communications, Environment; Department of Housing, Government: Planning and Local Environmental Protection Agency; Cavan County Council; Louth County Council; and Meath County Council. The Northern Ireland Environmental Agency was also notified.

Detail on submissions made on foot of the SEA scoping notice is provided under Section 3.2. Detail is also provided on submissions that were made on the Draft Plan and the SEA Environmental Report while they were on public display (see Section 3.3).

2.4 Communication of environmental sensitivities throughout the SEA process

Environmental considerations were integrated into the Plan before it was placed on public display. Individual sensitivities that were considered by the Planning Team preparing the Plan included the following:

- European Sites (Special Areas of Conservation and Special Protection Areas);
- Natural Heritage Areas and proposed
 Natural Heritage Areas;
- Status of Surface and Ground Waters;
- Various entries to the Water Framework Directive's Register of Protected Areas;
- Groundwater Vulnerability;
- Source Protection Zones;
- Water Services Capacity, Performance and Demand;
- Cultural heritage (archaeological and architectural) sensitivities;
- Landscape Character Areas; and
- Amenity Areas and Scenic Routes/Views.

A number of these sensitivities are mapped on Figures 2.1 to 2.4.

2.5 Appropriate Assessment and Strategic Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) have both been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DECLG, 2009).

The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network of European Sites¹.

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes. The preparation of the Plan, SEA, AA and SFRA has taken place concurrently and the findings of the AA and SFRA have informed both the Plan and the SEA.

2.6 Climate Adaptation and Mitigation

The County Development Plan is primarily a land use plan and land use plans and transport are closely linked. By improving sustainable mobility through land use planning, the Plan will reduce existing levels of greenhouse gas emissions and limit increases in future emissions. This will contribute towards avoidance or mitigation of climate change arising from development with County Monaghan. The Plan will also contribute towards climate mitigation across other sectors including energy and agriculture.

The key Plan issue in relation to climate adaptation is flooding. An SFRA (see Section 2.5) has been undertaken alongside the preparation of the Draft Plan that has helped to facilitate the appropriate zoning of areas that are at elevated risk of flooding.

2.7 Consideration of Alternatives

Consideration of the environmental effects arising from a variety of different alternatives for the Plan (see Section 4) has contributed towards the protection and management of the environment in the adopted Plan.

 $^{^{\}rm 1}$ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

⁽a) no alternative solution available;

⁽b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and

⁽c) adequate compensatory measures in place.

2.8 Integration of individual SEA and AA provisions into the Plan

Table 2.1 links key mitigation measure(s) which have been integrated into the Plan - to the likely adverse significant effects of implementing the Plan, if unmitigated. The integration of these measures into the Plan occurred over a number of iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

The reference codes are those that accompany the relevant measures in the Plan.

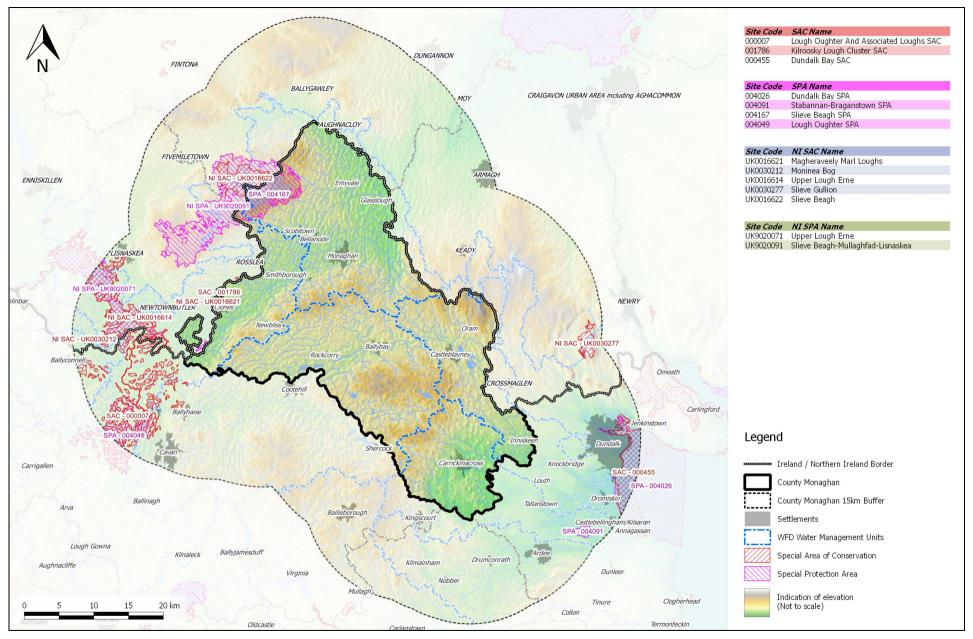


Figure 2.1 Environmental Sensitivities taken into account: European Sites

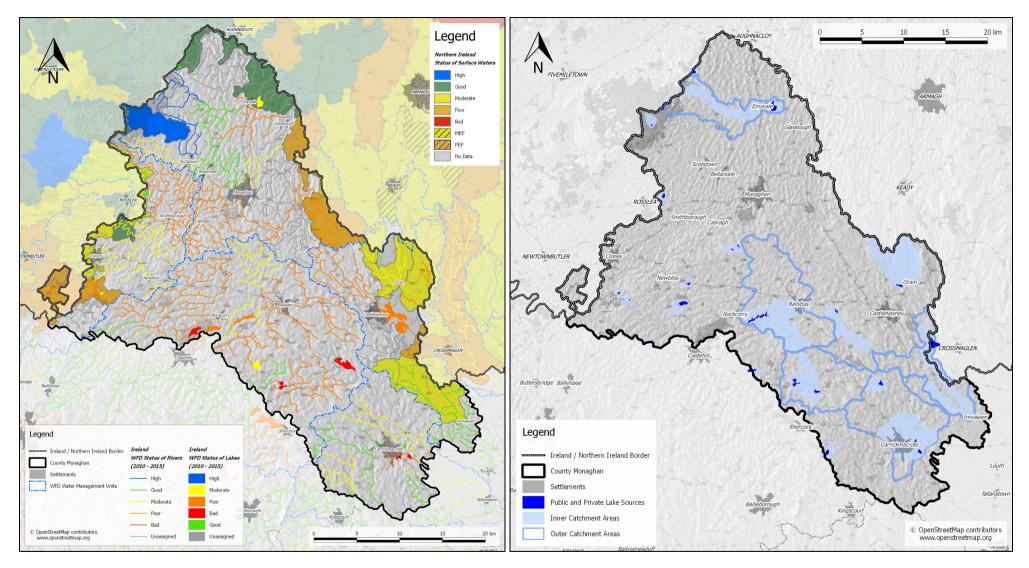


Figure 2.2 Environmental Sensitivities taken into account: Surface Water Status and Catchments of Surface Waters supplying Drinking Water

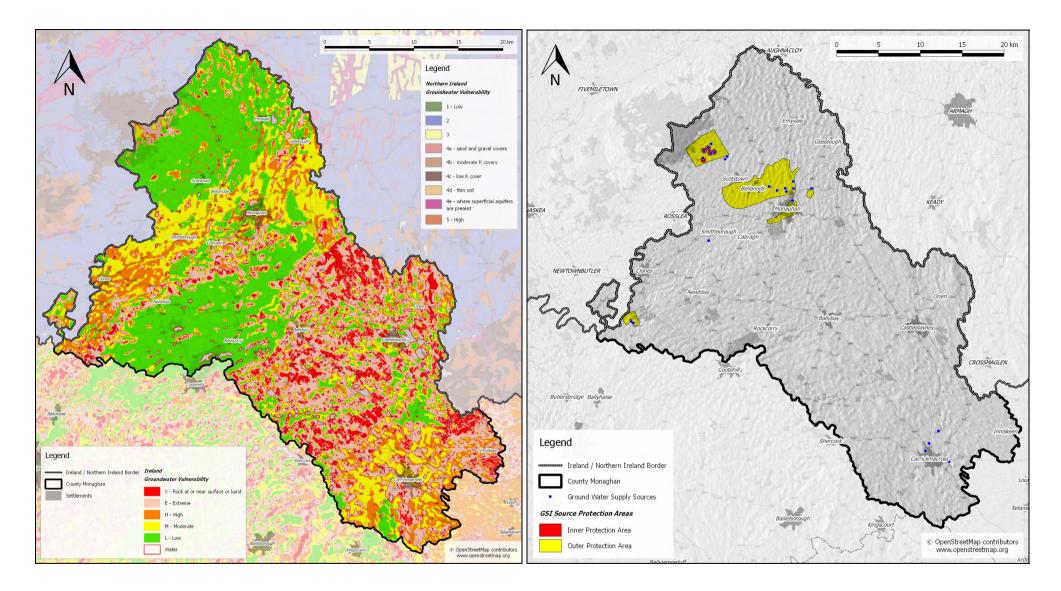


Figure 2.3 Environmental Sensitivities taken into account: Groundwater Vulnerability and Source Protection Areas

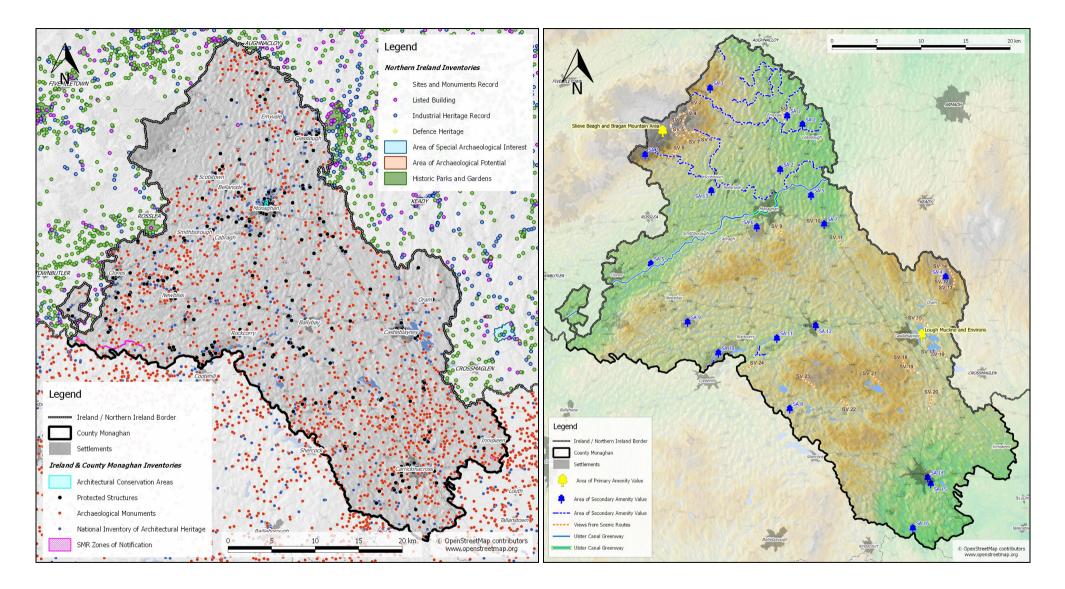


Figure 2.4 Environmental Sensitivities taken into account: Cultural Heritage and Amenity Areas and Scenic Routes/Views

Table 2.1	Integration	of Environmental	Considerations
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Environmental Component	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including
All	All	Regulatory framework for environmental protection and management HLP14 To cumulatively contribute towards, in combination with other users and bodies, the achievement of the objectives of the regulatory framework for environmental protection and management, including compliance with EU Directives - including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.
All	All	 Corridor and Route Selection Process Section 7.15 The following Corridor and Route Selection Process will be undertaken for relevant new infrastructure: Stage 1 – Route Corridor Identification, Evaluation and Selection Environmental constraints and opportunities (such as existing linear infrastructure) will assist in the identification of possible route corridor options; Potentially feasible corridors within which infrastructure could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, advised by relevant specialists; and In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridor will avoid constraints and meet opportunities to the optimum extent, advised by relevant specialists; taking into account project level information and potential mitigation measures that are readily achievable; In addition to the constraints identified above, site specific field data may be required to identify the most appropriate outes will avoid constraints and meet opportunities to the optimum extent, advised by relevant specialists, taking into account project level information and potential mitigation measures that are readily achievable; In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and
All	All	 the refinement of the route lines is likely to be informed by other considerations. Construction and Environmental Management Plan Section 15.30 Significant planning applications will be required to submit a Construction and Environmental Management Plan (CEMP) that shall incorporate relevant mitigation measures indicated in any lower tier Environmental Impact Assessment or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development. The following information and issues should be included: a) Location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse, b) Location of areas for construction site offices and staff facilities, c) Details of site security fencing and hoardings, d) Details of on-site car parking facilities for site workers during the course of construction, site and associated directional signage, f) Measures to obviate queuing of construction traffic to and from the construction site and associated directional signage, g) Measures to prevent the spillage or deposit of clay, rubble or other debris, h) Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works, i) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels, j) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater, k) Disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, l) A water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains, m) De

Environmental Component	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including
	unmitigated	 preparation and construction phases. q) Details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity.
		Policy CEMP1 : To require all significant planning applications to submit an appropriate Construction and Environmental Management Plan in accordance with the criteria set out in Section 15.30 of Chapter 15 of the Monaghan County Development Plan 2019-2025.
Biodiversity and	Arising from both	Also see measures under soil, water and material assets below.
Biodiversity and Flora and Fauna	Arising from both construction and operation of development and associated infrastructure: • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected	
	species.	such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations, including those of local communities. Biodiversity Action Plan HLP2 To adopt and implement in partnership with all relevant stakeholders the ebiostives and actions detailed in the Biodiversity Action
		relevant stakeholders the objectives and actions detailed in the Biodiversity Action Plan and any relevant action plan. Designated Sites Legislation HLP3 To contribute as appropriate towards the protection of designated sites in compliance with relevant EU Directives and applicable National Legislation
		applicable National Legislation. Protection of European Sites HLP4 No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects ²). Ecological Corridors GIP6 To contribute towards the protection and enhancement of biodiversity and ecological connectivity, including woodlands, trees, hedgerows, rivers, streams, other landscape features and associated wildlife where these form

 $^{^{\}rm 2}$ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

a) no alternative solution available,b) imperative reasons of overriding public interest for the project to proceed; and

c) Adequate compensatory measures in place.

Environmental Component	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including
		stepping stones in the context of Article 10 of the Habitats Directive.
		Green Infrastructure GIP7 To encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: - Provision of open space amenities - Sustainable management of water - Protection and management of biodiversity - Protection of cultural heritage - Protection of protected landscape sensitivities.
		Protection of Riparian Zone and Waterbodies and Watercourses WPP16 To protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine and wetland areas as appropriate.
		Drainage or Reclamation of Wetlands WLP3 To implement the relevant parts of the Planning and Development (Amendment) (No. 2) Regulations 2011 and the European Communities (Amendment to Planning and Development) Regulations 2011 which require planning permission to be applied for where the area impacted by works relating to the drainage or reclamation of a wetland exceeds 0.1 hectares or where such works may have a significant effect on the environment. Such planning applications would need to be supported by an Appropriate Assessment where necessary.
		Light Sensitive Species LP3 To require that lighting fixtures should provide only the amount of light necessary for personal safety and should be designed so as to avoid creating glare or emitting light above a horizontal plane. Lighting fixtures should also have minimum environmental impact and protect light sensitive species such as bats.
		Non-designated habitats and biological diversity HLP5 To recognise that nature conservation is not just confined to designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve the biological diversity.
		Non-native invasive species ISP2 To support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control and manage the spread of non-native invasive species on land and water. Where the presence of non-native invasive species is identified at the site of any proposed development or where the proposed activity has an elevated risk of resulting in the presence of these species, details of how these species will be managed and controlled will be required.
		 National Peatlands Strategy HLP6 To support the implementation of any relevant recommendations contained in the National Peatlands Strategy. Increases in Visitor Numbers to Semi-Natural Areas Policy TMP15 To seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that new any projects, such as greenways, are a suitable distance from ecological sensitivities, such as riparian zones.
Population and Human Health	Potential interactions if effects upon environmental vectors such as water and air are not mitigated.	Also see measures under soil, water and material assets below. Human Health DM2 To assess proposals for development in terms of, inter alia, 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 followed order to eliminate adverse environmental impacts or reduce them to an acceptable operating level. Major Accidents Directive WMP 10 To have regard to the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.
		Radon Policy CEMP2 : To 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).
Soil	 Damage to the hydrogeological and ecological function of the soil resource. 	Also see measures under water below. Geological Interest GEP1 To promote awareness of and access to sites of geological interest in consultation with landowners (where appropriate). GEP2 Where a proposed development is likely to impact on the setting or integrity of a CGS listed in the Monaghan County Development Plan 2019-2025 the Geological Survey of Ireland shall be consulted. GEP3 Protect from inappropriate development and maintain the integrity and conservation value of those features in areas of geological interest that are listed in the plan or any sites proposed by the Department of the Environment, Heritage and

Environmental Component	Potentially Significant Adverse Effects, if	Mitigating Measures, including
	unmitigated	
		the Gaeltacht or Geological Survey of Ireland during the lifetime of the plan. GEP4 To contribute towards the appropriate protection and maintenance of the character, integrity and conservation value of features or areas of geological interest.
		Contamination and Remediation Section 8.29
		Contamination and Remediation Section 8.29 Monaghan County Council will ensure that adequate soil protection measures are undertaken where appropriate. 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. The EPA's publication 'Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites' (2007) shall be taken into account as relevant by proposals for development within or adjacent to old landfill sites. 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 remediation incorporating international best practice and expertise on innovative ecological restoration techniques. These include 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. Prior to the grant of approval on contaminated sites, developers will be required to carry out a full contaminated land risk assessment to demonstrate:
		 How the proposed land uses will be compatible with the protection of health and safety (including the durability of structures and services) - during both construction and occupation How any contaminated soil or water encountered will be appropriately dealt with.
		Waste Management Regulations and Closed Landfills WMP8 To continue to fulfil 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.
Water	Adverse impacts	Also see measures under soil above and material assets below.
	upon the status of water bodies arising from changes in quality, flow and/or morphology. • Increase in the risk of flooding.	Water Framework Directive and associated legislation WPP17 To contribute towards the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, groundwater and associated habitats 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 (SI No. 272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same). To also support the application and implementation of a catchment planning and management approach to development and conservation, including the implementation of Sustainable Drainage System techniques for new development.
		River Basin Management Plan WPP16 To support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan, and associated Programmes of Measures, or any such plans that may supersede same during the lifetime of the plan. Proposals for development should not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands. Also, to have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 which provides guidance on exemptions to the environmental objectives of the Water Framework Directive. Catchment-sensitive farming practices, in order to meet Water Framework Directive targets and comply with the relevant Piver Basin Management Plan
		targets and comply with the relevant River Basin Management Plan. Surface Water Drainage and Sustainable Drainage Systems (SuDs) SDP2 To ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate to minimise the effect of a development on flooding and pollution of existing waterways.
	Increase in flood risk	As integrated through Strategic Flood Risk Assessment: WPP15 To protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine and wetland areas as appropriate. CCP4 To ensure new development is appropriately located, so as not to be exposed
		to risk of flooding FMP1 To fully implement and support in conjunction with the OPW the provisions of the EU Flood Risk Directive, The Flood Risk Regulations, The Planning System and

Environmental Component	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including
	unmugated	Flood Risk Management- Guidelines for Planning Authorities and any updated
		legislation or guidelines issued during this plan period.
		 FMP2 To restrict development in areas susceptible to flooding except where; The proposed development can be justified on strategic grounds.
		 The flood risk can be managed to an acceptable degree and without
		increasing flood risk beyond the site itself.
		 Appropriate and detailed mitigation measures can be implemented to measure (minimum final effects)
		remove/minimise flood effects. FMP3 Development proposals on land identified as being at risk of flooding shall be accompanied by a site-specific Flood Risk Assessment (FRA) carried out in accordance with the methodology set out in The Planning System and Flood Risk Management – Guidelines for Planning Authorities, 2009. Such assessments shall be
		carried out by competent professionals with hydrological experience and identify the risk and extent of any proposed mitigation measures. FMP4 All applications in areas prone to flooding shall be subject to the justification
		test set out in the Flood Risk Management Guidelines. Compensatory flood storage provision or the provision of flood defences will not override the need for completion
		of the justification test.
		FMP5 To protect the capacity of rivers, streams, riparian corridors, flood plains and wetlands from inappropriate development which will contribute to increased flood risk. Development on or within a floodplain will not be permitted.
		SDP1 To require best practice in the design, construction and operation of expanding and new developments to ensure minimum effects on the aquatic environment. Sustainable Urban Drainage Systems designed to ensure both water
		quality protection and flood minimisation should be included in developments for commercial, industrial, residential, intensive agricultural, public and institutional premises with significant roof or hard surface areas and multiple residential
		developments. For guidance refer to Monaghan County Councils Storm Water Technical Guidance Document 2017.
		SDP2 To ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate to minimise the effect of a development on flooding and pollution of
		existing waterways. SDP3 To require that planning applications are accompanied by a comprehensive
		SUD's assessment that addresses run-off quantity, run-off quality and its impact on the existing habitat and water quality. SDP4 To ensure that all storm water discharges shall be restricted onsite attenuation
		and or other measures to the pre-development levels (green field) in all new developments. All attenuated storage volumes must take in to consideration climate change. Guidance is available from The Greater Dublin Strategic Drainage Study Technical Document, Volume 5.
		SDP5 To require all run off from new developments in towns/villages to be restricted to the pre development levels(green field) by storm water attenuation on site and use of SUDs (sustainable urban drainage systems), as a measure to assist in flood avoidance. For guidance refer to Monaghan County Councils Storm Water Technical
		Guidance Document 2017. FLP1 To require that planning applications within areas of at risk of flooding follow the sequential approach and justification test set out in the DECLG The Flooding
		System and Flood Risk Management Guidelines for Planning Authorities. FLP2 To require that site specific Flood Risk Assessments (FRA) is prepared in areas
		at risk of flooding even for developments appropriate to that particular flood zone. The detail of such an assessment will depend on the level of risk and scale of
		development and it must be demonstrated that any mitigation measures proposed will not exacerbate flood risk in the wider area. FLP3 To require that planning applications on lands identified within groundwater
		and pluvial PFRA areas are accompanied by a site specific FRA that corresponds with Chapter 5 of the 2009 Guidelines. Such assessments shall be prepared by suitably
		qualified experts with hydrological experience and shall quantify the risk and the effects of any necessary mitigation together with the measures needed or proposed
Material Assets	• Failure to	to manage residual risks. Also see measures under soil above and material assets below.
	provide	Irish Water / Water Services Provisions
	adequate and	WWP1 To collaborate with, support and co-operate with Irish Water, as relevant
	appropriate waste water	and appropriate, to deliver a sustainable water supply in line with the objectives set
	waste water treatment	out in the Core Strategy. WWP2 To liaise with Irish Water to establish source management and protection
	(water services	zones around drinking water supply sources and advance appropriate management
	infrastructure	and maintenance measures for these sources (both ground and surface water).
	and capacity is needed to	WWP3 To co-operate with and advise Irish Water in order to identify, prioritise and advance the delivery of water and waste water projects throughout the County
	ensure the	during the Development Plan period and to only permit development in instances

Environmental	Potentially	Mitigating Measures, including
Component	Significant Adverse Effects, if unmitigated	
	mitigation of potential conflicts) ³ . • Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential	 where there is sufficient capacity in the public water and wastewater infrastructure. WWP4 To implement in conjunction with Irish Water, EPA and statutory requirements in compliance with the provision of the Urban Wastewater Treatment Regulations and the Wastewater Discharge (Authorisation) Regulations 2007 as amended. WWP5 To implement in conjunction with Irish Water, EPA and statutory requirements in compliance with the provisions of the EU (Drinking Water) Regulations, the Drinking Water Regulations (SI No 122 of 2014). WWP6 To, in conjunction with Irish Water, undertake recommendations made by the EPA arising from any failure to meet drinking water standards and any enlistment on the EPA's Remedial Action List. WWP7 To co-operate with the Federation of Group Water Schemes to improve the quality and capacity of water supply to areas served by group water schemes.
	 conflicts). Increases in waste levels. 	 Construction and Demolition WMP4 To require that all construction projects are carried out in accordance with Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects. Waste Hierarchy WMP7 To support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible and to safeguard the environment by seeking to ensure that residual waste is disposed of appropriately. Waste Management Regulations WMP8 To continue to fulfil 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. Contaminated Material WMP9 To require that treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit) and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste). 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 and be in accordance with Section 8.29.
	 Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter 	 AGP2 Specific Intensive Agriculture / Poultry & Pig Farming The following additional information to Policy AG01 will be required for assessing applications for intensive poultry units or similar specialised agri-developments the Council: An Environmental Impact Statement (EIS) and/or Appropriate Assessment depending on the size of the unit. Details of the scale and intensity of existing operations in the vicinity of the site, including the cumulative impact of similar type developments within close proximity of the site. Methods for waste management including frequency and location of disposal relative to the proposed unit. Details of air pollution arising from the units and effluent storage, transportation and spreading. Proximity of development to aquifers and water courses. The potential impact of the proposal on the residential amenity of adjoining occupiers must be considered. A unit shall not be developed at a distance of less than 100 metres from a dwelling within the rural area (i.e. outside of a designated settlement) unless the third party has given written consent, witnessed by a solicitor or a peace commissioner. Details of associated activities such as cleaning, ventilation and heating should be provided. A comprehensive landscaping plan, A statement outlining why a particular location on the landholding was deemed more appropriate location is available on the landholding the application may not receive favourable consideration, Traffic management plans and traffic assessment associated with the proposed development may be required for large proposals.

 $^{\scriptscriptstyle 3}$ Irish Water is responsible for strategic water services.

Environmental	Potentially	Mitigating Measures, including
Component	Significant	
	Adverse Effects, if unmitigated	
Air and Climatic Factors	Emissions to air including greenhouse gas emissions and other emissions.	Air Quality AQP1 Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air.
		Air Quality, Greenhouse Gases, Noise and Energy AQP2 To contribute toward compliance with air quality legislation; greenhouse gas emission targets; management of noise levels; and reductions in energy usage.
		Climate Adaptation and Mitigation CCP10 Support and facilitate European and national objectives for climate adaptation and mitigation as detailed in the National Mitigation Plan, National Adaptation Framework and relevant Sectoral Adaptation Plan(s).
		Green Infrastructure GIP7 To encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: - Provision of open space amenities - Sustainable management of water - Protection and management of biodiversity
		 Protection of cultural heritage Protection of protected landscape sensitivities.
Cultural Heritage	 Potential effects on protected and unknown archaeology and protected 	Archaeological Heritage BHP2 To contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended).
	architecture arising from construction and operation activities.	Protection of Archaeological Sites, including Underwater Archaeological Sites PMP6 To contribute, as appropriate, towards the protection of archaeological sites and monuments and their settings, archaeological objects and underwater archaeological sites that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are subject of Preservation Orders or have been registered in the Register of Historic Monuments. Contribute, as appropriate, towards the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places. To contribute, as appropriate, towards the protection and preservation of underwater archaeological sites in riverine or lacustrine locations.
		Consultation PMP7 To consult with the National Monuments Service in relation to
		proposed developments adjoining archaeological sites. Architectural Heritage BHP3 To contribute towards the protection of architectural
		heritage by complying, as appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and the
Landscape	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations 	Landscape Designations HLP6 To contribute towards the protection of County and local level landscape designations from incompatible developments. Proposals for development that have the potential to significantly adversely impact upon these designations shall be accompanied by an assessment of the potential landscape and visual impacts of the proposed development. This shall demonstrate that landscape impacts have been anticipated and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.
	relating to the landscape	National Landscape Strategy HLP7 Support, as appropriate, any relevant recommendations contained in the National Landscape Strategy for Ireland.

Section 3 Environmental Report and Submissions/ Observations

3.1 Introduction

This section details how both the Environmental Report and submissions and observations made to Monaghan County Council on the Environmental Report and SEA process have been taken into account during the preparation of the Plan and the SEA.

3.2 SEA Scoping Notices and Submissions

As part of the scoping process for preparation of the Plan, environmental authorities⁴ were notified that a submission or observation in relation to the scope and level of detail of the information to be included in the Environmental Report could be made to the Council.

Submissions were made by the Environmental Protection Agency and the Department of Culture, Heritage and the Gaeltacht. These submissions influenced the scope of the assessments and were taken into account during the undertaking of the SEA, Strategic Flood Risk Assessment (SFRA) and Appropriate Assessment (AA).

Key environmental issues raised included those relating to:

- Critical Service Infrastructure;
- Water Related Considerations;
- Flood Risk;
- Biodiversity;
- Habitat/Green Infrastructure Mapping;
- Non-designated;
- Biodiversity;
- Landscape;
- Relationship with other plans and programmes;
- Climate Adaptation / Climate Mitigation;
- Fisheries; and

• Northern Ireland information sources and plans, programmes, etc.

These issues were addressed in the assessments and/or the Plan as relevant.

3.3 Submissions on the Environmental Reports for the Draft Plan and Proposed Material Alterations

Various submissions were made on the Draft Plan, Proposed Material Alterations and associated environmental assessment documents while these documents were on public display. Certain submissions resulted in updates being made to the Plan and SEA documents.

On foot of a submission from the Environmental Protection Agency made during public display of the Draft Plan and associated documents, updates including the following were made:

- Update Policy CCP1 as indicated below: To support and encourage the implementation of the National Climate Change Adaptation Framework **2018** and any updated versions during the lifetime of this development plan.
- Include Table 10.1 from the SEA Environmental Report in the SEA Non-Technical Summary.
- Include a summary of the key environmental considerations in Section 3.4 "Scoping" of the SEA Environmental Report.
- Include a section in the SEA Environmental Report outlining how climate change mitigation and adaptation measures have been taken into account in the preparation of the Plan.
- Add the following columns from Table 8.3 in the SEA Environmental Report to Table 9.1 in the SEA Environmental Report: Significant Positive Effect, likely

⁴ The following authorities were notified: Environmental Protection Agency, Department of Communications, Climate Action and Environment, Department of Agriculture, Food and the Marine, Department of Culture, Heritage and the Gaeltacht and all adjoining planning authorities.

to occur; and Residual Adverse Non-Significant Effects.

- Add the Greenways Strategy to the plans and programmes listed at Appendix I to the SEA Environmental Report.
- Amend text from Section 10 "Monitoring" of the SEA Environmental Report as follows: A Sstand-alone Monitoring Reports on the significant environmental effects of implementing the Plan will be prepared both at interim review of the achievement of the Plans objectives and in advance of the beginning of the review of the Plan.

On foot of a submission from the Department of Housing, Planning and Local Government, the Plan and associated documents were updated to reflect the recent adoption of the River Basin Management Plan.

On foot of a submission from Irish Water made during public display of the Draft Plan, the information on water services provided in the SEA Environmental Report was updated.

3.4 SEA documents including SEA Environmental Report

The Draft Plan and accompanying documents (including SEA Environmental Report and AA and SFRA documents) were placed on public display from 9th of March to the 5th of May 2017, having integrated various recommendations arising from the SEA, AA and SFRA processes. Responses to submissions made on the SEA Environmental Report during the period of public display of a Draft Plan were integrated into a Chief Executive's Report and considered by Monaghan County Council.

Various Material Alterations were proposed after public display of the Draft Plan. These alterations were subject to screening for SEA and AA and some of the alterations were subject to SEA and Stage 2 AA. All changes to the original Draft Plan that was placed on public display have been mitigated by measures that have been integrated into the Plan including those identified at Table 2.1.

Further modifications made to the alterations were made in compliance with the Planning and Development Act (2000), as amended: they were minor in nature and not likely to have significant effects on the environment or adversely affect the integrity of a European site; they did not relate to an increase in the area of land zoned for any purpose; and they did not relate to an addition to or deletion from the record of protected structures.

On adoption of the Plan, the Environmental Report that had been placed on public display alongside the Draft Plan was updated to become a final Environmental Report that is consistent with the adopted Plan, taking into account recommendations included in the submissions as well as changes that were made to the original Draft Plan that was placed on public display.

Section 4 Summary of Alternatives considered

4.1 Summary of Description of Alternative Scenarios

One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative scenarios for accommodating future growth in County Monaghan. Three tiers of alternatives are examined as follows:

Tier 1: Alternatives for Allocation of Population

The following alternatives for an urban to rural population split were considered by the Council:

- **A. Continue Existing** 37% Urban, 63% Rural
- B. Increase Rural
 - 33% Urban, 67% Rural
- **C.** Increase Urban 41% Urban, 59% Rural

Tier 2: Consideration of Policy for Rural Areas under Strong Urban Influence

These two alternatives both provide for urban and rural growth in the County, however they have different approaches to managing development in areas surrounding urban settlements:

- **A.** One includes a "Rural Areas under Strong Urban Influence" policy that restricts development in areas surrounding urban settlements; and
- **B.** The other does not include a "Rural Areas under Strong Urban Influence" policy that restricts development in these areas.

Tier 3: Alternatives for Larger Towns

Three alternatives for each of the five settlements (Ballybay, Carrickmacross, Castleblaney, Clones and Monaghan) that are provided with land use zoning by the County Plan were considered as follows:

- A. Even Development
- B. Sporadic Development
- **C.** Haphazard Development

4.2 Summary of Evaluation of Alternative Scenarios

Significant Positive Effects common to all Alternatives

By providing for development within existing development boundaries and facilitating the use of existing utilities and brownfield sites, all alternatives would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in wider rural areas that are further from established settlements and less well serviced. This, in the context of normal proper planning and sustainable development provisions, would be likely to result in significant positive environmental effects on environmental components as indicated on Table 4.1.

Environmental Component	Significant Positive Effect, likely to occur
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water.
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services.
Water	 Contributes towards protection and management of ground and surface waters, including coastal waters downstream, due to facilitating development within established and serviced settlement centres.
Material Assets	 Allows for use of planned infrastructure including water services, transport and drainage infrastructure. Makes use of existing water services, transport and drainage infrastructure.
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air.
Cultural Heritage	 Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements.
Landscape	 Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements.

Although significant positive environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives provided in the subsections below.

Potentially Significant Adverse Effects Common to all Alternatives

All of the alternatives provide for development. Such development would have the potential to conflict with environmental components – to different degrees. Potentially significant adverse environmental effects arising from this conflict are common to all alternatives and are described on Table 4.2. For implementation of the Plan, these effects will be mitigated by provisions integrated into the Plan relating to environmental protection and management.

Although potentially significant adverse environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives provided in the subsections below.

Table 4.2 Potentially Significant Adverse Environmental Effects, if unmitigated, common to all alternatives

Environmental Component	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	 Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and
	displacement of protected species.
Population and Human Health	 Potential interactions if effects upon environmental vectors such as water and air are not mitigated.
Soil	 Damage to the hydrogeological and ecological function of the soil resource.
Water	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding.
Material Assets	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) ⁵.
	 Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).
	 Increases in waste levels. Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter
Air and Climatic Factors	• Emissions to air including greenhouse gas emissions and other emissions.
Cultural Heritage	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape

Tier 1: Alternatives for Allocation of Population

The following alternatives for an urban to rural population split were considered by the Council as follows:

A. Continue Existing

37% Urban, 63% Rural

- **B.** Increase Rural 33% Urban, 67% Rural
- C. Increase Urban
 - 41% Urban, 59% Rural

All of these alternatives would help to sustain existing sustainable rural management practices - and the communities who support them – in order to ensure the continuation of long established managed landscapes and the flora and fauna that they contain. Increasing the urban population in the County ("C. Increase Urban") would improve the status of the environment the most, with the least amount of potential conflicts. Increasing the rural population in the County ("B. Increase Rural") would improve the status of the environment the least, with the most amount of potential conflicts. Increasing the urban population in the County ("A. Continue Existing") would improve the status of the environment to a moderate degree, with a moderate amount of potential conflicts.

⁵ Irish Water is responsible for strategic water services.

Tier 2: Consideration of Policy for Rural Areas under Strong Urban Influence

These two alternatives both provide for urban and rural growth in the County, however they have different approaches to managing development in areas surrounding urban settlements:

A. One includes a "Rural Areas under Strong Urban Influence" policy that restricts development in areas surrounding urban settlements.

Restricting development in rural areas that are under strong urban influence would positively impact upon the protection and management of the environment and sustainable development. The restrictions would help to both reduce levels of greenfield development in areas immediately surrounding existing centres and encourage brownfield development within existing centres.

Rural development would be directed towards appropriate rural areas and urban development would be directed towards established settlements. This alternative would prevent low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

B. The other does not include a "Rural Areas under Strong Urban Influence" policy that restricts development in these areas.

Not restricting development in rural areas that are under strong urban influence would adversely impact upon the protection and management of the environment and sustainable development. The absence of restrictions would result in increased levels of greenfield development in areas immediately surrounding existing centres and less demand for brownfield development within existing centres.

Urban generated development would occur within rural areas outside of established settlements. This alternative would result in low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

Both alternatives would help to sustain existing sustainable rural management practices - and the communities who support them – in order to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Tier 3: Alternatives for Larger Towns

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new development over a relatively small number of sites that are already or most easily served by infrastructure and could serve demand for new development

Alternative A 'Even Development' would result in the greatest degree of significant positive effects (see Table 4.1) and least degree of potential conflicts (see Table 4.2). Development would be most likely to occur within or closest to existing settlement centres on serviced sites.

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new development over a greater number of sites that could serve demand for new development

Alternative B 'Sporadic Development' would result in a relatively moderate degree of significant positive effects (see Table 4.1) and a relatively moderate degree of potential conflicts (see Table 4.2). In comparison to Alternative A, development would

be spread out over a greater number of sites, some not currently serviced and some further from settlement centres. Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative A 'Even Development'.

By:

- Not identifying opportunity sites; and
- Following a 'laissez faire' approach in relation to development, with each application considered on its own merits and no land use zoning would be provided for

Alternative C 'Haphazard Development' would result in the least degree of significant positive effects (see Table 4.1) and greatest degree of potential conflicts (see Table 4.2). Development would be spread out over the entire area associated with each settlement with ribbon development a dominant feature within the settlements. Although existing Plan provisions _ including those relating to environmental protection/management and sustainable development – would have to be complied with, the potential for cumulative adverse effects would be significantly higher with this alternative.

All of the alternatives are consistent with approach provided by the existing Plan, to sustain existing sustainable rural management practices - and the communities who support them to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Reasons for choosing the alternatives for the Plan in the light of the other reasonable alternatives

Selected alternatives for the Plan from each of the three tiers of alternatives that emerged from the planning/SEA process are indicated on Table 4.3 below.

These alternatives have been selected and developed by the Planning Team, placed on public display and adopted by the Council having regard to both:

- 1. The environmental effects which were identified by the SEA and are detailed above; and
- 2. Planning including social and economic effects that also were considered by the Council.

Tier	Alternatives Considered	Selected Alternative
1. Alternatives for Allocation of	A. Continue Existing	C. Increase Urban
Population	B. Increase Rural	
	C. Increase Urban	
2. Consideration of Policy for Rural	A. Policy for Rural Areas under Strong	A. Policy for Rural Areas under
Areas under Strong Urban	Urban Influence	Strong Urban Influence
Influence	B. No Policy for Rural Areas under	
	Strong Urban Influence	
3. Alternatives for Larger Towns	A. 'Even Development'	A. 'Even Development'
	B. 'Sporadic Development'	
	C. 'Haphazard Development'	

Table 4.3 Selected Alternatives for the Plan

Section 5 Monitoring Measures

5.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Plan. Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

5.2 Indicators and Targets

Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the main environmental issues. Each indicator to be monitored is accompanied by the target(s) that were identified with regard to the relevant strategic actions.

Table 5.1 shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan.

The Monitoring Programme may be updated to deal with specific environmental issues including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

5.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the relevant authorities including the Council, the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Internal monitoring of the environmental effects of grants of permission in the Council will provide monitoring of various indicators and targets on a *grant of permission*⁶ basis.

Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

5.4 Reporting

Stand-alone Monitoring Reports on the environmental significant effects of implementing the Plan will be prepared both at interim review of the achievement of the Plans objectives and in advance of the beginning of the review of the Plan. This report should address the indicators set out below. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitorina evaluation report(s), the publication of these reports and, if necessary, the carrying out of corrective action.

5.5 Thresholds

Thresholds at which corrective action will be considered include:

- The occurrence of flood events;
- Court cases taken by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs regarding impacts upon archaeological heritage including entries to the RMP;
- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan;
- Boil notices on drinking water; and
- Fish kills.

⁶ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. By documenting this determination (e.g. whether a proposed development will impact upon a Protected Structure or whether a

proposed development can be adequately served with water services) while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan can be achieved.

Environmental	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Component			
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ⁷	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs' National Monitoring Report for the Birds Directive under Article 12 (every 3 years). Department of Agriculture, Environment and Rural Affairs Northern Ireland Consultations with the NPWS (at monitoring evaluation - see Section 5.4).
	 B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the Plan 	 B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the 	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years). Review of Council Ecological Network Mapping Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation - see Section 5.4) Department of Agriculture, Environment and Rural Affairs
	B3ii: Number of significant impacts on the protection of listed species	Plan B3ii: No significant impacts on the protection of listed species	Northern Ireland.
	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management	• Review of CSO figures for the County (every five years)

⁷ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:
(a) no alternative solution available;
(b) imperative reasons of overriding public interest for the plan to proceed; and
(c) adequate compensatory measures in place.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Population and Human Health	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive, Environmental Protection Agency, Department of Health (Northern Ireland) and Northern Ireland Environment Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	 Consultations with EPA and Health Service Executive and Department of Health Northern Ireland (at monitoring evaluation - see Section 5.4).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Water	W1: Classification of Overall Status (comprised of ecological and chemical status) under the Water Framework Directive	W1: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ⁸	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland and Northern Ireland (multi-annual).
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland and Northern Ireland (multi-annual).
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood</i> <i>Risk Management Guidelines for Planning</i> <i>Authorities</i>	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Material Assets	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 ⁹ which present a potential danger to human health as a result of implementing the Plan	 EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual). EPA Remedial Action List (every quarter). Drinking Water Quality Northern Ireland (annual)
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	 EPA National Waste Reports EPA Ireland's Environment Reports
Air and Climatic Factors	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	CSO Population Data (every c. 5 years).

⁹ Corresponding guidance from Northern Ireland legislation: Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (as amended)

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context these entries within the surrounding landscape where relevant- protected from adverse effects resulting from development which is granted permissions under the Plan	CH1: Protect entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context of these entries within the surrounding landscape where relevant – protected from adverse effects resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Department of Communities Northern Ireland (at monitoring evaluation - see Section 5.4).
	CH2: Percentage of entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context from significant adverse effects arising from new development granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Department of Communities Northern Ireland (at monitoring evaluation - see Section 5.4).
Landscape	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

SEA ENVIRONMENTAL REPORT

FOR THE

MONAGHAN COUNTY DEVELOPMENT PLAN 2019-2025

for: Monaghan County Council

County Offices The Glen County Monaghan



by: CAAS Ltd.

1st Floor 24-26 Ormond Quay Upper Dublin 7



March 2019

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Appendix II Non-Technical Summary¹.....Separately bound

¹ Note that Appendix II "Non-Technical Summary" is presented as part of this main SEA Environmental Report.

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List of Abbreviations

AA	Appropriate Assessment
ACA	Architectural Conservation Area
CFRAM	Catchment Flood Risk Assessment and Management
CSO	Central Statistics Office
DEHLG	Department of the Environment, Heritage and Local Government
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
GSI	Geological Survey of Ireland
NHA	Natural Heritage Area
NIAH	National Inventory of Architectural Heritage
NSS	National Spatial Strategy
OPW	Office of Public Works
RAL	Remedial Action List
RBD	River Basin District
RBMP	River Basin Management Plan
RMP	Record of Monuments and Places
RPA	Register of Protected Areas
RPS	Record of Protected Structures
RPGs	Regional Planning Guidelines
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SI No.	Statutory Instrument Number
SPA	Special Protection Area
WFD	Water Framework Directive

Glossary

Appropriate Assessment

The obligation to undertake Appropriate Assessment (AA) derives from Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC. AA is a focused and detailed impact assessment of the implications of a strategic action or project, alone and in combination with other strategic actions and projects, on the integrity of a European Site in view of its conservation objectives.

Biodiversity and Flora and Fauna

Biodiversity is the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems' (United Nations Convention on Biological Diversity 1992).

Flora is all of the plants found in a given area.

Fauna is all of the animals found in a given area.

Environmental Problems

Annex I of Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the assessment of the effects of certain Plans and programmes on the environment (the Strategic Environmental Assessment Directive) requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse.

Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the outset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

Environmental Vectors

Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings.

Mitigate

To make or become less severe or harsh.

Mitigation Measures

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing a human action, be it a plan, programme or project. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration should be given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: avoid effects; reduce the magnitude or extent, probability and/or severity of effects; repair effects after they have occurred; and compensate for effects, balancing out negative impacts with other positive ones.

Natural Heritage

The Heritage Act (1995) defines natural heritage as including flora, fauna, wildlife habitats, landscapes, seascapes, wrecks, geology, inland waterways, heritage gardens and parks.

Protected Structure

Protected Structure is the term used in the Planning and Development Act 2000 as amended to define a structure included by a planning authority in its Record of Protected Structures. Such a structure shall not be altered or demolished in whole or part without obtaining planning permission or confirmation from the planning authority that the part of the structure to be altered is not protected.

Recorded Monument

A monument included in the list and marked on the map which comprises the Record of Monuments and Places that is set out County by County under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified. Any works at or in relation to a recorded monument requires two months' notice to the former Department of the Environment, Heritage and Local Government (now Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs) under Section 12 of the National Monuments (Amendment) Act, 1994.

Scoping

Scoping is the process of determining what issues are to be addressed, and setting out a methodology in which to address them in a structured manner appropriate to the plan or programme. Scoping is carried out in consultation with appropriate environmental authorities.

Strategic Actions

Strategic actions include: *Policies/Strategies,* which may be considered as inspiration and guidance for action and which set the framework for Plans and programmes; *Plans,* sets of co-ordinated and timed objectives for the implementation of the policy; and *Programmes,* sets of projects in a particular area.

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt it.

Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level and are used as standards against which the provisions of the Plan and the alternatives can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

Section 1 SEA Introduction and Background

1.1 Introduction and Terms of Reference

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Monaghan County Development Plan 2019-2025. It has been undertaken by CAAS Ltd. on behalf of Monaghan County Council.

The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. The SEA is carried out in order to comply with the provisions of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended. This report should be read in conjunction with the Plan.

1.2 SEA Definition

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before such decisions are made. Environmental Impact Assessment, or EIA, is generally used for describing the process of environmental assessment for individual projects, while Strategic Environmental Assessment or SEA is the term which has been given to the environmental assessment of plans and programmes, which help determine the nature and location of individual projects taking place. SEA is a systematic process of predicting and evaluating the likely significant environmental effects of implementing a proposed plan or programme, in order to insure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

1.3 SEA Directive and its transposition into Irish Law

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning.

The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21st July 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development Environmental (Strategic Assessment) (Amendment) Regulations 2011 (SI No. 201 of 2011).

1.4 Implications for the Plan and the Planning Authority

Article 7 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended requires that SEA is undertaken for the preparation of certain Development Plans.

The findings of the SEA are expressed in this Environmental Report, an earlier version of which was updated to take account of both: recommendations contained in submissions; and changes that were made to the Draft Plan that was placed on public display. Members of Monaghan County Council have taken into account the findings of this report and other related SEA output during their consideration of the Draft Plan and before its adoption. An SEA Statement summarising how environmental considerations have been integrated into the Plan is prepared at the end of the process.

Section 2 The Plan

2.1 Introduction

The Monaghan County Development Plan provides an overall strategy for the proper planning and sustainable development of County Monaghan over the timescale of the Plan. Spatial planning through the development plan policies endeavours to achieve balance between the common good and the interests of those individuals.

It is acknowledged that many of the major issues affecting the County's development are contingent on national policy and government funding. However, it is also noted that a new document has been produced which focuses on what can be achieved locally by working together to bring about a higher quality of life and more sustainable economic development in Monaghan. In January 2016, Monaghan County Council working alongside Monaghan Local Community Development Committee published the first Local Economic and Community Plan (LECP) for County Monaghan. This was produced following extensive research and consultation in order to identify the key challenges, opportunities and priorities from both a community and economic perspective to set a vision, goals and objectives as well as detailed actions to mobilise all stakeholders with an interested in a successful future for Monaghan. The LECP and the County Development Plan are complementary policy documents, which share the same vision to provide an overall strategy for the social, economic, cultural and physical development of the County.

Therefore, the Plan builds on the review of the Monaghan County Development Plan 2013-2019 but also takes account of more recent key development trends, national, regional and local policy documents as well as EU legislative requirements.

2.2 Content of the Plan

The Monaghan County Development Plan 2019-2025 comprises a written statement with supporting maps and appendices. The written statement includes strategic objectives and policies for the development and use of land within County Monaghan. In the event of any conflict or ambiguity between what is contained within the written statement and the supporting maps, the written statement will take precedence. Provisions are included for various sectors including:

- Housing;
- Economic Development;
- Community;
- Heritage;
- Transport and Infrastructure; and
- Environment.

2.3 Plan Vision

The County Development Plan's vision is:

To facilitate sustainable development and to build on the strengths of County Monaghan by supporting the provision of employment opportunities and residential developments within quality urban and rural environments that provides a high standard of physical and social infrastructure necessary for their respective communities.

2.4 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval and the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Monaghan County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County. Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors including:

- Housing;
- Economic Development;
- Community;
- Heritage;
- Transport and Infrastructure; and
- Environment.

In addition, the undertaking of this SEA process as well as the preparation of an Appropriate Assessment and a Strategic Flood Risk Assessment were part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as detailed in Section 9 of this report.

2.5 Relationship with other relevant Plans and Programmes

The CDP sits within a hierarchy of strategic actions such as plans and programmes and is subject to a number of high level environmental protection policies and objectives with which it must comply (including those detailed in Appendix I², Section 4, Section 5 and Section 9 of this report).

As required by the Planning and Development Act, the CDP is consistent with such national plans, policies and strategies as the Minister determines relate to proper planning and sustainable development. The CDP may, in turn, guide lower level strategic actions. In this regard, Appendix I includes statutory provisions, plans, policies and strategies that set the context within which the CDP is framed and which have influenced the strategies and objectives of the CDP.

² Appendix I is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

This section details how the SEA has been undertaken alongside the preparation of the Plan. Figure 3.1 lays out the main stages in the Plan/SEA preparation process. The Plan and associated SEA, AA and SFRA documents were prepared in an iterative manner whereby multiple revisions of each document were prepared, each informing subsequent iterations of the others.

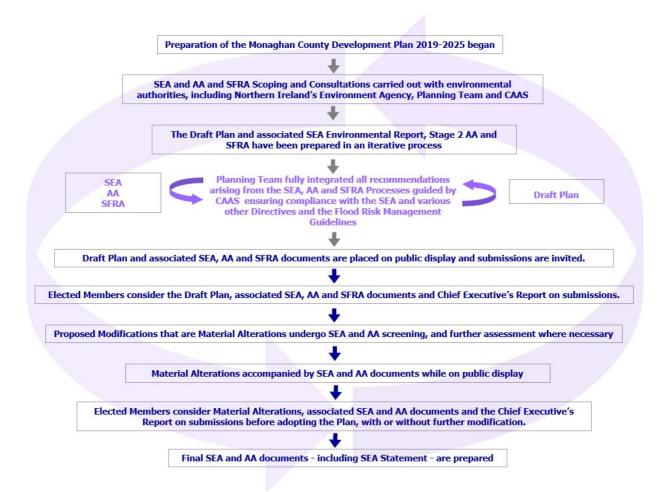


Figure 3.1 Monaghan County Development Plan and SEA/AA/SFRA Stages

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.2.1 Appropriate Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA have been undertaken alongside the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network of European Sites³.

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed both the Plan and the SEA. Various provisions have been integrated into the Plan through the AA process.

3.2.2 Integrated Biodiversity Impact Assessment

Many elements of Integrated Biodiversity Impact Assessment as detailed in the EPA's (2013) Practitioner's Manual have been aligned with in undertaking SEA for the Plan. These include:

Scoping

- Biodiversity-relevant issues were identified for consideration at scoping stage and these are now detailed in Section 4.3.
- Reference to a zone of influence is provided, including at Section 4.3.

Baseline

- Biodiversity data sources relevant for this County level assessment have been identified and datasets collated/gathered.
- The biodiversity baseline addresses designated sites and other habitats and species of ecological value.
- AA information has been incorporated into the SEA baseline.

(a) no alternative solution available;

Alternatives

• Impacts upon biodiversity are considered under each of the alternatives.

Impact assessment

 Effects on biodiversity are identified and assessed and the AA gives consideration to the interrelationship between biodiversity and potential effects on European Sites.

Mitigation and monitoring

- Taking into account all measures contained within the Plan, all the proposed mitigation measures deriving from the various processes were generally consistent and compatible.
- Indicators and associated targets have been included in the SEA for monitoring European sites.

Reporting

- This SEA ER addresses all biodiversity-related considerations relevant for this county level assessment.
- This SEA ER contains all biodiversity-relevant information, data, figures and maps relevant for this county level assessment.
- This SEA ER has been informed by the findings of the AA.

Communication and consultation

- Submissions including those from the Department of Climate Action, Communications and Environment and the Northern Ireland Environment Authority have been taken on board.
- The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed both the Plan and the SEA.

3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Plan. The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009).

3.4 Scoping

The scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are addressed was broadly decided upon taking into account the collection of environmental baseline data and input from environmental authorities. Scoping allowed the SEA to become focused upon key issues relevant to the environmental

³ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

⁽b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and

⁽c) adequate compensatory measures in place.

components which are specified under the SEA Directive⁴.

All relevant environmental authorities identified under the SEA Regulations as amended, were sent SEA scoping notices by the Council indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council⁵.

Submissions made by Meath County Council, the Environmental Protection Agency, the Department of Communications, Climate Action and the Environment and the Northern Ireland Environment Agency influenced the scope of the assessment undertaken, the findings of which are included in this report.

Key environmental issues raised included those relating to:

- Critical Service Infrastructure;
- Water Related Considerations;
- Flood Risk;
- Biodiversity;
- Habitat/Green Infrastructure Mapping;
- Non-designated;
- Biodiversity;
- Landscape;
- Relationship with other plans and programmes;
- Climate Adaptation / Climate Mitigation;
- Fisheries; and
- Northern Ireland information sources and plans, programmes, etc.

3.5 Environmental Report

This SEA Environmental Report predicts and evaluates the likely environmental effects of

implementing the Plan and relevant alternatives. The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9 - these have been integrated into the Plan.

An earlier version of this report was report was updated in order to take account of relevant recommendations contained in submissions and in order to take account of changes that were made to the original, Draft Plan that was placed on public display.

The Environmental Report is required to contain the information specified in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004), as amended (see Table 3.1).

No significant difficulties have been encountered during the undertaking of the assessment to date.

3.6 Material Alterations

Various Material Alterations were proposed after public display of the Draft Plan. These alterations were subject to screening for SEA and AA and some of the alterations were subject to SEA and Stage 2 AA. All changes to the original Draft Plan that was placed on public display have been mitigated by measures that have been integrated into the Plan including those identified at Section 9 of this report.

Further modifications made to the alterations were made in compliance with the Planning and Development Act (2000), as amended: they were minor in nature and not likely to have significant effects on the environment or adversely affect the integrity of a European site; they did not relate to an increase in the area of land zoned for any purpose; and they did not relate to an addition to or deletion from the record of protected structures.

3.7 SEA Statement

On finalisation of the Plan, an SEA Statement is prepared that includes information on:

⁴ These components comprise biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

⁵ The following authorities were notified: Department of Agriculture, Food and the Marine; Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs; Department of Communications, Climate Action and Environment; Department of Housing, Planning and Local Government; Environmental Protection Agency; Cavan County Council; Louth County Council; and Meath County Council. The Northern Ireland Environmental Agency was also notified.

- How environmental considerations have been integrated into the Plan, highlighting the changes to the Plan which resulted from the SEA process;
- How the SEA Environmental Report and consultations, including transboundary consultations, have been taken into account, summarising the key issues raised in consultations and in the Environmental Report and indicating what action was taken in response;
- The reasons for choosing the Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan as adopted was selected; and
- The measures decided upon to monitor the significant environmental effects of implementing the Plan.

Information Required to be included in the Environmental Report	Corresponding Section of this Report	
(A) Outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes	Sections 2, 5 and 8	
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the plan or programme	Section 4	
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 4, 7 and 8	
(D) Identification of any existing environmental problems which are relevant to the plan or programme, particularly those relating to European protected sites	Section 4	
(E) List environmental protection objectives, established at international, EU or National level, which are relevant to the plan or programme and describe how those objectives and any environmental considerations have been taken into account when preparing the Plan	Sections 5, 7, 8, 9 and Appendix I	
(F) Describe the likely significant effects on the environment	Sections 7 and 8	
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan or programme	Section 9	
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 6, 7 and 8	
(I) A description of proposed monitoring measures	Section 10	
(J) A non-technical summary of the above information	Non-Technical Summary	
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section	

Section 4 Environmental Baseline

4.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects of the current state of the environment for the following environmental components are identified in this section: biodiversity and flora and fauna, population and human health, soil, water, air and climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

This identification includes information that is relevant to lower tier environmental assessments and decision making⁶.

Given the potential for impacts beyond the boundary of the Plan Area, the spatial scope of the SEA takes into account the zone of influence (15km or greater where relevant) of the Plan area.

4.2 Likely Evolution of the Environment in the Absence of a new Plan

In the absence of a new Plan it is uncertain how permission for new development would be applied for and considered.

The 2013-2019 Plan has contributed towards environmental protection within County Monaghan.

If the 2013-2019 Plan was to expire and not be replaced by the 2019-2025 Plan, this would result in a deterioration of the County's planning and environmental protection framework. Although higher level environmental protection objectives – such as those of various EU Directives and transposing Irish Regulations – would still apply, the deterioration of this framework would mean that new development would be less coordinated and controlled. Such development could result in an increase in the occurrence of adverse effects on all environmental components, especially arising those cumulatively. Cumulative effects occur as a result of the addition of many small impacts to create one larger, more significant, impact.

Such adverse effects could include:

- Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed specs, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;
- Habitat loss, fragmentation and deterioration, including patch size and edge effects;
- Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species;
- Potential interactions if effects upon environmental vectors such as water and air are not mitigated;
- Damage to the hydrogeological and ecological function of the soil resource;
- Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology;
- Increase in the risk of flooding;
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)⁷;
- Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts);
- Increases in waste levels;
- Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter;
- Emissions to air including greenhouse gas emissions and other emissions;
- Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities; and
- Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

⁶ Note that Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, requires that the Environmental Report includes the information that may reasonably be required taking into account, inter alia, the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

⁷ Irish Water is responsible for strategic water services.

4.3 Biodiversity and Flora and Fauna

4.3.1 Overview

Ecologically rich areas in Monaghan include hedgerows, woodlands, wetlands, rivers and lakes. These habitats support a variety of species and ecosystems that contribute to the unique biodiversity of Monaghan. Many of these areas are coming under pressure as development intensifies the demand for land. It is imperative that measures are put in place to respond to these pressures and that any development will not have a detrimental effect on the natural environment.

Ecological designations include:

- Special Protection Areas⁸;
- Special Areas of Conservation⁹;
- Natural Heritage Areas and Proposed Natural Heritage Areas¹⁰;
- Nature Reserves¹¹;
- Freshwater Pearl Mussel catchments¹²
- Certain entries to the Water Framework Directive Register of Protected Areas ¹³;

- Freshwater Pearl Mussel catchments¹⁴;
- Wildfowl Sanctuaries (see S.I. 192 of 1979)¹⁵;
- Tree Preservation Orders (TPOs)¹⁶; and
- RAMSAR sites¹⁷.

Relevant ecological designations in Northern Ireland include:

- European Sites (see description above);
- Areas of Special Scientific Interest¹⁸;
- Nature Reserves¹⁹; and
- Ramsar Sites (see description above).

¹⁴ Freshwater pearl mussel is a globally threatened, longlived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment.

¹⁵ Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries.

¹⁶ TPOs are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected by a TPO.

¹⁷ The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares.

⁸ SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - by the DECLG due to their conservation value for birds of importance in the European Union.

⁹ Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) - referred to as the Habitats Directive by the DEHLG due to their conservation value for habitats and species of importance in the European Union.

¹⁰ NHAs are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats.

A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private landowners.
 ¹² Freshwater pearl mussel is a globally threatened, long-

¹² Freshwater pearl mussel is a globally threatened, longlived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment.

¹³ In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by wildlife have been listed on Registers of Protected Areas (RPAs). RPAs include those for Protected Habitats or Species, Shellfish, Salmonid, Nutrient Sensitive Areas, Recreational Waters and Drinking Water.

¹⁸ Areas of Special Scientific Interest (ASSIs) are protected areas that represent the best of Northern Ireland's wildlife and geological sites that make a considerable contribution to the conservation of Northern Ireland's most valuable natural places.

¹⁹ Nature reserves are chosen from among the very best examples of Northern Ireland's wildlife, habitats and geology. They contain a wide range of species, communities and geology and their designation is a public recognition of their importance.

Protected Species include:

- Annex IV (Habitats Directive) species of flora and fauna, and their key habitats (i.e. breeding sites and resting places), which are strictly protected wherever they occur, whether inside or outside the above sites, e.g. otter and bats;
- Other species of flora and fauna and their key habitats which are protected under the Wildlife Acts, 1976-2000, wherever they occur; and
- Protected species and natural • habitats' as defined in the European Liability Directive (2004/35/EC) and Communities European (Environmental Liability) Regulations, 2008, including: Birds Directive -Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur).

The Zone of Influence of the Plan beyond the County area with respect to impacts upon ecology via surface waters upon ecological resources – including designated ecology – can be estimated to be areas within 15km of the County boundary and all downstream areas of catchments which drain the County.

4.3.2 Ecological Networks and Connectivity

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as treelines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological non-designated surrounding sites, the countryside and the more urban areas of the County.

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside European Sites are maintained and it recognises the need for the management of these areas through land use planning and development policies. Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. Ecological networks are composed of linear features, such as treelines, hedgerows, rivers and streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are particularly important for mammals, especially for bats and small birds.

Important ecological corridors within County Monaghan include the River Glyde, River Fane, Ulster Canal and River Blackwater System.

4.3.3 Land Cover Mapping

The CORINE land cover mapping²⁰ for Monaghan classifies land cover under various headings as shown on Figure 4.1. The most common land covers within the County are *pastures* and *land principally occupied by agriculture with areas of natural vegetation*. The north-west of the County includes the highest concentration of land cover categories indicating elevated levels of value to ecology (including *peat bogs, forests* and *land principally occupied by agriculture with areas of natural vegetation*). The landcovers in this part of the County are part of a wider area of similar land covers that extends into Counties Fermanagh and Tyrone in Northern Ireland.

²⁰ CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. Because of the scale of the CORINE data and the method by which it was collected there are likely to be a number of inaccuracies at the local level. It is noted, however, that the land cover shown on the maps is generally accurate. The European Environment Agency, in conjunction with the European Space Agency, the European Commission and member countries is currently updating the CORINE land cover database.

4.3.4 Candidate Special Areas of Conservation

There is one SAC located within County Monaghan, Kilroosky Lough Cluster.

There are two SACs located within and at the County Border with Northern Ireland, Magheraveely Marl Loughs and Slieve Beagh.

There are five other SACs within 15km of the County Lough Oughter and Associated Loughs SAC, Dundalk Bay SAC, Upper Lough Erne (Northern Ireland), Moninea Bog (Northern Ireland) and Slieve Gullion (Northern Ireland).

Figure 4.2 maps SACs (and SPAs) both within the County, and within 15km of the County.

4.3.5 Special Protection Areas

There is one SPA located within County Monaghan, Slieve Beagh.

There are two SPAs located within and at the County Border with Northern Ireland, Upper Lough Erne and Slieve Beagh-Mullaghfad-Lisnaskea.

There are three other SPAs within 15km of the County; Dundalk Bay SPA, Lough Oughter SPA and Stabannan-Braganstown SPA.

Figure 4.2 maps SPAs (and SACs) both within the County, and within 15km of the County.

4.3.6 Natural Heritage Areas

There is one Natural Heritage Area in Monaghan, Eshbrack Bog.

There are various *proposed* Natural Heritage Areas (pNHAs) within²¹ and within 15km²² of the County.

Figure 4.3 maps NHAs and pNHAs in County Monaghan.

4.3.7 Nature Reserves

There are no Nature Reserves in County Monaghan however there is one in Northern Ireland, Reilly and Gole Woods Nature Reserve, located c. 9km to the west of the County (see Figure 4.3).

4.3.8 Areas of Special Scientific Interest

There are eight²³ Areas of Special Scientific Interest (ASSIs) located within and at the County Border with Northern Ireland. There are various others²⁴ located within Northern Ireland, within 15km of the County Border with Monaghan. These sites are mapped on Figure 4.3.

4.3.9 Registers of Protected Areas

In response to the requirements of the Water Framework Directive, a number of water bodies, or parts of water bodies, which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife, have been listed on Registers of Protected Areas (RPAs).

²¹ Dromore Lakes, Emy Lough, Glaslough Lake, Lough Fea Demesne, Lough Naglack, Monmurray Grassland, Muckno Lake, Cordoo Lough, Lough Ross, Ballyhoe Lough, Loughbawn House Loughs, Black And Derrygoony Loughs, Creevy Lough ,Drumakill Lough, Drumgole Lough, Drumreaske Lough, Gibson's Lough, Lough Egish, Rafinny Lough, Lough Smiley, Monalty Lough, Ulster Canal (Aghalisk), Wright's Wood, Tassan Lough, Spring And Corcrin Loughs, Lisarilly Bog, Killyhoman Marsh, Corcreeghy Lake And Woodland, Rosefield Lake And Woodland, Mullaghmore Lake (South), Kilroosky Lough Cluster, Lisabuck Lough, Killyvilly Lough, Lislannan Bog, Drumcor Lough and Nafarty Fen.

²² Cootehill Church, Lough Oughter And Associated Loughs, Dundalk Bay, Stabannan-Braganstown, Corstown Loughs, Annagh Lough (Ballyconnell), Drumkeen House Woodland, Lough Garrow And, Lough Gubdoo, Madabawn Marsh, Ardee Cutaway Bog, Darver Castle Woods, Drumcah, Toprass And Cortial Loughs, Trumpet Hill (Louth), Breakey Loughs, Mentrim Lough, Louth Hall And Ardee Woods, Stephenstown Pond, Kildemock Marsh and Reaghstown Marsh.

²³ Slieve Beagh, Kilroosky Lough, Summerhill Lough, Burdautien Lough, Finn Floods, Drumacrittin Lough, Drumcarn and Roeveagh

²⁴ Knockballymore Lough, Moninea Bog, Kiltubbrid Loughs, Dernish Island, Inishroosk, Glenmore Wood, Upper Lough, Erne - Crom, Killymackan Lough, Upper Lough Erne -Galloon, Upper Lough Erne – Belleisle, Upper Lough Erne – Trannish, Benburb, Annachullion Lough, Fardross Stream, Tullybrick Lough, Straghans Lough, Crossbane Lough, Cashel Loughs, Slieve Gullion, Lurgan Lough, Loughaveely, Drumlougher Lough, Levallymore, Carrickastickan, Tullyard, Cullentra Lough, Fymore Lough, Cam Lough, Derrycloony Lough, Black Lough (Tyrone), Lough Corry, Rehaghy Wood, Lough McCall, Lough na blaney bane, Round Lough and Lough Fadda, Camlough Quarry, Lislea, Mullaghbane, Glendesha, Cloghinny, Knocknacloy, Caledon and Tynan, Benburb - Milltown, Drummond Quarry, Ballagh, Carnmore, Cloghcor Lough, Cavan and Drumarg.

There are a number of water dependent habitats in the County which have been listed on these register – these relate to designated SACs and SPAs (see Sections 4.3.4 and 4.3.5).

The River Proules Upper (through Carrickmacross), the River Proules Lower and (downstream Monalty Lough of Carrickmacross), the River Blackwater (downstream of Monaghan Town) and Lough Muckno (downstream of Castleblaney) are listed on the RPA for Nutrient Sensitive Waterbodies. Nutrient sensitive areas are those waterbodies listed in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC on Urban Waste Water Treatment and transposing Regulations. The waterbody containing the sensitive area is used to represent the nutrient sensitive area.

There are various water bodies within the County that are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (SI No. 278/2007). These water bodies are identified on the RPAs for Drinking Water Ground or Surface Water Bodies. Lakes listed include Emy, More, Killcoran, Muckno, Mill, White Rockcorry, Egish, Bawn, Nagarnaman and Monalty. Rivers Dromore, Fane, systems listed include Annalee, Moynalty, Dee and Glvde. Groundwater beneath the entire county is included on the Drinking Water Ground Water Body RPA.

Downstream of County Monaghan, Dundalk Bay is an entry to the RPA for Shellfish Areas. This RPA lists those areas delineated originally as the 14 shellfish production areas under the Irish Shellfish Regulations 1994, and updated in 2009 to include polygons delineated in accordance with European Communities (Quality of Shellfish Waters) (Amendment) Regulations 2009.

4.3.10 Ramsar Sites

The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory.

There are no Ramsar Sites within County Monaghan however there are three located within and at the County Border with Northern Ireland; Magheraveeley Marl Loughs, Slieve Beagh and Upper Lough Erne (see Figure 4.3). There is also one downstream at Dundalk (Dundalk Bay).

4.3.11 Freshwater Pearl Mussel Sensitive Areas

Figure 4.3 and Figure 4.4 shows Freshwater Pearl Mussel, or *Margaritifera*, Sensitive Areas within and adjacent to the County. Freshwater pearl mussel is a globally threatened, longlived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment.

There is one category of Sensitive Area located within the County, "Catchments with previous records of Margaritifera, but current status unknown". This category means that while there are no recent records of freshwater pearl mussel from these catchments, in most cases there has been little, if any, survey for the species since 1970. The National Parks and Wildlife Service holds very little information on these populations. If any plans, or potentially damaging developments and activities are proposed for these catchments, freshwater pearl mussel should be considered as a constraint and dedicated survey is recommended.

Part of County Cavan is located within a "Catchment of other extant populations". This category means that these mussel populations may lie (in part) within SAC, other nature conservation sites or in the wider countryside. Those populations within SACs were not considered of sufficient quality to warrant designation for the species and detailed restoration objectives, targets, plans or measures are unlikely to be developed. However, the potential effects of any plans, developments or activities on the populations, including the potential to cause 'environmental damage' as per the Environmental Liability Directive and Regulations, must be determined through SEA, EIA or other ecological assessment. The National Parks and Wildlife Service holds some detailed information on the distribution and abundance of freshwater pearl mussels in a small number of these catchments.

4.3.12 Fen Survey

The Monaghan Fen Survey (Wetland Surveys on behalf of Monaghan County Council, National Parks and Wildlife Service and Department of the Environment, Heritage and Local Government, 2008) provides information on fens in County Monaghan. A fen is a wetland system with a permanently high-water level at or just below its surface. Its principal source of nutrients is from surface or groundwater and the substrate is an alkaline to slightly acidic peat soil. There are currently 36 Fens listed for County Monaghan within the Irish Peatland Conservation Council Sites Database (October 2017):

- Aghacloghan
- Aghnamullen
- Annagheane Lough
- Black & Derrygoony Loughs
- Bocks Upper
- Corvilla-Rakeen
- Cornaglare
- Crinkill Lough
- Crumlin Lough
- Drumakill Lough
- Drumcarn Fen (South)
- Drumgallan Bog
- Dunaree
- Eshbrack Bog (Slieve Beag Mountains)
- Gibsons Lough
- Killycooly Lough
- Killyhoman Marsh
- Killyneill Fen
- Killyvilly Lough
- Kilroosky Lough Cluster
- Lisarilly Bog
- Lisinisky Marsh
- Lislannan Bog
- Lisnalee
- Lisqugny (Corlonford Fen)
- Lough Fea Demesne
- Lough Ross
- Lough Smiley
- Loughbawn House Loughs
- Morgans Lough
- Muckno Lake

4.3.13 Human Management of Land

Human management of land is essential for the existence of many of the habitats within the managed landscape of the County. Figures from the CSO show overall increase (+2.41%) in the population involved in land management in the County between 2011 and 2016 - see Table 4.1.

Table	4.1	Persons	aged	15	years	and		
over at work in Monaghan County								

Broad Industrial Group	2011	2016	Change
Agriculture, Forestry and Fishing	2,818	2,850	+68 (+2.41%)
Total Population involved in Land Management	2,818	2,850	+68 (+2.41%)
Total Persons aged 15 years and over	28,516	29,030	+512 (+1.79%)

4.3.14 Existing Problems

Previous developments such as residential and commercial developments, along with the provision of transportation infrastructure, have resulted in loss of biodiversity and flora and fauna across the County as some semi-natural areas within the County have been replaced by impermeable surfaces.

Both the 2013-2019 County Development Plan and the 2019-2025 County Development Plan include robust measures to contribute towards the protection of biodiversity and flora and fauna and associated environmental vectors including water, soil and air.

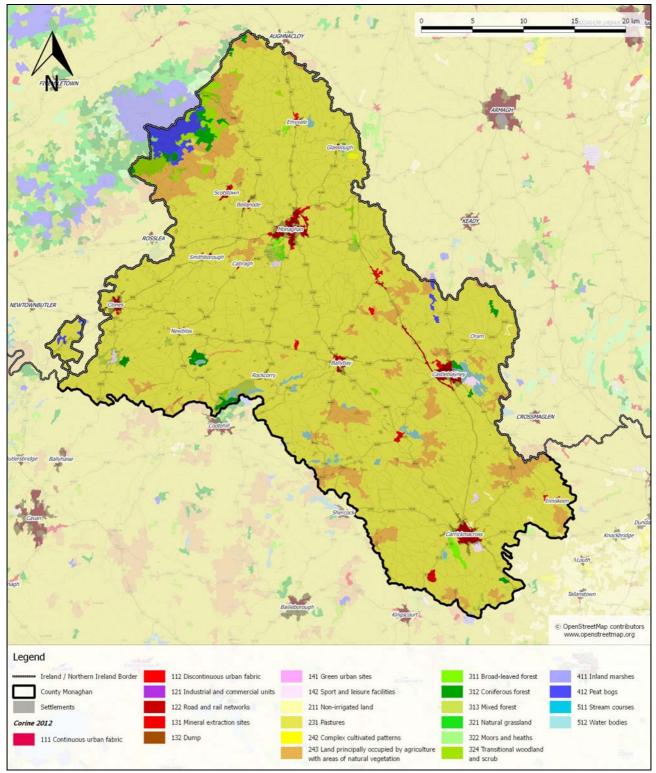
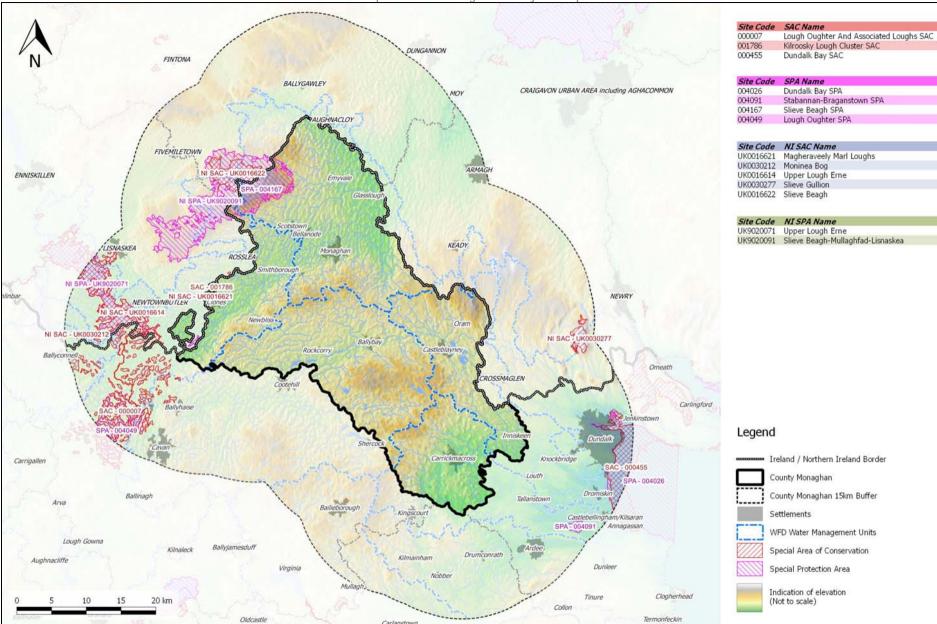


Figure 4.1 CORINE Land Cover 2012 Source: EPA (2016)



SEA Environmental Report for the Monaghan County Development Plan 2019-2025

Figure 4.2 SPAs and cSACs within the County Source: NPWS (datasets downloaded September 2017)

SEA Environmental Report for the Monaghan County Development Plan 2019-2025

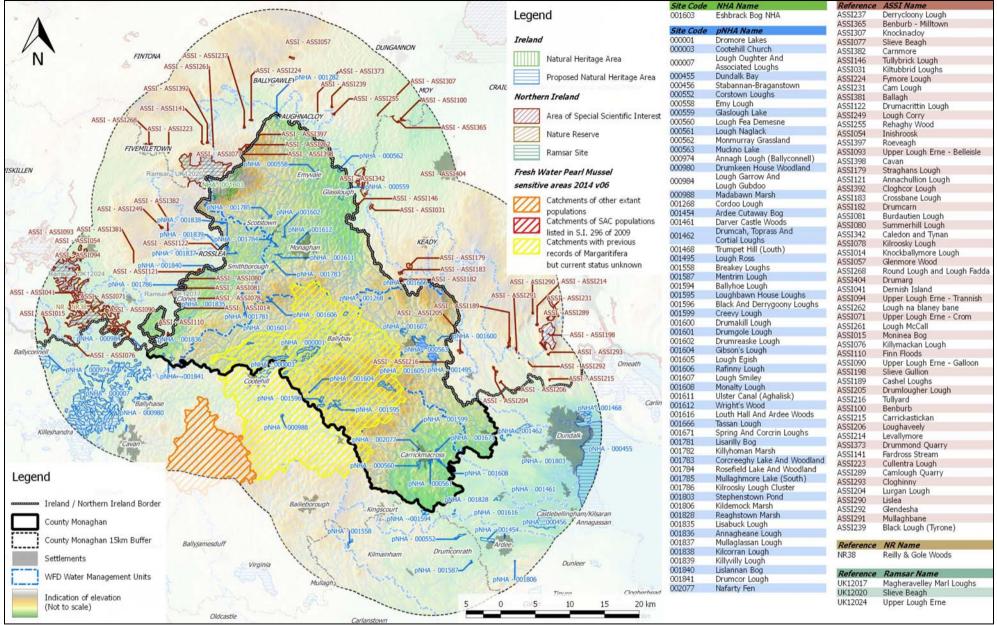


Figure 4.3 Natural Heritage Areas and Proposed Natural Heritage Areas Source: NPWS (datasets downloaded September 2017)

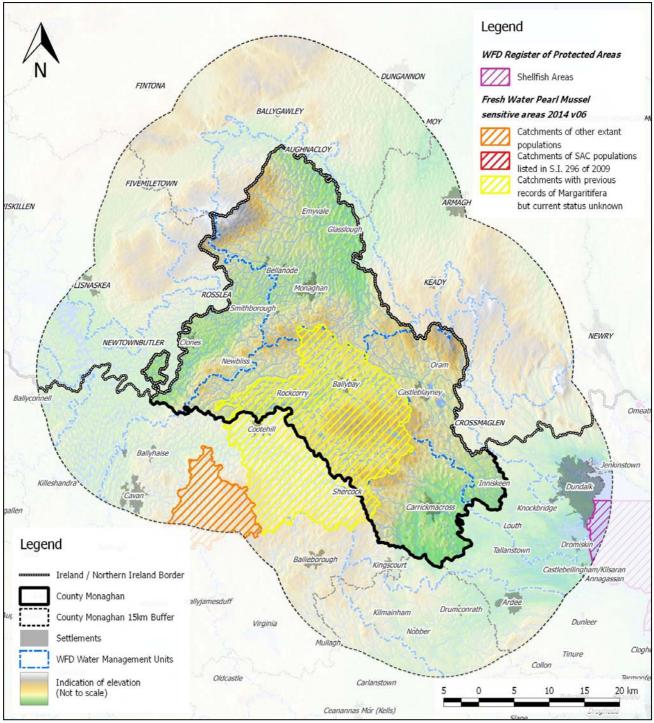


Figure 4.4 Freshwater Pearl Mussel Sensitive Areas and Shellfish Register of Protected Areas Source: NPWS (datasets downloaded September 2017)

4.4 Population and Human Health

4.4.1 Introduction

The new population provided for in the Plan interact with various environmental components. Potential interactions include:

- Recreational and development pressure on habitats and landscapes;
- Increase in demand for waste water treatment at the municipal level;
- Increase in demand for water supply;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

4.4.2 Population

The Census 2016 results show that Monaghan's population has grown by 891 persons since Census 2011, to 61,386 persons. This represents an increase of 1.5% over the intercensal period, an annual increase of 0.3% against a state average of 0.74%. These figures follow continuous population growth rates in Monaghan since the 1996 Census.

Given the change in economic trends nationally over the last ten years, along with a strong focus on emigration, the population growth within County Monaghan is considered reasonable. However, within the border counties Monaghan's population growth is relatively low to other counties over the last ten years.

Having regard to national economic conditions which impacted on population change over the 2011-2016 period, trends considered over a longer-term period demonstrate more measured and sustainable growth patterns. Taking a longer-term view of County Monaghan over the period 1991 to 2016 (25 years), the population of the County has increased by almost 10,093 persons demonstrating positive growth patterns, notwithstanding cycles of economic and population decline within this period.

In addition, positive population growth over the last ten years is also recorded at a rate of 1% per annum. Census figures indicate that there is a natural population increase and a decline in migration figures, and this is a trend which is likely to continue with anticipated continued economic growth.

4.4.3 Human Health

The impact of implementing the Plan on human health is determined by the impacts that the Plan will have upon environmental Environmental vectors. vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings. Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a land-use plan began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population.

4.4.4 Existing Problems

There is historic and predictive evidence of flooding in various locations across the County (see information on Strategic Flood Risk Assessment at Section 4.6.5). All recommendations made by the SFRA in relation to flood risk management have been integrated into the Plan.

Information on the status of groundwaters and surface waters is provided under Section 4.6 while compliance issues in relation to water services are detailed under Section 4.8.1.

4.5 Soil

4.5.1 Introduction

Soil is the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil can be considered as a non-renewable natural resource because it develops over very long timescales. It is an extremely complex, variable and living medium and performs many vital functions including: food and other biomass production, storage, filtration and transformation of many substances including water, carbon, and nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance. Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

To date, there is no legislation which is specific to the protection of soil resources. However, there is currently an EU Thematic Strategy on the protection of soil which includes a proposal for a Soil Framework Directive which proposes common principles for protecting soils across the EU.

4.5.2 Soil Types

Soil types, as classified by Teagasc in cooperation with the Forest Service, EPA and GSI are mapped on Figure 4.5. The soils of the County support a variety of uses including agriculture.

Most soils in Monaghan are gleys, which tend to be very sticky in wet conditions. The weak structure and poor drainage of these soils mean they are easily damaged by grazing stock which in turn limits the length of the grazing season and increases the amount of fodder required. If well managed however these soils have a moderately high pasture production capacity.

There is a band of acidic brown earths stretching from the environs of Clones, across the County towards Glaslough. Basic brown earths underlie an area to the north and south of Clones along the County border. The upland area at Slieve Beag are underlain by blanket peat soils. Areas of Mineral alluvium are found along many of the County's water bodies.

4.5.3 County Geological Sites

The Irish Geological Heritage Programme coordinated by the Geological Survey of Ireland (GSI) conducted an audit of geological sites in County Monaghan following a study in 2013. The audit did not identify any nationally important sites in the County however 20²⁵ locally important geological sites have been classified as County Geological Sites (CGS). The identification of such sites was an objective of the Monaghan County Development Plan 2013-2019 which has been realised.

4.5.4 Potentially contaminated lands and landfill sites

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species.

As is the case with other urban and semiurban areas across the country, there is potential for contamination at sites within County Monaghan, especially where land uses occurred in the past in the absence of environmental protection legislation.

4.5.5 Radon

The greatest health risk from radiation in Ireland is caused by radon. The presence of radon gas, a naturally occurring radioactive gas that originates from the decay of uranium in rocks and soils, occurs across the country. It accounts for more than half of the total radiation dose received by the Irish population. As a known carcinogen, in the same category as tobacco smoke and asbestos it is a cause of lung cancer. Exposure to radon

²⁵ These sites comprise Alphuca Cave (Fin Mc Cools Cave), Ballyloughan, Turloughs, Calliagh, Carrickatee Hill, Clontibret Stream, Creevy Cave, Donaghmoyne Rising, Fin Mc Cool's Chair and Killmactrasna Cave, Hope Mine Knocknacran Gypsum Mine, Drumlin, Lemgare, Leeg, Morkeeran Quarry, Moylan Lough, Rockorry-Cootehill ribbed moraine, Scotshouse- Redhills crosscutting ribbed, moraines, Tamlat, Tassan, Tiragarvan and Tullyvaragh.

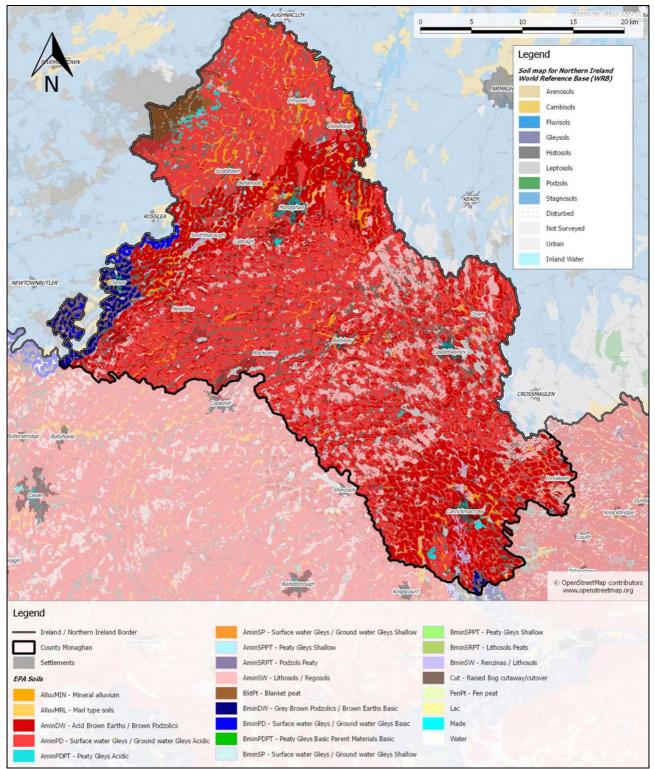
for long periods or at high concentrations can lead to lung cancer.

A High Radon Area is any area where it is predicted that 10 per cent or more of homes will exceed the Reference Level of 200 Becquerel per cubic metre (Bq/m³). The Government's Building Regulations require that all new homes in High Radon Areas are installed with a radon barrier. A high radon level can be found in any home in any part of the country, but these homes are more likely to be located in High Radon Areas.

Some of the areas within the County are above the Reference Level. These levels are relatively normal in comparison to those experienced elsewhere within the country (mapping available at http://www.epa.ie/radiation/radonmap).

4.5.6 Existing Problems

Legislative objectives governing soil were not identified as being conflicted with.





4.6 Water

4.6.1 The Water Framework Directive

4.6.1.1 Introduction and Requirements

The Water Framework Directive (WFD) is implemented at River Basin Districts (RBD) level. An RBD is an area of land that is drained by a large river or number of rivers and the adjacent estuarine/coastal areas. The National River Basin Management Plan

For the purpose of assessment, reporting and management - water has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies. River basin districts are also divided into multiple sub-basins. Sub-basins are areas smaller than the districts that comprise the land from which all surface run-off flows through a series of streams, rivers and possibly, lakes to a particular point in a water course. Sub-basins do not necessarily include coastal or estuarine waters.

Monaghan is located within two International River Basin Districts for the purpose of implementation of the WFD; the North Western International RBD and Neagh Bann International RBD.

4.6.2 Surface Water

4.6.2.1 WFD Surface Water Status

The Zone of Influence of the Plan beyond the County Border with respect to impacts upon waters can be estimated to be all bodies of groundwater hydrologically connected and all surface waters downstream areas of catchments²⁶ which drain the County. This includes downstream rivers and coastal waters in Northern Ireland that are part of the North Western and Neagh Bann International River Basin Districts.

4.6.2.2 WFD Surface Water Status

The WFD defines surface water status as the general expression of the status of a body of surface water, determined by the poorer of its ecological status and its chemical status. For example, if the ecological status is "good" and the chemical status "moderate" the overall status of the surface water body is identified as the poorer of the two i.e. as "moderate" status. Thus, to achieve good surface water status both the ecological status and the chemical status of a surface water body need to be at least good.

Ecological status is an expression of the structure and functioning of aquatic ecosystems associated with surface waters. Such waters are classified as of good ecological status when they meet Directive requirements.

Chemical Status is a pass/fail assignment with a failure defined by a face-value exceedance of an Environmental Quality Standards (EQS) for one or more Priority Action Substances (PAS) listed in Annex X of the Water Framework Directive (WFD). The EQS values for individual PAS substances are set at European level. Good surface water chemical status means that concentrations of pollutants in the water body do not exceed the environmental limit values specified in the Directive.

There is a data gap relating to WFD surface water status data for certain waterbodies and these are identified as unassigned²⁷ when it comes to WFD status 2010-2015.

Water quality status for surface water bodies across the County and surrounding areas is indicated on Figure 4.10. In the Republic of Ireland water status is shown by the individual water body whereas in Northern Ireland it is shown by the catchment area.

Degradation of water quality largely occurred between the mid-1970s and the late 1990s²⁸ and today a significant number of water bodies in County Monaghan are now assigned a status of less than "good". Most water bodies are of "moderate", "poor" or "bad status and will need improvement in order to achieve the objectives of the Water

²⁶ A catchment is an area of land contributing to a waterbody, with all the water ultimately running off to a single outlet. The WFD requires water quality management to be based on natural river catchments i.e. by reference to the natural, environmental unit rather than by reference to administrative or legal boundaries, which often fragment river catchments.

 ²⁷ Ecological status is not assigned and the term *unassigned status* applies in respect of these waterbodies.
 ²⁸ Monaghan County Development Plan 2013-2019

Framework Directive. The best water quality is in sub-catchments in the north of the County, including along the border with Northern Ireland and beyond.

Pressures on water quality identified in the County include urban waste waters, agriculture, unsewered properties (commercial and domestic), landfills and extractive industry, hard surface runoff, siltation, alien invasive species, use of pesticides and morphological changes²⁹.

Factors such as the drumlin topography, soil types and hydrology, contribute to water quality problems. Eutrophication of waters (i.e. excess enrichment by phosphorus) is some promising widespread and whilst improvements in river phosphate and ammonia levels are evident, lake recovery from eutrophication will take a considerable time. Excess soil phosphorus may also contribute to eutrophication and nutrient balancing. Nutrient management planning is a key tool in addressing this issue. Despite the improvements in some of the general conditions of river water quality, the biology of river and stream habitats remains impacted. Restoration of degraded river catchments is a complex process.

4.6.2.1 Surface Waters supplying Drinking Water

Monaghan County Council have mapped the catchments of surface waters that supply drinking water and therefore are likely to be sensitive to pollution. These are shown on Figure 4.7.

4.6.3 Ground Water

4.6.3.1 Introduction

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable, allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal waters. Groundwater is the part of the subsurface water that is in the saturated zone - the zone below the water table, the uppermost level of saturation in an aquifer at which the pressure is atmospheric, in which all pores and fissures are full of water.

4.6.3.2 WFD Groundwater Status

For groundwater bodies, the approach to classification is different to that for surface water. For each body of groundwater, both the chemical status and the quantitative must be determined. Both have to be classed as either *good* or *poor*. The WFD sets out a series of criteria that must be met for a body to be classed as good chemical and quantitative status.

The EPA has classified groundwater status in County Monaghan as generally being of "good" status. There is an area around a waste facility (Scotch Corner Landfill) to the north east of Ballybay that is classified as being of "poor" status.

4.6.3.3 Groundwater Productivity and Vulnerability

The Geological Survey of Ireland (GSI) rates groundwaters according to both their vulnerability to pollution and their productivity.

Groundwater Vulnerability is a term used to intrinsic geological represent the and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes³⁰.

Figure 4.8 maps groundwater vulnerability for the County. Much of the southern half of the County is underlain by "extreme" or "extreme – rock at or near surface or karst" groundwater vulnerability. Much of the northern half of the county is underlain by "low" or "moderate vulnerability".

The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity (see Figure 4.9). Much of County Monaghan is

²⁹ Structural alterations such as river straightening; construction of embankments, weirs, dams, port facilities and dredging can create conditions such that a water body is no longer able to support the natural ecology which would have existed prior to such modifications.

³⁰ Source: Geological Survey of Ireland (2014) Metadata

characterised as being underlain by a *poor aquifer* Carrickmacross is underlain by a *regionally important aquifer* as is a band stretching from Clones to Monaghan and to south of Glaslough. Much of the County to the north of this band is identified as a *locally important aquifer*, where productivity only generally occurs in local areas.

Groundwater protection within the County is carried out through the County's Groundwater Protection Scheme which has been undertaken jointly between the Geological Survey of Ireland and Monaghan County Council. The purpose of the scheme is to preserve the quality of groundwater, particularly for drinking water purposes, for the benefit of present and future generations. The scheme identifies the vulnerability of areas within the County and Groundwater protection responses for existing and new potentially polluting activities.

4.6.3.4 Groundwater Source Protections Zones

Groundwater Source Protection Area delineation provides an assessment of the land area that contributes groundwater to a borehole or spring. Source reports have been undertaken by the GSI on behalf of Local Authorities since the mid-1990s. Source Protection Zones within County Monaghan are shown Figure 4.9. Groundwater on vulnerability classifications within these zones are also shown.

4.6.4 WFD Registers of Protected Areas

In response to the requirements of the Water Framework Directive, a number of water bodies, or parts of water bodies, which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife, have been listed on Registers of Protected Areas (RPAs). There are a number of water dependent habitats in the County which have been listed on these registers – these relate to designated SACs and SPAs (see Sections 4.3.4 and 4.3.5).

The Upper River Proules (through Carrickmacross), the River Proules Lower and Monalty Lough (downstream of River Carrickmacross), the Blackwater (downstream of Monaghan Town) and Lough Muckno (downstream of Castleblaney) are listed on the RPA for Nutrient Sensitive

Waterbodies. Nutrient sensitive areas are those waterbodies listed in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC on Urban Waste Water Treatment and transposing Regulations. The waterbody containing the sensitive area is used to represent the nutrient sensitive area.

There are various water bodies within the County that are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (SI No. 278/2007). These water bodies are identified on the RPAs for Drinking Water Ground or Surface Water Bodies. Lakes listed include Emy, More, Killcoran, Muckno, Mill, White Rockcorry, Egish, Bawn, Nagarnaman and Monalty. Rivers systems listed include Dromore, Fane, Annalee, Movnalty, Dee and Glvde. Groundwater beneath the entire county is included on the Drinking Water Ground Water Body RPA.

Downstream of County Monaghan, Dundalk Bay is an entry to the RPA for Shellfish Areas. This RPA lists those areas delineated originally as the 14 shellfish production areas under the Irish Shellfish Regulations 1994, and updated in 2009 to include polygons delineated in accordance with European Communities (Quality of Shellfish Waters) (Amendment) Regulations 2009.

4.6.5 Flooding

Flooding is an environmental phenomenon which can have adverse impacts upon human health, the economy and our society. The existence of flood risk within County Monaghan can be illustrated by historical information on the locations and/or extents of known flooding events. A Strategic Flood Risk Assessment (SFRA) has been prepared alongside the preparation of the Plan in response to requirements contained in The Planning System and Flood Risk Management Guidelines for Planning Authorities (DEHLG/OPW, 2009). The SFRA has facilitated the integration of flood risk management considerations into both the land use zoning and written provisions contained within the Plan. Flood risk within County Monaghan arises from various sources including fluvial (from rivers/streams throughout the County), pluvial (from rainwater as it falls and accumulates at locations across the County), groundwater (at a number of locations to the

north and south of Carrickmacross) and surface drainage systems.

4.6.6 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD³¹, based on available data on the status of waters within the County, most surface water bodies and one groundwater body (underlying Scotch Corner Landfill) within the County will need improvement in order to comply with the objectives of the WFD. Further details are provided in the subsections above.

The Plan includes provisions that will contribute towards improvements in the status of waters.

There is historic and predictive evidence of flooding in various locations across the County. Recommendations made by the SFRA in relation to flooding risk management have been integrated into the Plan.

³¹ Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the river basin management plan.

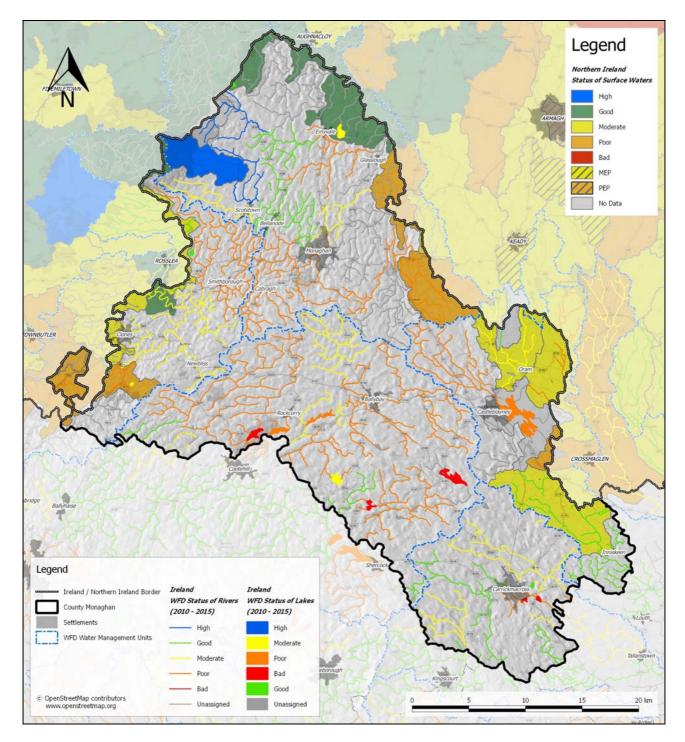


Figure 4.6 Status of Surface Waters 2010-2015 Source: EPA (2015)

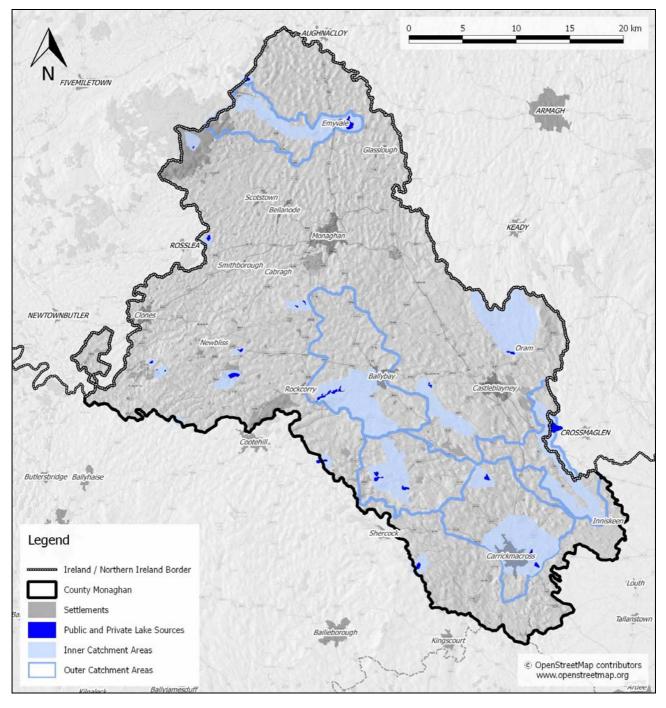


Figure 4.7 Surface Waters Supplying Drinking Water Source: Monaghan County Council

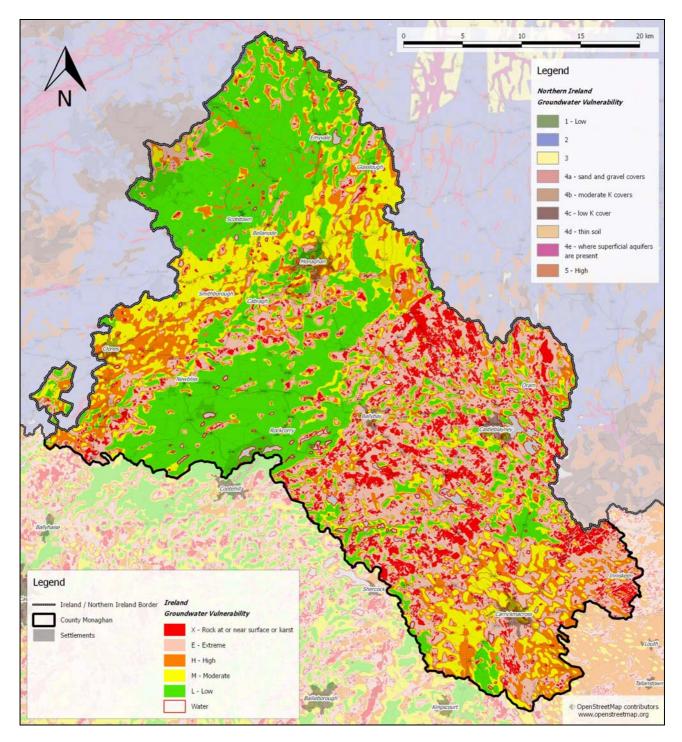


Figure 4.8 Groundwater Vulnerability Source: GSI (2006)

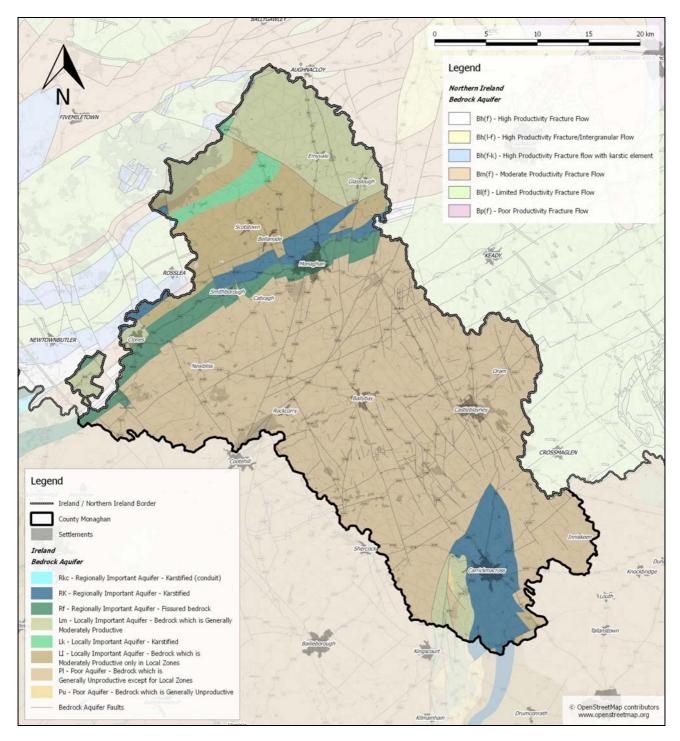


Figure 4.9 Aquifer Productivity Source: GSI

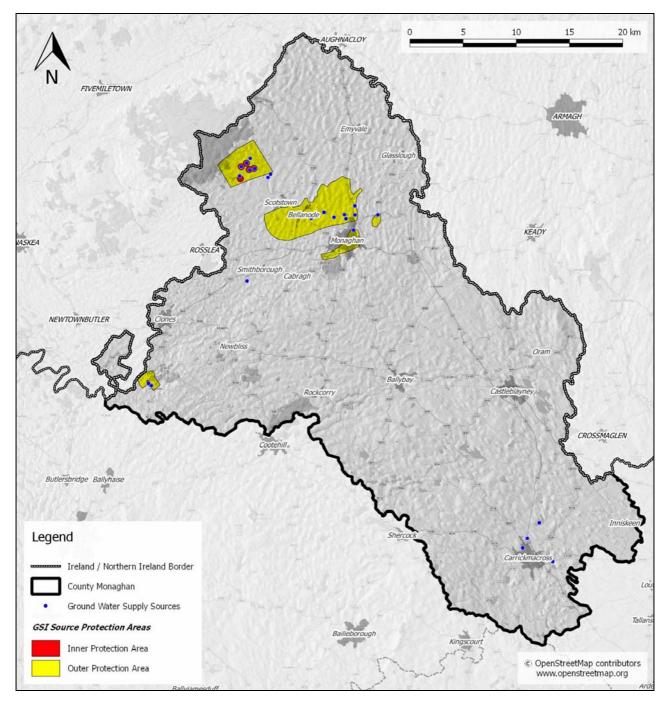


Figure 4.10 Source Protections Zones Source: GSI

4.7 Air and Climatic Factors

4.7.1 Climatic Factors

The key issue involving the assessment of the effects of implementing the Plan on climatic factors relates to greenhouse gas emissions arising from transport. Climatic factors also interact with flooding (see Section 4.6.5).

The Plan facilitates improvements in sustainable mobility, thereby facilitating reductions in and limiting increases of greenhouse gas emissions. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic. This is particularly relevant through the accommodation of new development, including consolidation, within each of the settlements that are provided with land use zoning by the Plan. Land-use planning contributes to what number and what extent of journeys occur. By addressing journey time through land use planning and providing more sustainable modes and levels of mobility, noise and other emissions to air and energy use can be minimised. Furthermore, by concentrating populations, greenfield development - and its associated impacts - can be minimised and the cost of service provision can be reduced.

Ireland's emissions profile has changed considerably since 1990, with the contribution from transport more than doubling and the share from agriculture reducing since 1998. Travel is a source of:

- 1. Noise;
- 2. Air emissions; and
- Energy use (42.2% of Total Final Energy Consumption in Ireland in 2015 was taken up by transport, the largest take up of any sector)³².

Over the period 1990 to 2015, the biggest shift in the transport market has been from petrol to diesel. While consumption of both fuels increased, consumption of diesel increased by 305% compared with just a 14% increase for petrol. Diesel's overall market share grew from 33% in 1990 to 57% in 2015. Transport energy use peaked in 2007 and fell each year thereafter until 2013. As the economy started to expand again transport energy use grew in 2013, 2014 and 2015, by 4.2%, 4.0% and 5.9% respectively, to 4,789 ktoe. Transport energy in 2015 was 16% below the peak in 2007, or back to 2004 levels.

publication The FPA 2017 Ireland's Greenhouse Gas Emission Projections 2016-2035 provides an assessment of Ireland's progress towards achieving its emission reduction targets set down under the EU Effort Sharing Decision (Decision No 406/2009/EC) for the years 2013-2020 and a longer term assessment based on current projections. Ireland's 2020 target is to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, the built environment, waste and non-energy intensive industry) on 2005 levels with annual limits set for each year over the period 2013-2020. The EPA's Report identifies that:

- For 2016, total national greenhouse gas emissions are estimated to be 61.19 million tonnes carbon dioxide equivalent (Mt CO₂eq), 3.5% higher than emissions in 2015 and similar to 2009 levels.
- In the last 2 years, national total emissions have increased by 7.3%. In the same period, emissions in the ETS³³ sector have increased by 11.2% and in the non-ETS sector by 5.8%.
- Agriculture emissions increased by 2.7% in 2016 (driven by higher dairy cow numbers and increases in milk production)
- Greenhouse gas emissions from the Transport sector increased by 3.7% in 2016. This is the fourth successive year of increases in transport emissions.
- Agriculture and Transport accounted for 73.3% of total non-ETS emissions in 2016.
- Emissions in the Energy Industries sector show an increase of 6.1%

³² Sustainable Energy Ireland (2016) Energy in Ireland 1990 – 2015

³³ The EU emissions trading system (EU ETS) was launched in 2005 as the world's first international company-level 'cap-and trade' system for reducing emissions of greenhouse gases cost-effectively. The cap makes sure that CO2 becomes a product and, thus, CO2 is valued at a price, which is determined by the supply and demand at the (trading) market.

which is attributable to an increase in natural gas use for electricity generation by 27.7% and reductions of 6.5% and 15.6% respectively for electricity generated from wind and hydro renewables. This is reflected in a 3.8% increase in the emissions intensity of power generation in 2016 compared with 2015. Renewables now account for 25.6% of electricity generated in 2016 (down from 27.3% in 2015). Ireland exported 2.4% of electricity generated in 2016.

- Emissions from the Manufacturing Combustion³⁴ sector decreased by 0.4% in 2016.
- The Industrial Processes sector emissions increased by 7.1%, mainly from increased cement production. Cement process emissions increased by 8.6% in 2016.
- Greenhouse gas emissions from the Residential sector remained almost unchanged with a small increase of 0.1%.
- Emissions from the Waste sector decreased by 1.2% in 2016.

These figures indicate that Ireland will be in compliance with its 2016 annual limit set under the EU's Effort Sharing Decision (ESD), 406/2009/EC3. However, the EPA's latest projections indicate that Ireland will exceed its annual targets in 2017.

The 2017 publication identifies that:

- For 2020 it is estimated that non-ETS sector emissions are projected to be 4% 6% below 2005 levels by 2020. This compares to the target of 20% below 2005 levels by 2020.
- To determine compliance under the Effort Sharing Decision, any overachievement of the binding emission limit in a particular year (in the period 2013 to 2020) can be banked and used towards compliance in a future year. Under both scenarios Ireland is expected to exceed the annual limit in 2016.
- Under the *With Existing Measures* scenario³⁵, Ireland is projected to

cumulatively exceed its obligations by 13.7 Mt of CO_{2eg} over the period 2013-2020. Under the With Additional scenario, Ireland Measures is projected to cumulatively exceed its obligations by 11.5 Mt of CO_{2eq} over the period 2013-2020. This takes into account the overachievement of the annual limits in the period 2013-2015 which is banked and used in the years 2016-2020. Using this mechanism Ireland is projected to cumulatively exceed its obligations in 2019.

 Agriculture and transport dominate non-ETS sector emissions; emission trends from these sectors will be key determinants in terms of meeting targets with both projected to increase in the period to 2020.

Ireland's National Policy position is to reduce CO₂ emissions in 2050 by 80% on 1990 levels across the Energy Generation, Built Environment and Transport sectors, with a goal of Climate neutrality in the Agriculture and Land-Use sector. The 2016 emissions for all these sectors are heading in the wrong direction, making achievement of long-term goals more difficult.

National Mitigation Plan 2017, The first prepared by the Department of Communications. Climate Action and Environment, represents an initial step to set Ireland on a pathway to achieve the level of decarbonisation required. It is a whole-of-Government Plan, reflecting in particular the central roles of the key Ministers responsible for the sectors covered by the Plan -Electricity Generation, the Built Environment, Transport and Agriculture, as well as drawing

anticipated impact of policies and measures that were in place (and legislatively provided for) by end of 2015.

- 37.3% renewable electricity share (full target is 40%)
- 9% renewable heat share (full target is 12%)
- 8% renewable transport share (full target is 10%)

³⁴ Manufacturing Combustion; includes combustion of fuels in Industry and Construction, both in ETS and non-ETS

³⁵ The *With Existing Measures* scenario is based primarily on Sustainable Energy Association of Ireland's (SEAI's) Baseline energy forecast which incorporates the

The *With Additional Measures* scenario is based on SEAI's energy forecast (which includes existing and planned policies and measures) however this year's energy forecast has been risk adjusted to reflect current progress and the trajectory towards achieving 2020 targets. This includes an expected shortfall in achieving full renewable energy targets. In this regard, by 2020, the *With Additional Measures* scenario assumes Ireland will have achieved:

on the perspectives and responsibilities of a range of other Government Departments.

The National Adaptation Framework (Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for.

In 2015, Northern Ireland's greenhouse gas emissions were estimated to be 20.7 million tonnes of carbon dioxide equivalent³⁶. This was an increase of 0.6% compared to 2014. The longer term trend shows a decrease of 17% compared to the base year of 1990^{37} . The largest sectors in terms of emissions in 2015 were agriculture (29%), transport (21%) and energy supply (19%). Most sectors showed a decreasing trend since the base year. The largest decreases, in terms of tonnes of carbon dioxide equivalent, were in the energy supply, residential and waste sectors. They were driven by improvements in energy efficiency, fuel switching from coal to natural gas, which became available in the late 1990s, and the introduction of methane capture and oxidation systems in landfill management. Northern Ireland accounted for 4.2% of UK greenhouse gas emissions in 2015. Northern Ireland's latest greenhouse gas projection estimates that emissions in 2030 will total 17.3 million tonnes of carbon dioxide equivalent. This would mean a 31.2% decrease in emissions between 1990 and 2030.

4.7.2 Ambient Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out in the Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) (which replaces the earlier Air Quality Framework Directive 1996 and the first, second and third *Daughter Directives*; the fourth *Daughter Directive* will be included in CAFE at a later stage).

The CAFE Directive:

- Sets new air quality objectives for PM_{2.5} (fine particles) including the limit value and exposure related objectives;
- Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values; and
- Allows the possibility for time extensions of three years (PM₁₀) or up to five years (NO₂, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.

The fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.

The CAFE Directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011). It replaces the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002), the Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004) and S.I. No. 33 of 1999. The fourth Daughter Directive was transposed into Irish legislation by the Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (S.I. No. 58 of 2009).

In order to comply with the directives mentioned above, the EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (SI No. 271 of 2002). All of County Monaghan is located within Zone D.

The Kilkitt air quality monitoring site is located within the Plan area. The current air quality at

³⁶ Northern Ireland greenhouse gas inventory 1990-2015 statistical bulletin

³⁷ Northern Ireland Environmental Statistics Report 2017

this site is identified by the EPA as being $good^{88}$.

The Second Assessment of the State of Northern Irelands Environment states that air quality in Northern Ireland continues to improve. Problems remain on nitrogen dioxide emissions due to transport, and ammonia emissions, mostly due to livestock, which pose a risk to sensitive habitats and ecosystems.

The EPA's (2017) *Air Quality in Ireland 2016* identifies that:

- No levels above the EU limit value were recorded at any of the ambient air quality network monitoring sites in Ireland in 2016;
- WHO guideline values were exceeded at a number of monitoring sites for particulate matter (PM₁₀ and PM_{2.5}), ozone, SO₂ and NO₂; and
- 2016 dioxin survey shows that concentrations of dioxins and similar pollutants remain at a consistently low level in the Irish environment.

With regard to challenges, the report identifies that maintaining our standard of air quality in Ireland is a growing challenge. Overcoming this challenge is taking on an increased importance with the further understanding of the links between poor air quality and human health. The European Environment Agency (EEA) have estimated a figure of 1,510 premature deaths in Ireland in 2014 (EEA 2017) directly attributable to air quality, with the predominant culprit being fine particulate matter (PM_{2.5}) from the use of solid fuels such as wood, coal and peat for home heating. It is becoming increasingly apparent that there is no safe level of air pollution, a position that is held by the WHO and is reflected in their much stricter (than EU limit values) air quality guideline values. The clear benefits in terms of health improvements of reducing the people's exposure to poor air quality is also supported by significant economic savings in doing so. This is highlighted by the Organisation for Economic Co-operation and Development's (OECD) report on the economic cost of air pollution (OECD 2016).

With regards to solutions, the report identifies the following that the implementation of the new Ambient Air Quality Monitoring Programme (AAMP) by the EPA will be key to tackling the issues surrounding air guality in Ireland. The two key sectors that predominantly impact negatively on air quality are residential heating and transport. The AAMP seeks to address these key issues by firstly informing the public on the status of air quality in Ireland. This will be achieved through an expansion of the monitoring network with a greater emphasis on provision of real-time particulate matter levels. In conjunction with this network expansion, the AAMP will implement a programme of citizen engagement which will be used to highlight the links between air quality, health and the actions or clean air choices that can be taken by citizens to directly impact and improve their local air quality. Namely these are:

- Any shift from the burning of solid fuel to cleaner, more energy efficient methods of home heating which will result in cleaner air quality for the consumer, their family and neighbours with a resultant improvement in their health; and
- A transition in our modes of transport away from the use of the private diesel and petrol powered motor cars to alternative modes of transport such as walking, cycling and forms of transport that are environmentally friendly and sustainable such as electric motor powered vehicles. This is especially important in our at-risk urban environments.

To incentivise and compliment these behavioural changes in the public, the report identifies that it is imperative that Ireland adopts policy solutions that can marry the twin issues of ambient air quality and climate change mitigation. The government's 'Clean Air Strategy' which is due for publication should point the way forward in terms of policy solutions for Ireland in this regard.

The Plan facilitates improvements in sustainable mobility, thereby facilitating reductions in and limiting increases of emissions to air including noise. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic.

4.7.3 Existing Problems

Legislative objectives governing air and climatic factors in County Monaghan were not identified as being conflicted with.

³⁸ 08/12/17 (http://www.epa.ie/air/quality/)

4.8 Material Assets³⁹

4.8.1 Water Services

4.8.1.1 Irish Water

Since January 2014, Irish Water is the State body responsible for the delivery, integration and implementation of strategic water and waste water projects and infrastructural improvements. Monaghan County Council no longer has a direct role in this area, however the Council works with Irish Water to help to ensure that the land use plans and water services investment plans align.

Irish Water are responsible for the operation of all public water and wastewater services including:

- Management of national water and wastewater assets;
- Maintenance of the water and wastewater system;
- Investment and planning;
- Managing capital Projects; and
- Customer care and Billing.

The upgrading of infrastructure will contribute towards compliance with the Water Framework Directive, EU Urban Waste water Treatment Directive and Drinking Water Regulations and will help to protect human health and maintain the quality of surface and ground waters.

4.8.1.2 Waste Water Infrastructure

Monaghan County Council operates 26 waste water treatment plants in the County. These vary in size from Monaghan Town Waste Water Treatment Works (WWTW) which has a design capacity of 37,400 population equivalent⁴⁰ to plants such as Drum WWTW which has a design population equivalent of 150. Table 4.2 provides information sourced from the 2016 Annual Environmental Reports (published in 2017) on identified issues, associated mitigation and the status of implementation of this information at 14⁴¹ of these public waste water treatment plants. This information is updated on an ongoing basis and future assessments will take into account future iterations of these reports.

4.8.1.3 Drinking Water

Compliance with the drinking water requirements is determined by comparing the results of analyses submitted by water suppliers to the standard for 48 parameters specified in the European Communities (Drinking Water) Regulations (No. 2), 2007. To ensure that these standards are met, each water supply must be monitored on a regular basis.

Under Section 58 of the Environmental Protection Agency (EPA) Act 1992, the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000.

The most recent drinking water report from the EPA 'Drinking Water Report for Public Water Supplies 2017' (EPA, 2017) identifies that:

- There are 10 public water supplies in County Monaghan serving a population of 28,526;
- Microbiological parameter compliance for the year was 100%;
- Chemical parameter compliance for the year was 98.2%;
- No boil notices were issued in 2016; and
- No water restrictions occurred.

The EPA publishes their results in annual reports which are supported by Remedial Action Lists (RALs). The RAL identifies water supplies which are not in compliance with the Regulations mentioned above. No water supplies from County Monaghan are listed on the most recent EPA Remedial Action List (Q4 of 2018).

4.8.2 Waste Management

The Connacht Ulster Waste Management Plan 2015-2021 provides the framework for solid

³⁹ Much of the text in this section is taken from the Plan ⁴⁰ Population equivalent is defined in the Regulations as 'a measurement of organic biodegradable load and a population equivalent of 1 (1 p.e.) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60g of oxygen per day'.

⁴¹ Scotstown, Smithborough, Knockaconny, Newbliss, Rockcorry, Ballinode, Inniskeen, Glaslough, Emyvale, Ballybay and Environs, Clones and Environs, Castleblayney, Carrickmacross and Monaghan.

waste management in the region and sets out a range of policies and actions to meet specified mandatory and performance based targets. The Plan seeks to assist and support resource efficiency and waste prevention initiatives. Key Plan targets include:

- A 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan;
- A recycling rate of 50% of Managed Municipal Waste by 2020; and
- A reduction to 0% of the direct disposal of unprocessed residual municipal waste to landfill from 2016 onwards in favour of higher value pre-treatment processes and indigenous recovery practices.

Intensive agricultural activities in the County mean that quantities of broiler litter, layer manure spent mushroom compost and other intensive agricultural manures are dependent on off-site disposal to compost manufacture.

4.8.3 Agriculture

County Monaghan is noted for its intensive agricultural activities and it benefits significantly from its successful poultry and mushroom industries. However, the intensive nature of these sectors also presents challenges for disease minimisation and environmental protection.

4.8.4 Transport

The provision and maintenance of an efficient, safe and sustainable transportation system is essential to delivering the County's economic competitiveness, an improved quality of life and improved social inclusion.

There is a strong interrelationship between land use and transportation. This is reflected in the Settlement Strategy endorsed by the plan which aligns with national policy to direct a significant portion of future development to existing towns and settlements in order to reduce car dependency and to facilitate the economic provision of public transport. The adoption and implementation of the Core Strategies for Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay and the remaining settlements will strengthen this relationship by creating more compact urban forms which make the use of public transport, cycling and walking more viable.

Road transport is the only form of transport available in County Monaghan therefore investment, maintenance and improvement of existing road infrastructure and the protection of the carrying capacity of the national road network is of key importance to the economic and social development of the County.

This plan will set out a framework of policies to deliver an improvement of the existing transport system and facilities in the County over the Plan period.

4.8.5 Existing Problems

There are a number of challenges with respect to the provision of transport and water services infrastructure which are described under Sections 4.8.1 and 4.8.4 above.

The provisions of the new Plan will contribute towards protection of the environment with regard to impacts arising from material assets.

Table 4.2 Public Waste Water Treatment Information⁴²

Town	Issue	Mitigation	Status	
Scotstown 43	High inflows into the Scotstown WWTP during storm conditions/ periods of heavy rainfall	CCTV survey of network and remedial measures identified carried out	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis	
	No record of SWO activating or measurement of flows	Install SWO measurement /recorder device to measure flows/record the no of times it activates	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis	
	Breaches of ELV for orthophosphate in 2016	Review of ferric dosing system and implement actions identified	Planned 2017	
Smithborough ⁴⁴	Ortho P exceedances	Install a phosphorus removal system to lower ortho P 2016	Completed 2105, No breaches of ELV for ortho P 2106	
	Improved operational Control	Flow Monitoring at WWTP	Influent sampler and 3 flow meters installed at WWTP in 2016 as part of MN flow and sampling programme	
	Failed asset	Replacement DO meter in aeration basin	Complete. Further works on fixed probe in aeration tank 1 were carried out in 2016.	
Knockaconny ⁴⁵	Implement a phosphorus removal system to lower ortho P levels discharging from the WWTP	Install a ferric dosing system	Completed 2015. No breaches in ELV for orthophosphate in 2016.	
	Screenings by passing hand raked screen	Fit mechanical screener at inlet works	Completed 2016	
	No record of SWO outflows to river	Install recorder device	Event monitor on SWO installed 2016	
Newbliss ⁴⁶	No record of SWO activating or measurement of flows	Install SWO measurement/recorder device to measure flows/record no of times it activates	SWO event recorder installed in July 2016	
	Failure to meet ELV's or ortho P	Installation of ferric dosing	Ferric dosing installed	
	Rotating arms on Percolation Filter require replacement	Replace Arms	Arms replaced some issues outstanding further works required, due to be completed in 2017	
Rockcorry ⁴⁷	High Inflows into the Rockcorry WWTP during storm conditions/periods of heavy rainfall	CCTV survey of network and remedial measures identified carried out. Conduct SIRAT on the network	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis	
	No record of flows / activation of storm water overflow from storm tank	Install SWO recorder / flow monitoring	Rockcorry WWTP is part of the second phase flow and sampling programme to commence in 2017	
Ballinode ⁴⁸	High Inflows into the Ballinode WWTP during storm conditions/ periods of heavy rainfall	CCTV survey of network and remedial measures identified carried out	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis.	
	Operation of STW without adequate flood alleviation measures along the river bank	Flood control measure along river bank	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis.	
	No record or measurement of SWO activating or flow measurement.	Install SWO measurement / recorder device to measure flows /record no of times it activates	Ballinode has been included in the 2nd phase of MN Flow and Sampling Programme. This programme is underway	

⁴² Information is from 2016 Annual Environmental Reports (published in 2017). This information is updated on an ongoing basis and future assessments will take into account future iterations of these reports.

⁴³ Irish Water (2017) Annual Environmental Report 2016 for Scotstown

⁴⁴ Irish Water (2017) Annual Environmental Report 2016 for Smithborough

⁴⁵ Irish Water (2017) Annual Environmental Report 2016 for Knockaconny

⁴⁶ Irish Water (2017) Annual Environmental Report 2016 for Newbliss

⁴⁷ Irish Water (2017) Annual Environmental Report 2016 for Rockcorry

⁴⁸ Irish Water (2017) Annual Environmental Report 2016 for Ballinode

SEA Environmental	Report for	the Monaghan	County Developmen	it Plan 2019-2025

Issue	Mitigation	Status
No record of SWO activating or measurement of flows	Install SWO measurement /recorder device to	Information on SWO will be available to assess impact on receiving water. Inniskeen on flow monitoring programme for 2017
2015 failure to meet ELV for Suspended Solids	Sand filter to be replaced	Information on SWO will be available to assess impact on receiving water. Inniskeen on flow monitoring programme for 2017
Infiltration into the sewer line	Pipe to be replaced and relined	Reduced flows in periods of heavy rainfall. Complete 2016
Failure to meet ELV for Ammonia and Ortho P	Implement a return of activated wastewater to the head of the works from cell pond 3 to pumping station at head of works	Project complete 2015
Flooding from storm water around pump station and compound area	Flood control measure along river bank/storm water check valve	50% Complete
High inflows into the WWTP during storm periods of heavy rainfall	CCTV of network and establish where excess storm water ingression to collection network	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis.
Failure to meet ELV for Ammonia and Ortho P	Upgrade of ICW/Replanting	Complete September 2015
Failure to meet ELV for Ammonia and ortho P	Implement programme of monitoring between cells	Planned 2017
High inflows into Emyvale WWTP during storm conditions/periods of heavy rainfall	CCTV survey of network and remedial measures identified carried out	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis.
No record of SWO measurement/Recorder device	Install SWO measurement/Recorder device	Emyvale is on the MN flow monitoring and sampling programme 2017
Orthophosphate levels in the discharge from this plant exceed the UWWTD limits, reduced ELV for ortho p	Provision of ferric dosing	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis
Ballybay Sludge Scrapers	Provide new sludge scrapers	Complete
Improved Operational Control	Flow monitoring at WWTP	Ballybay WWTP part of MN flow and Sampling Programme
Clones WWTP Sludge Handling	Supply and fit a sludge dewatering tank	At design stage
Improvement works required to comply with ELV's in Schedule A	Clones WWTP final Clarifier	At design stage
Compliance with ELV for orthophosphate	Provision of Ferric dosing	Ferric dosing installed and operational 2016
Meet lower Phosphorus ELV from 1st Jan 2016.	Mitigation Measure Commissioning of ferric dosing on site	Status Complete
Meet new Ammonia ELV from 1st Jan 2016	Upgrade of WWTP	On IW capital investment programme 2017
No record of SWO activating or measurement of flows.	Install SWO measurement/recorder device to measure record no of times it activates	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition
Improved Operational Control	Flow Monitoring at WWTP	Four mag meters installed in 2016
Upgrading of Storm Overflows to comply with the criteria outlined in the DoEHLG "Procedures and Criteria in relation to Storm Water Overflows"	Upgrading of Storm Overflows	Works indicated in 2012 SWO assessment are complete. The 2015 SWO assessment indicated that more works are required. The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition
	No record of SWO activating or measurement of flows 2015 failure to meet ELV for Suspended Solids Infiltration into the sewer line Failure to meet ELV for Ammonia and Ortho P Flooding from storm water around pump station and compound area High inflows into the WWTP during storm periods of heavy rainfall Failure to meet ELV for Ammonia and Ortho P Failure to meet ELV for Ammonia and Ortho P Failure to meet ELV for Ammonia and ortho P Failure to meet ELV for Ammonia and ortho P Failure to meet ELV for Ammonia and ortho P Failure to meet ELV for Ammonia and ortho P Bailybe inflows into Emyvale WWTP during storm conditions/periods of heavy rainfall No record of SWO measurement/Recorder device Orthophosphate levels in the discharge from this plant exceed the UWWTD limits, reduced ELV for ortho p Ballybay Sludge Scrapers Improved Operational Control Clones WWTP Sludge Handling Improvement works required to comply with ELV's in Schedule A Compliance with ELV for orthophosphate Meet lower Phosphorus ELV from 1st Jan 2016. Meet new Ammonia ELV from 1st Jan 2016. Ne record of SWO activating or measurement of flows. Improved Operational Control Upgrading of Storm Overflows to comply with the	No record of SWO activating or measurement of flows Install SWO measurement /recorder device to measure the flows/record no of times it activates 2015 failure to meet ELV for Suspended Solids Sand filter to be replaced Infiltration into the sewer line Pipe to be replaced and relined Failure to meet ELV for Ammonia and Ortho P Implement a return of activated wastewater to the head of the works from cell pond 3 to pumping station at head of works Flooding from storm water around pump station and compound area Flood control measure along river bank/storm water check valve High inflows into the WWTP during storm periods of heavy rainfall Storm water ingression to collection network Failure to meet ELV for Ammonia and Ortho P Upgrade of ICW/Replanting Failure to meet ELV for Ammonia and ortho P Upgrade of ICW/Replanting Failure to meet ELV for Ammonia and ortho P Upgrade of ICW/Replanting Failure to meet ELV for Ammonia and ortho P Implement programme of monitoring between cells COTV of network and remedial measures identified carried out No record of SWO measurement/Recorder device Orthophosphate levels in the discharge from this plant Provision of ferric dosing Improvement works required to comply with ELV's in Schedule A Supply and fit a sludge dewatering tank Compliance with ELV for orthophosphate <td< td=""></td<>

⁴⁹ Irish Water (2017) Annual Environmental Report 2016 for Inniskeen
⁵⁰ Irish Water (2017) Annual Environmental Report 2016 for Glaslough
⁵¹ Irish Water (2017) Annual Environmental Report 2016 for Emyvale
⁵² Irish Water (2017) Annual Environmental Report 2016 for Ballybay and Environs
⁵³ Irish Water (2017) Annual Environmental Report 2016 for Clones and Environs
⁵⁴ Irish Water (2017) Annual Environmental Report 2016 for Castleblayney

CAAS for Monaghan County Council

SEA Environmental Report for the Monaghan County Development Plan 2019-2025

Town	Issue	Mitigation	Status
Carrickmacross ⁵⁵	No standby pump at main inlet Oriel Road pump station, no overhead lifting equipment or gantry to lift pump when required	Provision and installation of standby pump and overhead lifting equipment at Oriel road inlet pump station	Complete 2015
	No record of activation or flow measurement from SWO tank at the WWTP	Install SWO measurement/recorder device to measure flows/record no. times it activates	Recorder device on SWO installed as part of flow and monitoring programme 2016.
	Failed asset replacement of venture aerator pump in oxidation ditch No. 2. Pump has burned out and is no longer operational	Replacement of venture aerator pump in oxidation ditch No. 2.2 replaced 2015 and complete 2016	
Monaghan ⁵⁶	To maintain processing levels of all incoming sludges	Upgrade sludge dewatering unit, capital project	Operational 2016, at process proving stage
	Ferric dosing system not online	Replacement of Ferric dosing equipment	Complete 2016
	Failed asset screener	Replacement of gearbox and motor on 1 No screener	Complete 2016
	Diffusers in aeration tank are ruptured and require replacement	Replacement of Air blowers Monaghan	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis.
	Measures identified in 2015 SWO assessment	Implement measures	The improvement programme will be reviewed by Irish Water to assess the works required to comply with the licence condition on a prioritised basis.
	Provide Sludge reception facilities, improved operational control	Monaghan WWTP Sludge reception facilities	Consultants have been appointed

 ⁵⁵ Irish Water (2017) Annual Environmental Report 2016 for Carrickmacross
 ⁵⁶ Irish Water (2017) Annual Environmental Report 2016 for Monaghan

4.9 Cultural Heritage

4.9.1 Introduction

Heritage is a broad concept, as set out in the Heritage Act, 1995; it includes monuments, archaeological & heritage objects, architectural heritage, flora, fauna, habitats, landscapes, seascapes, wrecks, geology, heritage gardens, parks and inland waterways. Heritage incorporates both natural and built resources; in addition to these physical expressions of heritage there is a further indefinable form of cultural heritage which includes music, language and folklore.

Some heritage features extend beyond the County border. Black Pigs Dyke, a collection of a dozen individual linear earthworks, extends across the north midlands and south Ulster. The Ulster Canal extends from the River Bann/Lough Neagh in Northern Ireland to Lough Erne in the Republic of Ireland, passing through Monaghan along the way. The Great Northern Railway extends from Belfast to various locations within the County including Glaslough, Monaghan and Clones.

4.9.2 Archaeological Heritage

4.9.2.1 Introduction

Archaeology is the study of past societies through the material remains left by those the evidence societies and of their environment. Archaeological heritage consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence. As archaeological heritage can be used to gain knowledge and understanding of the past it is of great cultural and scientific importance.

Monaghan County's rich archaeological heritage includes a collection of ring forts, cairns, crannogs, burial grounds, headstones as well as industrial archaeology including mills, the dismantled Great Northern Railway and the Ulster Canal.

Archaeological sites may have no visible surface features; the surface features of an archaeological site may have decayed completely or been deliberately removed but archaeological deposits and features may survive beneath the surface.

4.9.2.2 Record of Monuments and Places

The National Monument Acts 1930-2004 are the primary legislative framework for the protection of archaeological heritage in Ireland. Through the definition of monuments, historic monuments, and national monuments a wide range of structures and features fall under the remit of these Acts.

The Record of Monuments and Places (RMP) was established under Section 12 of the National Monuments (Amendment) Act 1994 and structures, features, objects or sites listed in this Record are known as Recorded Monuments. The term Monument refers to any artificial or partly artificial building or structure, that has been carved, sculptured or worked upon or which appears to have been purposely put or arranged in position. It also includes any, or part of any prehistoric or ancient tomb, grave or burial deposit, or ritual, industrial or habitation site. Monuments that predate 1700 AD are automatically accorded the title Historic Monument. A 'National Monument' is defined in the National Monuments Acts (1930-2004) as a monument or the remains of a monument, the preservation of which is of national importance by reason of the historical, archaeological, traditional, artistic or architectural interest.

As well as extending protection to all known sites, now identified as Recorded Monuments, the National Monuments Acts 1930 – 2004 extend protection to all previously unknown archaeological items and sites that are uncovered through ground disturbance or the accidental discovery of sites located underwater. Where necessary, the Minister with responsibility for Heritage will issue preservation orders to ensure protection is afforded to sites believed to be under threat.

There are approximately 1383 known Recorded Monuments in the County at present. In addition, there are 7 National Monuments in state control.

Archaeological heritage designations in areas adjacent to the County in Northern Ireland include entries to the Northern Ireland Sites and Monuments Record and Areas of Significant Archaeological Interest and Archaeological Potential.

Figure 4.11 shows the spatial distribution of entries to the RMP in County Monaghan and adjacent areas. These monuments are found throughout the County with clusters occurring in the County's towns and lower concentrations occurring in rural areas.

4.9.3 Architectural Heritage

4.9.3.1 Introduction

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social, or technical interest.

4.9.3.2 Record of Protected Structures

Part IV of the Planning and Development Act requires every development plan to include a Record of Protected Structures (RPS). A 'protected structure' is a structure or a specific feature of the structure as may be specified that a Planning Authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

The placing of a structure on the RPS seeks to ensure that the character and interest of the structure is maintained and any changes or alterations to it are carried out in such a way as to retain and enhance that character and interest. The inclusion of a structure in the RPS confers certain responsibilities upon the owner of the structure and requires that planning permission be sought for any changes or alterations to the structure. The definition of a 'structure' or 'a specified part of a structure' for the purpose of the RPS includes "the interior of the structure; the land lying within the curtilage of the structure; any other structures lying within the curtilage of that structure and their interiors; and all fixtures and features which form part of the interior or exterior of the structure". From the date of notification of an intention to include a structure in the RPS, the owner has a duty to protect that structure from endangerment. The Council may, on receipt of a written request from the owner or occupier of a protected structure, issue a declaration under Section 57 of the Planning and Development Act 2000 (as amended), outlining certain works it considers would not materially affect the character and interest of the protected structure and which are, therefore, exempted

from the requirement for planning permission. Any works that would materially affect the character and interest of a structure require planning permission. In general works to a protected structure should comply with the guidelines as set out in the Architectural Heritage Protection Guidelines from the Department.

County Monaghan has 712 Protected Structures on record. Architectural heritage designations in areas adjacent to the County in Northern Ireland include Listed Buildings and Historical Parks and Gardens. Figure 4.11 shows the spatial distribution of architectural heritage designations within and adjacent to County Monaghan.

4.9.3.3 National Inventory of Architectural Heritage

In addition to entries to the RPS, there are hundreds of entries to the National Inventory of Architectural Heritage (NIAH) across the County. The NIAH is a State initiative under the administration of the Department of Culture, Heritage and the Gaeltacht and was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for the Environment, Heritage and Local Government to the local authorities for the inclusion of particular structures in their RPS.

To date in County Monaghan there has been 76 additions to the RPS from the NIAH. These include post boxes, stone bridges, water pumps, religious buildings, industrial buildings/structures and houses.

4.9.3.4 Architectural Conservation Areas

In accordance with Section 81 of the Planning and Development Act, Development Plans are required to include an objective to preserve the character of a place, area, group of structures or townscape, taking account of building lines and heights, that:

a) is of special architectural, historical, archaeological, artistic, cultural,

scientific, social or technical interest or value, or

b) contributes to the appreciation of protected structures,

if the Planning Authority is of the opinion that its inclusion is necessary for the preservation of the character of the place, area, group of structures or townscape concerned and any such place, area, group of structures or townscape shall be known as an "Architectural Conservation Area" (ACA).

An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures.

There are 19 designated ACAs in County Monaghan there are all located in the urban centres of Monaghan, Carrickmacross and Clones (subject to additions).

11 of these are located in Monaghan Town, five are located in Carrickmacross and three are located in Clones.

There are two additional ACAs proposed in the County, one in Glaslough Village and one in Castleblayney.

4.9.4 Existing Problems

The context of archaeological and architectural heritage has changed over time within County Monaghan however no existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

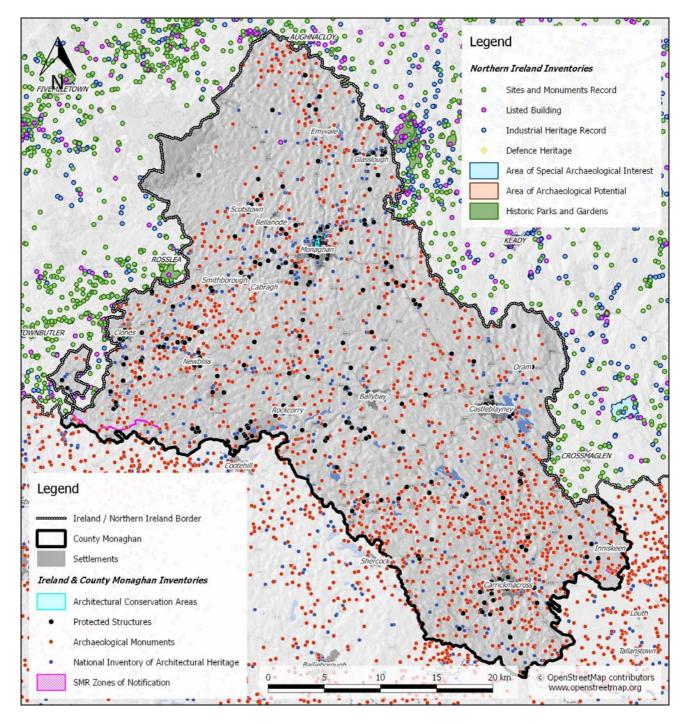


Figure 4.11 Archaeological and Architectural Heritage in County Monaghan Source: Monaghan County Council, National Monuments Service and Northern Ireland's Historic Environment

4.10 Landscape

4.10.1 Introduction

Article 1 (a) of the European Landscape Convention provides a definition of landscape as follows; "Landscape means as area, as perceived by people whose character is the result of the action and interaction of natural/or human factors". The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty.

Much of County Monaghan's unique drumlin landscape is encapsulated in its Irish name Muineachán which means "little hills". This drumlin landscape is different compared to the more open landscapes encountered elsewhere in the country.

Uplands occur in the north (Slieve Beagh) and east (Mullyash) of the County. In the central part of the County a series of low-lying lakes extend from west to east. To the north and south of this belt of lakes the landscape character consists of high drumlin farmland. There are a number of estate houses with associated demesne landscapes occurring throughout the County. The landscape has evolved over centuries due to changes in agricultural practices, settlement patterns and infrastructural development.

4.10.2 Landscape Character Areas

The European Landscape Convention was ratified in Ireland in 2002, this required EU Member States to adopt national measures to promote landscape, planning, protection and management.

In recognition of this Monaghan commissioned the preparation of a landscape character assessment of the County in 2008. This study was carried out in accordance with the Department of the Environment, Community and Local Government Guidelines. The purpose of landscape character assessment is to provide the foundation for policy formulation and decision making for landscape management. The landscape character assessment identified nine landscape character areas in County Monaghan as follows:

- Sliabh Beagh Uplands;
- Blackwater Valley & Drumlin Farmland;
- Smithborough Hills;
- Clones River Valley & Farmed Uplands;
- Monaghan Drumlin Uplands, Mullyash Uplands;
- Ballybay/Castleblaney Lakeland's;
- Drumlin and Upland Farmland of South Monaghan;
- Carrickmacross Drumlin; and
- Lowland Farmland.

These areas are mapped on Figure 4.12.

The following three Northern Ireland Regional Character Areas share their border with the County Monaghan/Northern Ireland border:

- Clogher Valley and Slieve Beagh Regional Character Area, located to the immediate north west of County Monaghan
- Southern Drumlins and Orchards, located to the immediate north east of County Monaghan
- Slieve Gullion and South Armagh Hills, located to the immediate east of County Monaghan.

4.10.3 Amenity Areas

County Monaghan has two principle areas of outstanding landscape quality which require protection from insensitive and inappropriate development. These areas are termed Areas of Primary Amenity and comprise Lough Muckno and Environs and Sliabh Beagh and Bragan Mountain.

In addition to the areas of primary amenity, there are a number of other scenic and amenity areas that require protection from inappropriate and insensitive development. These areas are generally associated with river valleys, uplands, woodlands and lakes and provide an important community, recreational and tourism resource. These areas are termed Areas of Secondary Amenity and comprise:

- Emy Lough and Environs (SA1);
- Blackwater River Valley (SA2);
- Mountain Water River Valley (SA3);
- Mullyash Mountain (SA3);

- Ulster Canal and Environs (SA4);
- Rossmore Park and Environs (SA5);
- Castleshane Woods and Environs (SA6);
- Billy Fox Memorial Park and Environs (SA7);
- Annaghmackerrig Lake, Woodland and Environs (SA8);
- Dartrey Demense and Environs (SA9);
- Dromore River and Lake Systems (SA10);
- Lough Major and Environs (SA11);
- Hollywood Lake (SA12);
- Lisanisk Lake (SA13);
- Lough Naglack (SA14); and
- Rahans Lake (SA15).

Primary and Amenity Areas are mapped on Figure 4.13.

4.10.1 Scenic Routes/Views

County Monaghan has a number of important scenic routes which identified and afforded protection by the County Plan.

Scenic Routes/Views are mapped on Figure 4.13.

4.10.2 Existing Environmental Problems

New developments have resulted in changes to the visual appearance of lands within the County however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.

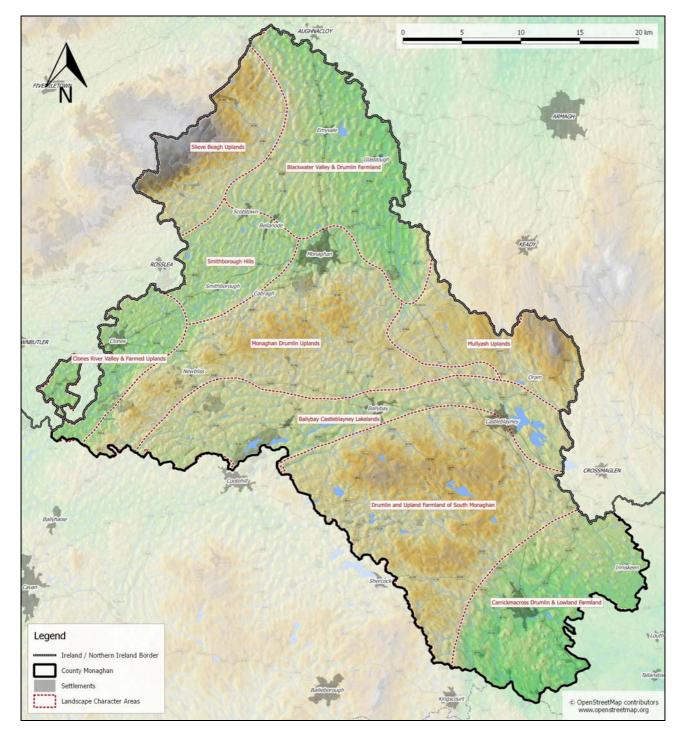


Figure 4.12 Landscape Character Areas Source: Monaghan County Council (2017)

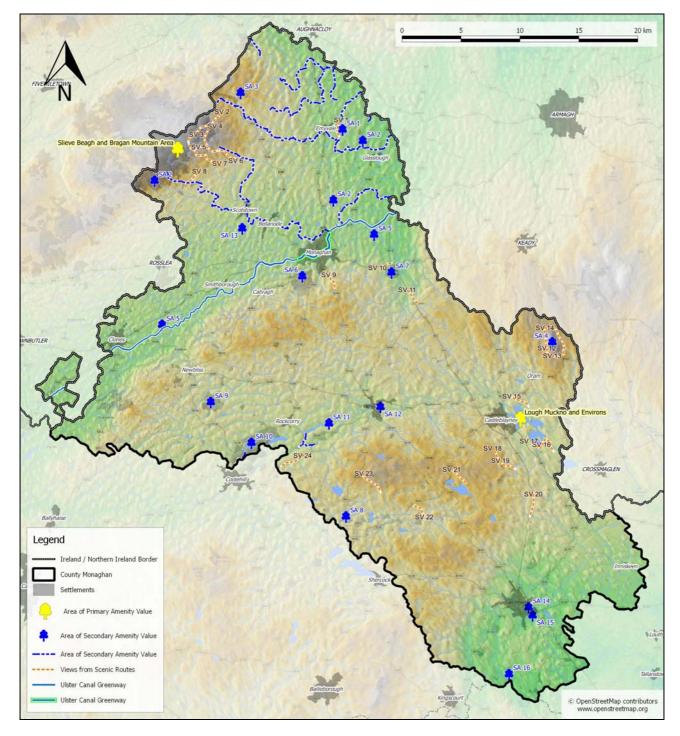


Figure 4.13 Amenity Areas and Scenic Routes/Views Source: Monaghan County Council (2017)

4.11 Overlay of Environmental Sensitivity Mapping

In order to identify where most sensitivities within the County occur, a number of the environmental sensitivities described above were weighted and mapped overlapping each other.

Figure 4.14 provides an Overlay of Environmental Sensitivities in the County. Environmental sensitivities are indicated by colours which range from extreme sensitivity (red/pink colour gradients) to high sensitivity (pink/peach colour gradients) to moderate sensitivity (yellow colour gradients) to low sensitivity (green colour gradients). Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration.

The occurrence of environmental sensitivities does not preclude development; rather it flags at a strategic level that the mitigation measures which have already been integrated into the Plan - will need to be complied with in order to ensure that the implementation of the Plan contributes towards environmental protection.

Most of the Plan area is identified as being of low to moderate sensitivity. Greater areas of moderate sensitivity are found in the southern half of the County, owing much to elevated levels of groundwater vulnerability.

Rivers and lakes identified on the map as areas of high or extreme sensitivity include the River Proules Upper (through Carrickmacross), the River Proules Lower and Monalty Lough (downstream of Carrickmacross), the River Blackwater (downstream of Monaghan Town) and Lough Muckno (downstream of Castleblaney).

The largest area of extreme and high sensitivity is located in the north west of the County, close to Slieve Beagh and at Eshbrack Bog, along the border with Northern Ireland.

4.11.1 Methodology

A weighting system applied through Geographical Information System (GIS) software was used in order to calculate the vulnerability of all areas in the County. A slight differentiation was made in certain layers as follows:

- European Sites cSACs, SPAs (10 points);
- Other Ecological designations NHAs, pNHAs (5 points);
- Sensitive Landcover Categories (10 points);
- WFD Status of Surface water poor ecological status (5 points);
- WFD Status of Surface water bad ecological status (10 points);
- Groundwater vulnerability ("extreme" or "extreme – rock at or near surface or karst" 10 points, "high" 5 points);
- Sensitive surface waters (include Public and Private Lake Sources with a value of 10 and Inner Catchment areas with a value of 5);
- Sensitive groundwaters (including Inner Source Protection Areas 10 points and Outer Source Protection Areas 5 points);
- Cultural Heritage including Architectural Conservation Areas, entries to the Record of Protected Structures, entries to the Record of Monuments and Places (10 points);
- Preliminary Flood Risk Assessment Fluvial Mapping;
- WFD RPA Nutrient Sensitive and Drinking Water Rivers and Lakes (buffer of 40m applied with a value of 10 points) and Rivers in Nutrient Sensitive Areas (buffer of 40m applied with a value of 10 points)

The scale of sensitivity for each area of the County corresponds to the sensitivity factors: 5 points corresponds to one sensitivity factor; 10 points corresponds to two sensitivity factors; 20 points corresponds to four sensitivity factors and so on. The scores for each area are added together in order to determine overall vulnerability as is shown on Table 4.3 below.

Score	Vulnerability Class
5-15	Low
20-25	Moderate
30-45	High
>50	Extreme

 Table 4.3 Overall Vulnerability Classes

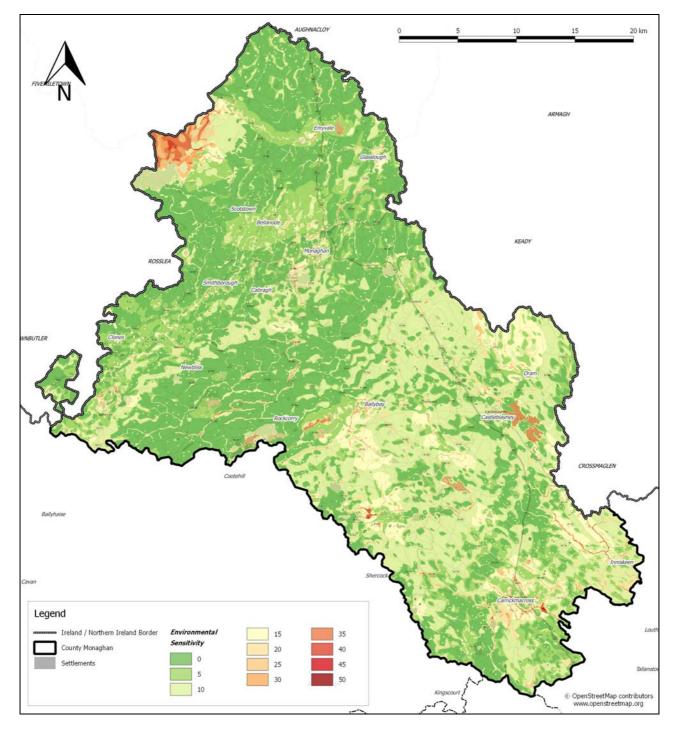


Figure 4.14 Overlay Mapping of Environmental Sensitivities Source: CAAS (2017)

Section 5 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives which have been transposed into Irish law and which are required to be implemented.

The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan and the alternatives are evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

The SEOs are linked to indicators which can facilitate monitoring the environmental effects of the Plan as well as identifying targets which the Plan can help work towards.

All SEOs, indicators and targets are provided on Table 5.1 overleaf while background to these measures is provided in the subsections below.

Further detail on legislation, plans and programmes are provided under Section 2 (and associated Appendix I "Relationship with Legislation and Other Plans and Programmes") and Section 4.

Environmental	Strategic Environmental	Selected Indicator(s)	Selected Target(s)
Component	Objectives		
Biodiversity, Flora and Fauna	B1: To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ⁵⁷	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ⁵⁸
	B2: To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan
	B3: To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ⁵⁹ and Area of Special Scientific Interest and to ensure the appropriate protection of listed species	 B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species 	B3i:Avoidsignificantimpacts on relevant habitats, species,environmentalfeatures or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the PlanB3ii:Nosignificant impacts on the protection of listed species
	B4: To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management

Table 5.1 Strategic Environmental Objectives, Indicators and Targets

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan to proceed; and
- (c) adequate compensatory measures in place.

⁵⁷ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁵⁸ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

⁵⁹ The Planning and Development Act 2010 defines a 'wildlife site' as: (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000, (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000, (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, (d) a nature reserve recognised or proposed to be recognised under a recognition 5 order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or (e) a refuge for fauna or flora designated 10 or proposed to be designated under a designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

Environmental Component	Strategic Environmental Objectives	Selected Indicator(s)	Selected Target(s)	
Population and Human Health	PHH1: To protect populations and human health from exposure to incompatible landuses	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive, Environmental Protection Agency, Department of Health (Northern Ireland) and Northern Ireland Environment Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	
Soil	S1: To avoid damage to the hydrogeological and ecological function of the soil resource	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	
Water	W1: To maintain and improve, where possible, the quality and status of surface waters	W1: Classification of Overall Status (comprised of ecological and chemical status) under the Water Framework Directive	W1: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ⁶⁰	
	W2: To prevent pollution and contamination of ground water	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	
	W3: To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009) ⁶¹	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The</i> <i>Planning System and Flood</i> <i>Risk Management Guidelines</i> <i>for Planning Authorities</i>	
Material Assets	M1: To serve new development with adequate and appropriate waste water treatment	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan	
	M2: To serve new development with adequate drinking water that is both wholesome and clean	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 ⁶² which present a potential danger to human health as a result of implementing the Plan	
	M3: To reduce waste volumes, minimise waste to landfill and increase recycling and reuse	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	
Air and Climatic Factors	C1: To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport	C1: Percentage of population travelling to work, school or college by public transport or non- mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	

⁶¹ Corresponding guidance from UK Department for Communities and Local Government: National Planning Policy Framework and associated planning practice guidance on Flood risk and coastal change (March 2014) ⁶² Corresponding guidance from Northern Ireland legislation: Water Supply (Water Quality) Regulations (Northern Ireland)

^{2007 (}as amended)

Environmental	Strategic Environmental	Selected Indicator(s)	Selected Target(s)
Component	Objectives		•
Cultural Heritage	CH1: To protect archaeological heritage including entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record (NISMR) and/or their context	CH1: Percentage of entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context these entries within the surrounding landscape where relevant- protected from adverse effects resulting from development which is granted permissions under the Plan	CH1: Protect entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context of these entries within the surrounding landscape where relevant – protected from adverse effects resulting from development which is granted permission under the Plan
	CH2: To protect architectural heritage including entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context	CH2: Percentage of entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context from significant adverse effects arising from new development granted permission under the Plan
Landscape	L1: To minimise significant adverse visual impacts within and adjacent to the County, especially with regard to landscape and amenity designations included in Land Use Plans	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan

Section 6 Description of Alternatives

6.1 Introduction

One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternatives for accommodating future growth in County Monaghan. These alternatives must be realistic, capable of implementation, and should represent a range of different approaches within statutory and operational requirements of the County Development Plan.

This section identifies and describes different alternatives, taking into account higher level strategic actions as well as the geographical scope of the County. The alternatives are evaluated in Section 7 resulting in the identification of potential effects and informing the selection of a preferred alternative for the Plan. Alternatives are evaluated over a number of separate hierarchical tiers, as identified below. The selected alternative from each of these tiers makes up the Plan.

The policies and objectives of the Plan which realise the selected alternatives are evaluated in Section 8.

Mitigation measures attempt to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the preferred alternative have been integrated into the Plan - these are identified in Section 9.

6.2 Excluding the 'Do-Nothing' Scenario

As the current Plan is required to be reviewed and replaced by a new Plan under legislation, a 'donothing' alternative is not considered, nor is it required to be by the SEA Directive.

Annex I of the SEA Directive specifies that information should be provided in the environmental report on inter alia 'the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme'. Section 4 identifies the evolution of each component of the environment in the absence of implementing the Plan.

6.3 Tier 1: Alternatives for Allocation of Population

The following alternatives for an urban to rural population split were considered by the Council:

- A. Continue Existing 37% Urban, 63% Rural
- **B.** Increase Rural 33% Urban, 67% Rural
- **C.** Increase Urban 41% Urban, 59% Rural

6.4 Tier 2: Consideration of Policy for Rural Areas under Strong Urban Influence

These two alternatives both provide for urban and rural growth in the County, however they have different approaches to managing development in areas surrounding urban settlements:

A. One includes a "Rural Areas under Strong Urban Influence" policy that restricts development in areas surrounding urban settlements; and

B. The other does not include a "Rural Areas under Strong Urban Influence" policy that restricts development in these areas.

6.5 Tier 3: Alternatives for Larger Towns

Three alternatives for each of the five settlements (Ballybay, Carrickmacross, Castleblaney, Clones and Monaghan) that are provided with land use zoning by the County Plan were considered as follows:

- A. Even Development
 - Required population split achieved;
 - The infrastructure required to be in place to achieve the growth targets is already in place;
 - New development within the lifetime of the plan generally to take place on expansion lands as indicated on maps, unless a comprehensive justification is provided for alternative residential lands;
 - Community development facilities to be developed in tandem with the targeted growth of settlements;
 - Village Centre developments would be developed in a planned and coordinated manner;
 - Sufficient zoning of undeveloped lands is provided for in order to cater for projected growth of settlements.
 - Open Space and Recreational Lands would be preserved.
- **B.** Sporadic Development
 - Required population split achieved;
 - Additional infrastructure would be required to accommodate sporadic development, more than would be required for Scenario 1 'Even Development';
 - New development within the lifetime of the plan generally to take place on expansion lands as indicated on maps, unless a comprehensive justification is provided for alternative residential lands;
 - Village centre development would be sporadic and uncoordinated around the village centre zonings;
 - More than sufficient zoning of undeveloped lands is provided for in order to cater for projected growth of settlements. This zoning is spread across more areas than is the case under "Alternative A Even Development".
- **C.** Haphazard Development
 - Required population split achieved;
 - Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'Even Development' or Alternative 2 'Sporadic Development', development would have to be serviced by private wastewater treatment systems which would have to be properly maintained;
 - Development would occur on a piecemeal and haphazard basis within settlements;
 - Ribbon and backland development would be a dominant feature within settlements;
 - Village centre development would be permitted on a number of different zonings and not concentrated on the village centre;
 - No zoning provided for with a laissez faire attitude in relation to development with each application considered on its own merits.

Maps of alternatives "A. Even Development" and "B. Sporadic Development" for each of the settlements follow. As there is no land use zoning under "C. Haphazard Development", there is no mapping required for these alternatives.

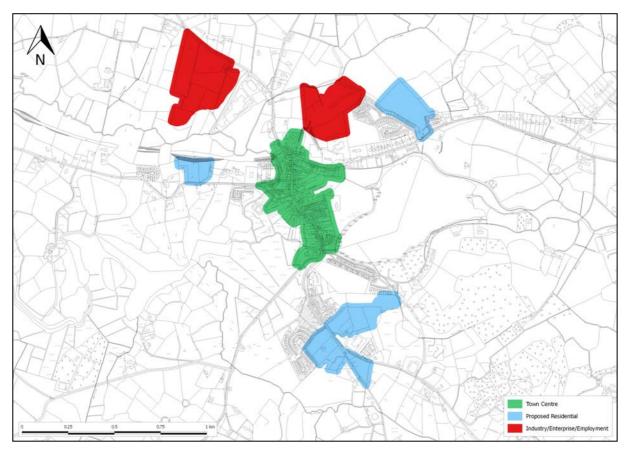


Figure 6.1 Ballybay Alternative A: Even Development

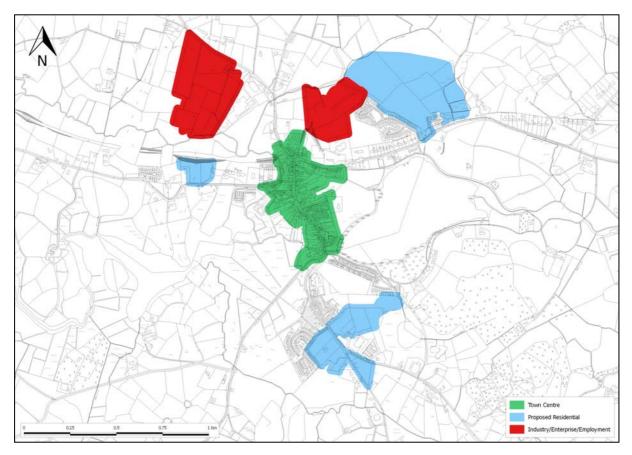


Figure 6.2 Ballybay Alternative B: Sporadic Development



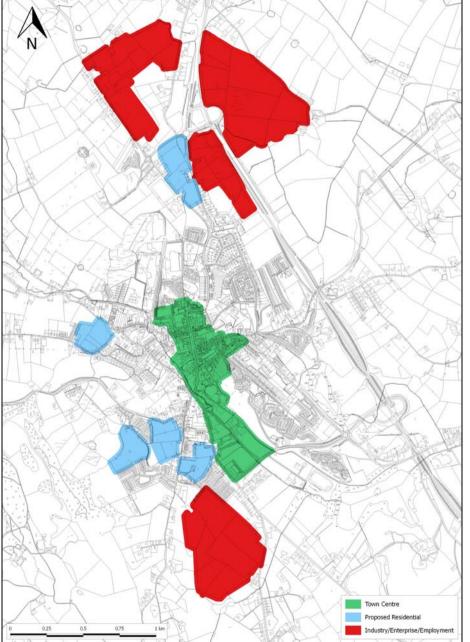


Figure 6.3 Carrickmacross Alternative A: Even Development CAAS for Monaghan County Council

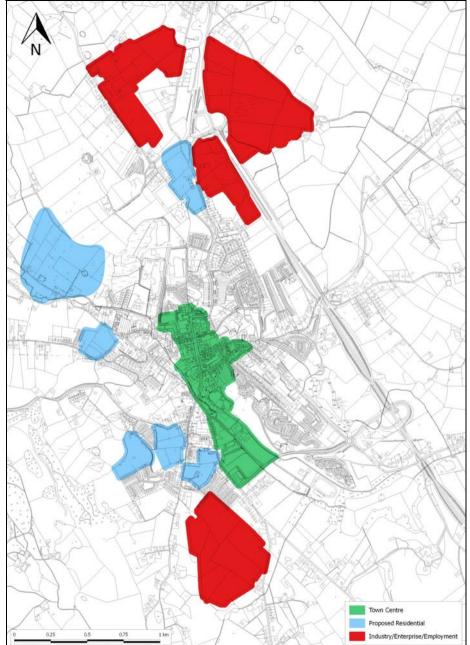


Figure 6.4 Carrickmacross Alternative B: Sporadic Development

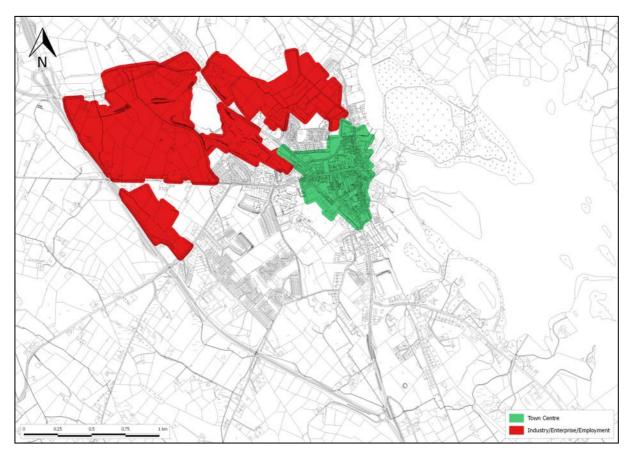


Figure 6.5 Castleblaney Alternative A: Even Development

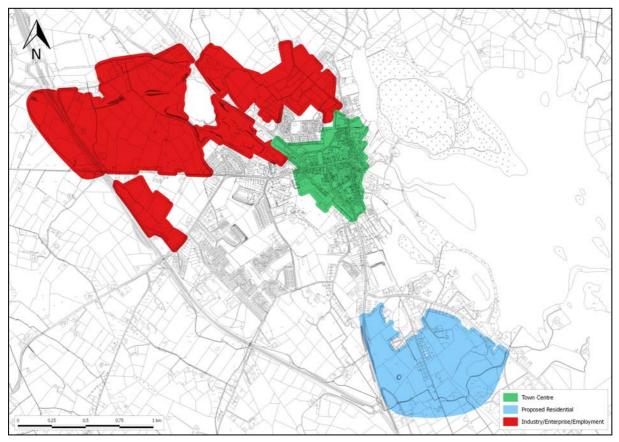


Figure 6.6 Castleblaney Alternative B: Sporadic Development

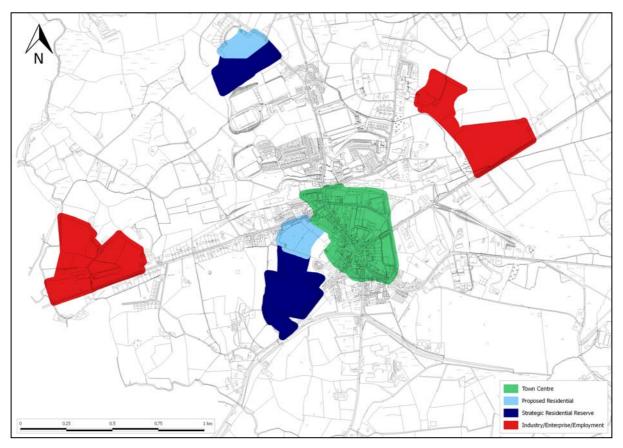


Figure 6.7 Clones Alternative A: Even Development

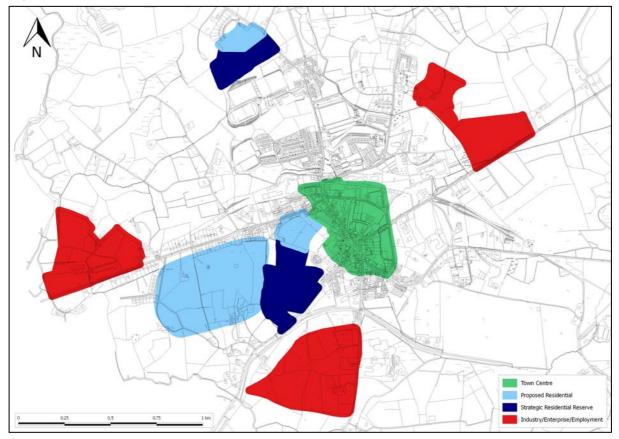


Figure 6.8 Clones Alternative B: Sporadic Development

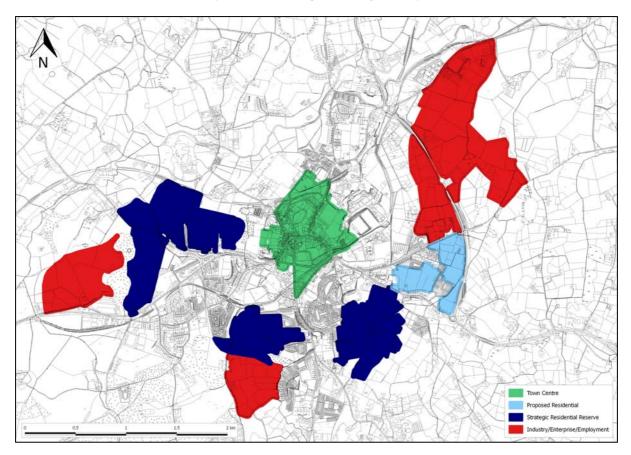


Figure 6.9 Monaghan Alternative A: Even Development

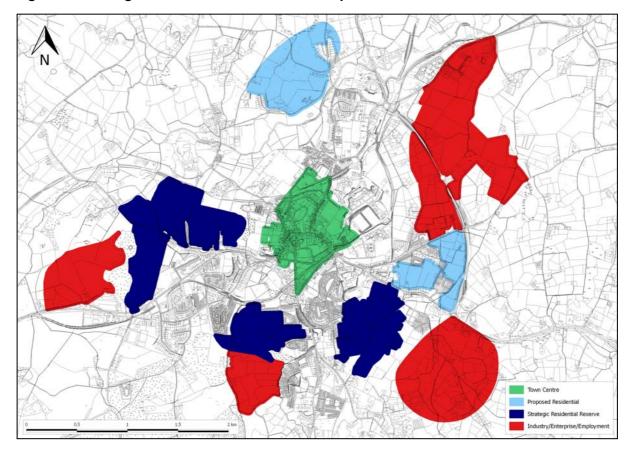


Figure 6.10 Monaghan Alternative B: Sporadic Development

Section 7 Evaluation of Alternatives

7.1 Introduction

This section provides a comparative evaluation of the environmental effects of implementing the different alternatives. This determination sought to understand whether each alternative was likely to improve conflict with or have a neutral interaction with the receiving environment.

7.2 Methodology

The relevant aspects of the current state of the environment (see Section 4) and the Strategic Environmental Objectives (see Section 5 and Table 7.1) are used in the evaluation of alternatives.

The alternatives are evaluated usina compatibility criteria (see Table 7.2 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the alternatives are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment. Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for the SEO likely to be affected - in this instance 'to ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species⁶³'.

The interactions identified are reflective of likely significant environmental effects⁶⁴.

The degree to which effects can be determined is limited as the Plan will be implemented through the lower tier environmental assessments and/or decision making of the Council. Nonetheless a comparative evaluation of the various alternatives can be provided.

⁶³ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁶⁴ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Environmental	SEO Code	SEO
Component	310 000e	
Biodiversity, Flora and Fauna	B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species ⁶⁵
	B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
	B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ⁶⁶ and Areas of Special Scientific Interest and to ensure the appropriate protection of listed species
	B4	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Population and Human Health	PHH1	To protect populations and human health from exposure to incompatible landuses
Soil	S1	To avoid damage to the hydrogeological and ecological function of the soil resource
Water	W1	To maintain and improve, where possible, the quality and status of surface waters
	W2	To prevent pollution and contamination of ground water
	W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009) ⁶⁷
Material Assets	M1	To serve new development with adequate and appropriate waste water treatment
	M2	To serve new development with adequate drinking water that is both wholesome and clean
	M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
Air and Climatic Factors	Air and Climatic C1 To reduce travel related emissions to air and to encourage modal change fi	
Cultural Heritage	CH1	To protect archaeological heritage including entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record (NISMR) and/or their context
	CH2	To protect architectural heritage including entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context
Landscape	L1	To minimise significant adverse visual impacts within and adjacent to the County, especially with regard to landscape and amenity designations included in Land Use Plans

Table 7.2 Criteria for appraising the effect of Alternatives on SEOs

Likely to <u>Improve</u> status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable <u>Conflict</u> with status
to the Greatest degree	to a <u>Moderate</u> degree	to a <u>Lesser</u> degree	to a <u>Lesser</u> degree	to a <u>Moderate</u> degree	to a <u>Greater</u> degree	with status of SEOs- unlikely to be fully mitigated

⁶⁵ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁶⁶ The Planning and Development Act 2010 defines a 'wildlife site' as: (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000, (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000, (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, (d) a nature reserve recognised or proposed to be recognised under a recognition 5 order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or (e) a refuge for fauna or flora designated 10 or proposed to be designated under a designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

⁶⁷ Corresponding guidance from UK Department for Communities and Local Government: National Planning Policy Framework and associated planning practice guidance on Flood risk and coastal change (March 2014)

7.3 Cumulative Effects

Cumulative effects are one of the types of effects which have been considered by the assessment of the alternatives. Cumulative effects can be described as the addition of many small impacts to create one larger, more significant, impact.

There are 2 types of potential cumulative effects that have been considered, namely:

- Potential *intra-Plan* cumulative effects these arise from the interactions between different types of potential environmental effects resulting from a plan, programme, etc. Where there are elevated levels of environmental sensitivities (such as those indicated on the overlay mapping on Figure 4.14 in Section 4.11), future development could result in environmental conflicts and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.4 in Section 8 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality; and
- Potential *inter-Plan* cumulative effects these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified under Table 8.3.

With regard to potential *inter-Plan* cumulative environmental effects, these occur as a result of the combination of: potential environmental effects which are identified by the assessment; and the effects arising from other legislation, plans, programmes or developments arising.

In considering the relationship with legislation and other plans and programmes it is important to note that the Plan will be implemented within areas that have existing plans and programmes (see Sections 2.5, 4 and 5 and Appendix I) for a range of sectors at a range of levels (e.g. National, Regional, County and Local) that are already subject to more specific higher and lower tier SEA and AA.

The assessment of the likely *inter-Plan* cumulative environmental effects requires knowledge of the likely effects of all plans/developments under consideration. The assessment is limited in this instance as there has been limited assessment of the likely types of developments provided for by other policies, plans and programmes that could occur in combination with the implementation of the County Development Plan. Where they exist, the SEA recognises the existence of other environmental assessments with a view to avoid duplication of assessment, in compliance with the SEA Directive.

The SEA undertaken for the Plan has taken account of the Council's obligation to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Cumulative effects that have been considered include those resulting from the Plan and:

- Other land use Plans (e.g. Fermanagh, Dungannon and South Tyrone, Armagh, Louth and Cavan and lower tier land use plans within and adjacent to County Monaghan);
- Water services, waste management, transport and energy infrastructure plans (e.g. Irish Water's Water Services Strategic Plan and associated Capital Investment Plan, Connacht Ulster Waste Management Plan and Grid25 and associated Implementation Programme) and the County Monaghan Local Economic and Community Plan; and
- Environmental protection and management plans (e.g. River Basin Management Plan and flood risk management plans).

Such potential cumulative effects include the following (note that potential adverse cumulative effects will be mitigated by provisions which have been integrated into the Plan - see Section 9):

- Contributions towards reductions in travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating sustainable mobility/a shift from motorised transport modes to more sustainable and non-motorised transport modes;
- Contributions towards travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating development which must be accompanied by road capacity;
- Facilitation of new development which is accompanied by appropriate levels of water services thereby contributing towards environmental protection;
- Need for and use of water and wastewater treatment capacity arising from new developments and associated potential adverse effects;
- Potential cumulative effects upon surface and ground water status as a result of housing, employment, agricultural and forestry loadings and abstractions;
- Potential cumulative effects (habitat damage, enhancing ecological connectivity, contributing towards sustainable mobility) arising from linear developments, such as those relating to Green Infrastructure, including beyond the County border;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths adjacent to the County border; and
- In combination with plans and programmes from all sectors potential adverse effects on all environmental components arising from all development in greenfield and brownfield areas (e.g. infrastructural, residential, economic, agricultural etc.). The type of these effects are consistent with those described on Table 7.4. These plans and programmes from other sectors undergo SEA and comply with environmental legislation while projects are subject to EIA and AA, as relevant.

These effects would have the potential, if unmitigated, if they occurred, to result in changes in the environment within and beyond County Monaghan. The potential effects are also potential transboundary effects.

A variety of the issues covered by the Plan provisions are regional issues which are considered: at Regional Assembly level, in the Border Regional Authority Planning Guidelines 2010-2022 and by planning authorities across the Region. The solutions to these issues are often regional solutions which are subject their own consenting procedures. Works arising outside of the Plan as a result of providing for new development within the Plan area including those arising as a result of the cumulative provision of development in the wider Border region would potentially conflict with a number of environmental components, across the wider Border region and beyond, including: ecology, soil function, the status of water bodies and the landscape. Some of these conflicts would be mitigated by measures which will be integrated into the Plan while some will be mitigated by measures arising out of separate consent procedures.

7.4 Detailed Evaluation of Alternatives

7.4.1 Significant Positive Effects Common to all Alternatives

By providing for development within existing development boundaries and facilitating the use of existing utilities and brownfield sites, all alternatives would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in wider rural areas that are further from established settlements and less well serviced. This, in the context of normal proper planning and sustainable development provisions, would be likely to result in significant positive environmental effects on environmental components as indicated on Table 7.3.

Environmental Component	Significant Positive Effect, likely to occur
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water.
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services.
Water	 Contributes towards protection and management of ground and surface waters, including coastal waters downstream, due to facilitating development within established and serviced settlement centres.
Material Assets	 Allows for use of planned infrastructure including water services, transport and drainage infrastructure. Makes use of existing water services, transport and drainage infrastructure.
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air.
Cultural Heritage	Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements.
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements.

Although significant positive environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives provided in the subsections below.

7.4.2 Potentially Significant Adverse Effects Common to all Alternatives

All of the alternatives provide for development. Such development would have the potential to conflict with environmental components – to different degrees. Potentially significant adverse environmental effects arising from this conflict are common to all alternatives and are described on Table 7.4. For implementation of the Plan, these effects will be mitigated by provisions integrated into the Plan relating to environmental protection and management – see Section 9.

Although potentially significant adverse environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives provided in the subsections below.

Table 7.4 Potentially Significant Adverse Environmental Effects, if unmitigated, common to all alternatives

Environmental Component	Potentially Significant Adverse Environmental Effects, if unmitigated					
Biodiversity and Flora and Fauna	 Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. 					
Population and Human Health	• Potential interactions if effects upon environmental vectors such as water and air are not mitigated.					
Soil	 Damage to the hydrogeological and ecological function of the soil resource. 					
Water	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. 					
	 Increase in the risk of flooding. 					
Material Assets	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)⁶⁸. Failure to comply with drinking water regulations and serve new development with adequate drinking 					
	water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).					
	 Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter 					
Air and Climatic Factors	 Emissions to air including greenhouse gas emissions and other emissions. 					
Cultural Heritage	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 					
Landscape	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape 					

 $^{^{\}mbox{\tiny 68}}$ Irish Water is responsible for strategic water services.

7.4.3 Evaluation of Tier 1: Alternatives for Allocation of Population

The following alternatives for an urban to rural population split were considered by the Council as follows:

- A. Continue Existing 37% Urban, 63% Rural
- B. Increase Rural 33% Urban, 67% Rural
- C. Increase Urban

41% Urban, 59% Rural

All of these alternatives would help to sustain existing sustainable rural management practices - and the communities who support them – in order to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Tier 1 alternatives are assessed against Strategic Environmental Objectives on Table 7.5.

As indicated on this table, increasing the urban population in the County ("C. Increase Urban") would improve the status of the environment the most, with the least amount of potential conflicts.

Increasing the rural population in the County ("B. Increase Rural") would improve the status of the environment the least, with the most amount of potential conflicts.

Increasing the urban population in the County ("A. Continue Existing") would improve the status of the environment to a moderate degree, with a moderate amount of potential conflicts.

Alternative	Likely to Improve status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable <u>Conflict</u> with
	to the Greatest degree	to a <u>Moderate</u> degree	to a <u>Lesser</u> degree	to a <u>Lesser</u> degree	to a <u>Moderate</u> degree	to a <u>Greater</u> degree	status of SEOs- unlikely to be fully mitigated
Tier 1: A. Continue Existing		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		
Tier 1: B. Increase Rural		B4	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B4	 B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 	
Tier 1: C. Increase Urban	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		

7.4.4 Evaluation of Tier 2: Consideration of Policy for Rural Areas under Strong Urban Influence

These two alternatives both provide for urban and rural growth in the County, however they have different approaches to managing development in areas surrounding urban settlements:

A. One includes a "Rural Areas under Strong Urban Influence" policy that restricts development in areas surrounding urban settlements.

Restricting development in rural areas that are under strong urban influence would positively impact upon the protection and management of the environment and sustainable development. The restrictions would help to both reduce levels of greenfield development in areas immediately surrounding existing centres and encourage brownfield development within existing centres.

Rural development would be directed towards appropriate rural areas and urban development would be directed towards established settlements. This alternative would prevent low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

B. The other does not include a "Rural Areas under Strong Urban Influence" policy that restricts development in these areas.

Not restricting development in rural areas that are under strong urban influence would adversely impact upon the protection and management of the environment and sustainable development. The absence of restrictions would result in increased levels of greenfield development in areas immediately surrounding existing centres and less demand for brownfield development within existing centres.

Urban generated development would occur within rural areas outside of established settlements. This alternative would result in low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

Both alternatives would help to sustain existing sustainable rural management practices - and the communities who support them – in order to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Tier 2 alternatives are assessed against Strategic Environmental Objectives on Table 7.6.

Alternative	Likely to Improve status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable <u>Conflict</u> with status of
	to the Greatest degree	to a <u>Moderate</u> degree	to a <u>Lesser</u> degree	to a <u>Lesser</u> degree	to a Moderate degree	to a <u>Greater</u> degree	SEOs- unlikely to be fully mitigated
Tier 2: A. Policy for Rural Areas under Strong Urban Influence	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		
Tier 2: B. No Policy for Rural Areas under Strong Urban Influence		B4	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B4	 B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 	

Table 7.6 Assessment of Tier 2 Alternatives against Strategic Environmental Objectives

7.4.5 Evaluation of Tier 3: Alternatives for Larger Towns

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new development over a relatively small number of sites that are already or most easily served by infrastructure and could serve demand for new development

Alternative A 'Even Development' would result in the greatest degree of significant positive effects (see Section 7.4.1) and least degree of potential conflicts (see Section 7.4.2). Development would be most likely to occur within or closest to existing settlement centres on serviced sites.

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new development over a greater number of sites that could serve demand for new development

Alternative B 'Sporadic Development' would result in a relatively moderate degree of significant positive effects (see Section 7.4.1) and a relatively moderate degree of potential conflicts (see Section 7.4.2). In comparison to Alternative A, development would be spread out over a greater number of sites, some not currently serviced and some further from settlement centres. Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative A 'Even Development'.

By:

- Not identifying opportunity sites; and
- Following a 'laissez faire' approach in relation to development, with each application considered on its own merits and no land use zoning would be provided for

Alternative C 'Haphazard Development' would result in the least degree of significant positive effects (see Section 7.4.1) and greatest degree of potential conflicts (see Section 7.4.2). Development would be spread out over the entire area associated with each settlement with ribbon development a dominant feature within the settlements. Although existing Plan provisions – including those relating to environmental protection/management and sustainable development – would have to be complied with, the potential for cumulative adverse effects would be significantly higher with this alternative.

All of the alternatives are consistent with approach provided by the existing Plan, to sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Tier 3 alternatives are assessed against Strategic Environmental Objectives on Table 7.7.

Table 7.7 Assessment of Tier 3 Alternatives against Strategic Environmental Objectives

	Likely to <u>Ir</u>	mprove status of	SEOs	Potentia	I <mark>l Conflict w</mark> ith sta likely to be mitiga	Probable <u>Conflict</u> with	
Alternative	to the Greatest degree	to a <u>Moderate</u> degree	to a <u>Lesser</u> degree	to a <u>Lesser</u> degree	to a <u>Moderate</u> degree	to a <u>Greater</u> degree	status of SEOs- unlikely to be fully mitigated
Tier 3 A 'Even Development'	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		
Tier 3 B 'Sporadic Development'		B1B2B3B4PHH1S1W1W2W3M1M2M3C1CH1CH2L1			B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		
Tier 3 C 'Haphazard Development'		B4	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B4	 B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 	

7.5 Selected Alternatives

Selected alternatives for the Plan from each of the three tiers of alternatives that emerged from the planning/SEA process are indicated on Table 7.8 below.

These alternatives have been selected and developed by the Planning Team, placed on public display and adopted by the Council having regard to both:

- 1. The environmental effects which were identified by the SEA and are detailed above; and
- 2. Planning including social and economic effects that also were considered by the Council.

Tier	Alternatives Considered	Selected Alternative
1. Alternatives for Allocation of Population	A. Continue Existing	
	B. Increase Rural	C. Increase Urban
	C. Increase Urban	
2. Consideration of Policy for Rural Areas under Strong Urban Influence	A. Policy for Rural Areas under Strong Urban Influence	A. Policy for Rural Areas under Strong Urban
	B. No Policy for Rural Areas under Strong Urban Influence	Influence
3. Alternatives for Larger Towns	A. 'Even Development'	
	B. 'Sporadic Development'	A. 'Even Development'
	C. 'Haphazard Development'	

Table 7.8 Selected Alternatives for the Plan

Section 8 Evaluation of Plan Provisions

8.1 Introduction

This section provides an assessment of environmental effects from implementation of the Plan.

The provisions of the Plan are evaluated using compatibility criteria (see Table 8.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the provisions of the Plan are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment. Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for the SEO likely to be affected - in this instance 'To ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species⁶⁹.

The interactions identified are reflective of likely significant environmental effects⁷⁰;

- 1. Interactions that would be likely to improve the status of a particular SEO would be likely to result in a significant positive effect on the environmental component to which the SEO relates.
- 2. Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in potential significant negative effects however these effects would be likely to be mitigated by measures which have been integrated into the Plan.
- 3. Interactions that would probably conflict with the status of an SEO and would be unlikely to be mitigated would be likely to result in a significant negative effect on the environmental component to which the SEO relates.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9 - these have been integrated into the Plan.

Table 8.1 Criteria for appraising the effect of Plan provisions on SEOs

Likely to <u>Improve</u> status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable <u>Conflict</u> with status of SEOs- unlikely to be fully mitigated	No Likely interaction with status of SEOs
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⁶⁹ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁷⁰ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 8.2 Strategic	Environmental	Objectives ⁷¹
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Environmental	SEO Code	Strategic Environmental Objectives
Component		
Biodiversity,	SEO B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection
Flora and		of European Sites and Annexed habitats and species ⁷²
Fauna	SEO B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
	SEO B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ⁷³ and Areas of Special Scientific Interest and to ensure the appropriate protection of listed species
	SEO B4	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Population	SEO	To protect populations and human health from exposure to incompatible landuses
and Human	PHH1	
Health		
Soil	SEO S1	To avoid damage to the hydrogeological and ecological function of the soil resource
Water	SEO W1	To maintain and improve, where possible, the quality and status of surface waters
	SEO W2	To prevent pollution and contamination of ground water
	SEO W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009) ⁷⁴
Material	SEO M1	To serve new development with adequate and appropriate waste water treatment
Assets	SEO M2	To serve new development with adequate drinking water that is both wholesome and clean
	SEO M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
Air and	SEO C1	To reduce travel related emissions to air and to encourage modal change from car to more
Climatic		sustainable forms of transport
Factors		
Cultural	SEO CH1	To protect archaeological heritage including entries to the Record of Monuments and
Heritage		Places, the Northern Ireland Sites and Monuments Record (NISMR) and/or their context
	SEO CH2	To protect architectural heritage including entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context
Landscape	SEO L1	To minimise significant adverse visual impacts within and adjacent to the County, especially with regard to landscape and amenity designations included in Land Use Plans

⁷¹ See Section 5 for a description of Strategic Environmental Objectives.

⁷² 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁷³ The Planning and Development Act 2010 defines a 'wildlife site' as: (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000, (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000, (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, (d) a nature reserve recognised or proposed to be recognised under a recognition 5 order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or (e) a refuge for fauna or flora designated 10 or proposed to be designated under a designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

⁷⁴ Corresponding guidance from UK Department for Communities and Local Government: National Planning Policy Framework and associated planning practice guidance on Flood risk and coastal change (March 2014)

8.2 Overall Evaluation (including Transboundary)

Monaghan County Council have integrated all recommendations arising from the SEA, AA and SFRA processes into the Plan (see Section 9). Table 8.3 provides a detailed overall evaluation of the environmental effects arising from the Plan. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation through both provisions integrated into the Plan – see Section 9.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site specific environmental factors. Strategic Environmental Objective (SEO) codes taken from Table 8.2.

The scope of the assessment (including description of baseline, the relationship to other plans and programmes and the evaluation of effects) has considered the environment of both Ireland and Northern Ireland. Taking into account, inter alia, the detailed mitigation which has been integrated into the Plan (including that which is detailed at Section 9) it has been determined that significant residual adverse environmental effects will not occur in either Ireland or Northern Ireland. Relevant Plans and Programmes in both Ireland and Northern Ireland are required to comply with environmental legislation including the SEA and Habitats Directives. In order to be permitted, proposals for development in both Ireland and Northern Ireland are required to comply with environmental protection legislation and relevant higher tier Plans and Programmes.

Table 8.3 Overall Evaluation – Effects arising from the Plan

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Residual Adverse Non- Significant Effects	Relevant SEO Codes
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain 	 Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. 	 Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation). 	B1 B2 B3 B4
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water. 	Potential interactions if effects upon environmental vectors such as water and air are not mitigated.	 Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility, flood risk management and infrastructural provision. 	PHH1
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services. 	Damage to the hydrogeological and ecological function of the soil resource.	 Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. 	S1
Water	 Contributes towards protection and management of ground and surface waters, including coastal waters downstream, due to facilitating development within established and serviced settlement centres. 	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding. 	 Increased loadings as a result of development to be in compliance with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events. 	W1 W2 W3

Environmental	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if	Residual Adverse Non-	Relevant
Component		unmitigated	Significant Effects	SEO Codes
Material Assets	 Allows for use of planned infrastructure including water services, transport and drainage infrastructure. Makes use of existing water services, transport and drainage infrastructure. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) ⁷⁵. Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Increases in waste levels. Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter 	 Residual wastes to be disposed of in line with higher level waste management policies. 	M1 M2
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air. 	 Emissions to air including greenhouse gas emissions and other emissions. 	 An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility. 	C1
Cultural Heritage	Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements.	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	 Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation. Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan. 	CH1 CH2
Landscape	 Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements. 	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape	 The Plan as varied contributes towards the protection of landscape designations and the landscape. Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments. 	L1

⁷⁵ Irish Water is responsible for strategic water services.

8.3 Appropriate Assessment and Strategic Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) have both been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DECLG, 2009).

The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network of European Sites⁷⁶.

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes. The preparation of the Plan, SEA, AA and SFRA has taken place concurrently and the findings of the AA and SFRA have informed both the Plan and the SEA.

8.4 Climate Adaptation and Mitigation

Climate adaptation is a change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts.

Climate mitigation describes action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change.

As detailed under Section 4.7 "Air and Climatic Factors": "The key issue involving the assessment of the effects of implementing the Plan on climatic factors relates to greenhouse gas emissions arising from transport. Climatic factors also interact with flooding..."

The County Development Plan is primarily a land use plan and land use plans and transport are closely linked. By improving sustainable mobility through land use planning, the Plan will reduce existing levels of greenhouse gas emissions and limit increases in future emissions. This will contribute towards avoidance or mitigation of climate change arising from development with County Monaghan. The Plan will also contribute towards climate mitigation across other sectors including energy and agriculture.

Strategic Environmental Objectives (SEOs), indicators and targets have been developed to focus upon this key issue as follows:

- SEO C1: To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
- Indicator C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means
- Target C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means

The SEA has facilitated the consideration of three tiers of alternatives for the overall County Development Plan strategy (see Sections 6 and 7). The SEA evaluated the likely significant environmental effects of all alternatives with an understanding of the land use pattern likely to arise

⁷⁶ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

⁽a) no alternative solution available;

⁽b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and

⁽c) adequate compensatory measures in place.

and associated emissions from transport key to this evaluation. This informed the decision by the planners to select alternatives at each of the three tiers that are best for the environment, best for reducing car dependency, best for increasing levels of sustainable mobility and best for reducing emissions of greenhouse gas emissions.

The selected alternatives (to increase the overall proportion of urban populations, to include a policy for rural areas under strong urban influence and to provide for even development within the County's settlements) will contribute towards:

- Improving sustainable mobility
- Reducing existing levels of greenhouse gas emissions; and
- Limiting increases in future emissions

thereby contributing towards avoidance or mitigation of climate change arising from development with County Monaghan.

The key Plan issue in relation to climate adaptation is flooding. A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the preparation of the Draft Plan that has helped to facilitate the appropriate zoning of areas that are at elevated risk of flooding. The findings of the SFRA are integrated into the SEA. The SFRA in combination with the SEA has facilitated the integration of provisions into the CDP that will help to ensure the implementation of the Flood Risk Management Guidelines at lower tiers of decision making and will help to facilitate improved levels of sustainable drainage in the County.

SEOs, indicators and targets have also been included for the topic of flooding which is the key Plan issue relating to climate change adaptation:

- SEO W3: To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009)
- Indicator W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
- Target W3: Minimise developments granted permission on lands which pose or are likely to pose in the future a significant flood risk in compliance with The Planning System and Flood Risk Management Guidelines for Planning Authorities

In addition to focusing on the key issues of land use planning, sustainable mobility and greenhouse gas emissions from transport and flooding, the SEA has contributed towards the integration of a multitude of other provisions (other than those directly relating to land use, transport and flooding) into the Plan relating – directly or indirectly – to climate mitigation and adaptation. These relate to other sectors and are intended to support the efforts, Plans, etc. of these sectors.

The first National Mitigation Plan 2017, prepared by the Department of Communications, Climate Action and Environment, represents an initial step to set Ireland on a pathway to achieve the level of decarbonisation required. It is a whole-of-Government Plan, reflecting in particular the central roles of the key Ministers responsible for the sectors covered by the Plan – Electricity Generation, the Built Environment, Transport and Agriculture, as well as drawing on the perspectives and responsibilities of a range of other Government Departments.

The National Adaptation Framework (Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for.

8.5 Interrelationship between Environmental Components

The SEA Directive requires the Environmental Report to include information on the likely significant effects on the environment, including on issues such as biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

Likely significant effects on environmental components which are identified include those which are interrelated; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.4.

Component	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air and Climatic factors	Material assets	Cultural heritage	Landscape
Biodiversity, flora and fauna		No	Yes	Yes	Yes	Yes	No	Yes
Population and Human Health			Yes	Yes	Yes	Yes	No	No
Soil				Yes	No	Yes	No	No
Water					No	Yes	No	No
Air and Climatic Factors						Yes	No	No
Material Assets							Yes	Yes
Cultural Heritage								Yes
Landscape								

Table 8.4 Presence of Interrelationships between Environmental Components

8.6 Detailed Evaluation

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

8.6.1 Chapter 1: Introduction

	Likely to <u>Improve</u> status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Strategic Aim and Objectives				
 To facilitate sustainable development and to build on the strengths of County Monaghan by supporting the provision of employment opportunities and residential developments within quality urban and rural environments that provides a high standard of physical and social infrastructure necessary for their respective communities. The realisation of this aim will be pursued by seeking to secure the following overall strategic objectives of the Plan: To develop to its full potential each part of County Monaghan in economic, social and environmental terms. To sustain traditional settlement patterns while developing the role and function of each town, village and settlement throughout the County in accordance with the settlement strategy. To realise the potential of County Monaghan in the context of its strategic location along the border, adjacent to the eastern economic corridor and to improve linkages and communications between Monaghan and its neighbouring counties. To protect and nurture the County's rich natural resources, heritage and amenities along with the environmental quality of the natural and built environment in both the urban and rural areas. To provide a framework for the management and regulation of development and use of land that will guide day 	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
to day planning decisions.				
Commentary				

These provisions contribute towards the sustainable development and the protection and management of the environment, as can be demonstrated by the following text from the various strategic objectives:

1. "environmental terms";

2. "sustain traditional settlement patterns while developing the role and function of each town, village and settlement";

3. "improve linkages";

4. "delivering improved infrastructure and services";

5. "protect and nurture the County's rich natural resources, heritage and amenities along with the environmental quality of the natural and built environment in both the urban and rural areas"; and

6. "improve the quality of life of all".

8.6.2 Chapter 2: Core Strategy

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Strategic Objective, Aims and Settlement Hierarchy	•		•	•
CST To ensure that new development within the County will provide for sustainable development that enables economic growth, delivery of accessible and high-quality infrastructure and services and guides population growth in accordance with the settlement strategy. Aim 1: To provide planning policy that will support strong and sustainable development over the lifetime of the Plan. Aim 2: To approach the overall development of the County in an inclusive, integrated way to make sure all aspects of development work together. Aim 3: To provide a plan that will make the best use of the County's resources to support the sustainable development of infrastructure, amenities and economic investment in the area. Aim 4: To achieve a lively and vibrant living and working environment for the County's population by making the most of the economic, social and physical development. Aim 5: To identify the scope of development needed to support future population growth. Aim 5: To identify the scope of development needed to support future population growth. Aim 6: To promote and support the integration of land use and transport and to encourage a modal shift to greater use of sustainable modes of transport, including walking, cycling and public transport. Aim 7: To examine and assess existing housing and settlement patterns so to ensure all decisions are informed and evidence based. Aim 1: Support the strengthening of the town and village network throughout the County, whith trageting growth to supporting urban settlements and enabing the expansion of linkages within the region and nationally. Aim 3: To create vibrant and thriving communities in the rural settlements by using the extensive village network to support rural communities through the provision of community services, convenience retail services, social functions and transport links. Aim 4: To create altractive town and village environments with unique identities and an appropriate mix of uses to attract and retain population within the	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

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Core Strategy, Rural Settlement Strategy and Rural Area Types Policies and Objectives				
CSP1: To maintain Monaghan town's position as the principle town of County Monaghan and to endeavour to ensure	B1 B2 B3 B4		B1 B2 B3 B4	
that it reaches its population target and fulfils its role as the designated County town.	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
CSP2: To promote urban growth and the further development of the strategic towns to ensure their functions are	W3 M1 M2 M3 C1		W3 M1 M2 M3	
supported by appropriate development that will direct development within the locality.	CH1 CH2 L1		C1 CH1 CH2 L1	
CSP3: To facilitate the growth of the service towns as settlements that can provide associated community facilities,				
services and employment opportunities for the urban area and the surrounding hinterland.				
CSP4: To promote and facilitate limited development within the Tier 4 village network that is commensurate with the				
nature of the settlement and to support their role as local service centres.				
CSP5: To preserve the character of Tier 5 and Tier 6 rural settlements by restricting the scale of development permitted				
within them and to ensure integration with the rural character of the area and the satisfactory provision of infrastructure				
services.				
CSP6: To consolidate the settlements, retain their visual identity distinct from the surrounding countryside and to				
reserve land for future planned expansion of settlements. This includes the provision of major infrastructure, as well as				
protecting the heritage, water quality and recreational amenity of the settlements and their surrounding rural				
hinterlands.				
CSP7: Proposals for residential development in the designated settlement will be determined in accordance with the				
provisions of the core strategy with regard to population growth, the ability of the proposal to enhance the character of				
the settlement, the demand for the proposed quantum and type of residential development within the settlement and				
compliance with relevant development management criteria as set out in this development plan.				
CSP8: To facilitate the development of low density residential developments and/or serviced sites on designated zoned				
lands within existing settlements. This will assist in providing choice of house type within a structured but low-density				
environment, as an alternative to the development of one off housing in the open countryside.				
CSP9: To ensure that the amount of lands zoned for residential uses in the County is consistent with the requirements				
of the Core Strategy as set out in Table 2.4 & 2.5 Any land considered appropriate for zoning in excess of these				
requirements shall be included as Strategic Reserve for potential development beyond this plan period.				
RSO1 To support a balanced approach to the development of rural areas to retain vibrancy, to accommodate within the				
rural area people who are functionally or socially part of the rural community, and to direct urban generated housing				
demand into established rural settlements.				
RSO2 To permit small scale residential development reflective of the character of the existing settlement in accordance				
with the relevant criteria set out in Section 2.7.1.				
RHP1				
1. To require applications for development within the rural settlements to submit an assessment of the development site				
relative to the location, visual impact and other normal planning considerations including the ability to consolidate the				
settlement, enhance the existing character and strengthen a sense of identity and distinctiveness for the settlement.				
2. To only permit residential development and local level services such as small convenience shops, schools, post offices				
which are appropriate in scale and nature to these settlements.				
3. To consider applications for serviced sites in accordance with Policy RDP5 as outlined in Development Management				
Chapter in those Tier 5 and 6 settlements which have capacity within existing public foul drainage systems. In all other				
instances, the application site must be 0.2ha and be served by an individual waste water treatment system which can be				
installed in accordance with EPA Code of Practice.				
4. Identified rural settlements within the rural areas under strong urban influence shall not be required to demonstrate a				
rural generated housing need				
RSO3 To facilitate housing in rural areas under strong urban influence for those who have a rural generated housing				
need and to apply a presumption against urban generated rural housing development.				
RSO4 To maintain population levels in the remaining rural areas by accommodating appropriate rural development and				
to consolidate the existing town and village structure.				
RHP3 Applications for single dwellings in these areas will only be permitted where the development complies with one				

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of the fo	lowing;			
a)	The applicant is a landowner ⁷⁷ , or where the dwelling is for a member of his / her immediate family ⁷⁸ .			
b)	The dwelling is for an individual who has lived in the local ⁷⁹ rural area ⁸⁰ for a minimum period of 5 years prior			
	to the date of submission of a planning application.			
c)	The dwelling is required to meet the needs of a person working in an established rural based agricultural,			
	commercial, industrial or other enterprise in the local area, where the person derives his/her main income			
	from that activity, or by a member of his / her immediate family. Such circumstances may also include other			
d)	persons whose work is intrinsically linked to the local rural area (such as teachers in rural schools).			
d)	The dwelling is to facilitate a retiring farmer, where the applicant last worked principally as a farmer in the local area, or by a widow or widower of someone who last worked principally as a farmer in the local area.			
e)	The dwelling is required to facilitate site specific and compelling special domestic or personal circumstances,			
e)	where genuine hardship would result if planning permission were refused. In these circumstances the onus will			
	be placed on the applicant to justify why other alternative solutions, such as a house extension, granny flat or			
	mobile home, cannot be considered.			
f)	The dwelling is to replace an existing dwelling, where the dwelling to be replaced; was in use or last used as a			
,	dwelling; has not been changed to a dwelling from another use without planning permission; has not been			
	vacant for a period in excess of 10 years prior to the date of submission of a planning application; exhibits all			
	the essential characteristics of a habitable dwelling house and is reasonably intact.			
g)	The sympathetic change of use of a protected structure or a non-protected vernacular building (where the			
	building is an important element in the landscape or of local architectural or historic merit) into residential use,			
	where this secures its upkeep and survival, and the character and architectural or historic interest of the			
	building would be preserved or enhanced. Proposals for a change of use should incorporate details of all			
	intended alterations to the building and its curtilage to demonstrate their effect on its appearance, character			
	and setting. Improvements to protected structures will comply with policies as set out in Development			
L)	Management Chapter of the Monaghan County Development Plan 2019-2025.			
h)	The dwelling is for an emigrant who is returning to the local area, where he/she had previously lived for a minimum period of five continuous years.			
	p facilitate rural housing in the remaining rural areas subject to the relevant planning policies as set out in			
	nent Management Chapter of the Monaghan County Development Plan 2019-2025.			
	here planning permission has been granted for a dwelling prior to 2010, in an area that is currently designated			
	al Area Under Strong Urban Influence, where substantial works have been carried out but the development has			
	completed, the planning authority may grant planning permission for the retention and completion of the			
developn	nent, without the necessity to comply with the provisions of Policy RHP3. The applicant will be required to			
demonst	rate that the development is in compliance with all other policies within the Monaghan County Development			
	9-2025. The planning authority in granting planning permission under this policy may consider it necessary to			
	restrictions on future development of lands within the applicant's control having regard to the prevailing			
	ances and/or an occupancy clause in accordance with the Sustainable Rural Housing Guidelines 2005.			
Comme	ntary			

The Core Strategy detailed in this chapter reflects the preferred selection of alternatives for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) provided for the various provisions of the Core Strategy is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The Core Strategy seeks to ensure that the focus of growth is commensurate to the size and function of the settlements within the County. Monaghan Town is the primary economic growth town to be

⁷⁷ For the purpose of this section a landowner is defined as an individual with a minimum landholding in the local rural area of four hectares, which he or she has owned for a minimum period of five years prior to the date of submission of a planning application.

⁷⁸ Immediate family is considered to be a sibling, son or daughter, or adopted child of the landowner. Where the landowner's child(ren) have resided outside the state or N. Ireland for a minimum continuous period of ten years or where the landowner has no children, a niece/nephew maybe considered a landowner's family member.

⁷⁹ For the purposes of this section, local area is defined as being within a radius of four kilometres.

⁸⁰ For the purposes of this section, rural area is defined as outside the defined development limits of a settlement.

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promoted for regional enterprise. Carrickmacross and Castleblayney are identified as secondary economic centres whereby capacity exists to provide new employment opportunities in strategic accessible locations. The towns of Clones and Ballybay will be encouraged to supply new local employment opportunities. The wider rural area will continue to provide for employment generating uses that are locational based including, but not limited to, agri-business, rural based tourism and renewable energy projects.

The Settlement Hierarchy supports the strengthening of the town and village network throughout the County, with priority being accorded to Monaghan Town in order to fulfil its role as the principle town within the County, whilst targeting growth to supporting urban settlements, including Carrickmacross, Castleblayney, Clones and Ballybay, and enabling the expansion of linkages within the region and nationally. The hierarchy seeks to maintain and support the functional roles of the larger towns by the promotion of appropriate development in these areas and provides for vibrant and thriving communities in the rural settlements.

Many of these provisions contribute towards both sustainable development and the protection and management of the environment. Strategic Aims 1, 3 and 6, Core Strategy Policies CSP5 and CSP6, Rural Settlement Strategy Policies RHP1 and the approach to Rural Areas including "areas under strong urban influence"⁶¹ relate primarily to the protection of the environment.

The provision of necessary infrastructure in advance of development would facilitate both of the following:

- The achievement of balanced and sustainable development as set out by higher level planning objectives; and
- Appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health SEOs M1 M2 W1 W2 B1 B2 B3 PHH1) and the provision of transport infrastructure integrated with land use planning and associated interactions with sustainable mobility, emissions and energy usage (SEOs C1 PHH1).

Provided by the Core Strategy, is a concentration of growth in urban centres and appropriate growth in rural areas: towns are likely to develop within settlement boundaries and rural areas would be supported by larger urban centres and a control of sporadic rural housing. This approach would:

- Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health SEOs C1 PHH1);
- Contribute towards the protection of many environmental components outside of the settlement boundaries of growth towns that would otherwise occur. Such components include biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations and cultural heritage (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1);
- Make most use of existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health) (SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1); and
- Sustain existing sustainable rural management practices and the communities who support them to ensure the continuation of long established managed landscapes and the flora and fauna that they contain (SEO B4)

The construction and operation of all infrastructure, economic and housing development has the potential to result in adverse effects upon all environmental components however these effects have been mitigated by provisions which have been integrated into the Plan, including those which are identified in Section 9 of this report. The potential adverse effects (if unmitigated) include the following:

- Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna (SEO B1);
- Habitat loss, fragmentation and deterioration, including patch size and edge effects (SEO B2)
- Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species (SEO B3)
- Intercations with human health if effects upon environmental vectors such as water and air are not mitigated (SEO PHH1)
- Damage to the hydrogeological and ecological function of the soil resource (SEO S1)
- Adverse impacts upon the status and quality of water bodies (SEOs W1 W2)
- Increase in the risk of flooding (SEO W3)
- Failure to provide adequate and appropriate waste water treatment (SEO M1; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)⁸²
- Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (SEO M2; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)
- Increases in waste levels (SEO M3) and interactions between agricultural waste and soil, water, biodiversity and human health (SEOs B1 B2 B3 PHH1) including as a result of emissions of

⁸¹ Restricting development in rural areas that are under strong urban influence would positively impact upon the protection and management of the environment and sustainable development. The restrictions would help to both reduce levels of greenfield development in areas immediately surrounding existing centres and encourage brownfield development within existing centres. Rural development would be directed towards appropriate rural areas and urban development would be directed towards established settlements. This alternative would prevent low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter

- Emissions to air including greenhouse gas emissions and other emissions (SEO C1)
- Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities (SEOs CH1 CH2)
- Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape (SEO L1)

8.6.3 Chapter 3: Housing

Housing Objective and Policies Image: Comparison of the Comparison of the County within existing defined settlements to the calls the economics of providing infrastructure and services in towns and villages, facilitate their plan led expansion while traditions usualnable rural housing where it supports and promotes the prosperity of existing praditions for the comparison of the Comparison of the County within existing defined settlements to providing infrastructure and services in towns and villages, facilitate their plan led expansion B1 B2 B3 B4 Policy HSP: To provide social housing through partnership working with voluntary and co-operative housing bodies as well as through agreements with private colecular developments on land zone of for residential or mixed uses (where residential developments on land zone) for as social possign throat residential developments on land zone of for residential or mixed uses (where residential is included) be provided for social housing in provide within communities. Declions on leasing take up, RAS and on Part V on specific sites shall be based on existing housing profile and needs of the area. CH1 CH2 L1 CH1 CH2 L1 Policy HSP: To conculterate tundue social segregation by ensuring an appropriate balance between social, specialist and private (cold multiple residential development in a sequential manner outward from the core area of settlements. CH1 CH2 L1 CH1 CH2 L1 Policy HSP: To require the provision of a suitable range of house types and iszes to facilitate the changing demographic and in particular the increasing trend towards smaller household sizes. In private housing schemes a minimum of 10% of housing introductions made the provide guites process and utilitin the schements demonstrate a high-quality liv		Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be mitigated	<u>Mitigated</u> <u>Conflicts</u>	No Likely interaction with status of SEOs
Strategic Objective HSO1: To plan positively for future housing in the Courty within existing defined settlements to B1 B2 B3 B4 realise the economics of provides informatic uture and services in towns and villages, facilitate their plan led expansion B1 B2 B3 B4 Policy HSP1: To provide social housing through partnership working with voluntary and co-operative housing bodies as B1 B2 B3 B4 Policy HSP2: To require that 10% of all private residential developments on land zone for residential or mixed uses (Where residential is included) be provided for social housing under the provisions of Part V of the Planning & Development Act 2000 (as amended). CH1 CH2 L1 CH1 CH2 L1 Policy HSP3: To counterat undue social segregation by ensuring an appropriate balance between social, specialist and private (both rented and owner occupied) housing profile and needs of the area. Policy HSP3: To direct multiple residential developments in ascendance with the growth projected within the specific settlement. Policy HSP3: To direct multiple residential development in a sequencial amener outward from the core area of settlements in order to maximise the utility of existing and future infrastructure provision, to promote sustainability, to make more efficient use of inderrutilis and ands, and to avid the extension of services and utilities to more remote areas. Policy HSP3: To require that the development proposals for new residential developments in settlements denonstrate a high-quality thing design process including layout, specificatintial evelopment proposals for new residential develo	Housing Objective and Policies				
accordance with the current, and any future, traveller accommodation plan, and ethnic minorities, as far as is reasonable and practicable using the full range of housing options available. Policy HSP15: To support independent living for older people and the provision of specific, purpose built accommodation and to require that nursing homes/analogous services are located within the Tier 1, 2 and 3 settlements except in exceptional circumstances where the suitable reuse of existing buildings can be considered. Policy HSP16: To require that a high degree of building flexibility is incorporated into the design of new dwellings	 Strategic Objective HSO1: To plan positively for future housing in the County within existing defined settlements to realise the economics of providing infrastructure and services in towns and villages, facilitate their plan led expansion whilst facilitating sustainable rural housing where it supports and promotes the prosperity of existing rural communities. Policy HSP1: To provide social housing through partnership working with voluntary and co-operative housing bodies as well as through agreements with private developers and the local authority's own house building programme. Policy HSP2: To require that 10% of all private residential developments on land zoned for residential or mixed uses (where residential is included) be provided for social housing under the provisions of Part V of the Planning & Development Act 2000 (as amended). Policy HSP3: To counteract undue social segregation by ensuring an appropriate balance between social, specialist and private (both rented and owner occupied) housing is provided within communities. Decisions on leasing take up, RAS and on Part V on specific sites shall be based on existing housing profile and needs of the area. Policy HSP4: To direct multiple residential developments to those settlements identified in the Core Strategy and to require that the scale of such development is in accordance with the growth projected within that specific settlement. Policy HSP6: To equire to maximise the utility of existing and future infrastructure provision, to promote sustainability, to make more efficient use of underutilised lands, and to avoid the extension of services and utilities to more remote areas. Policy HSP6: To ensure the provision of a suitable range of house types and sizes to facilitate the changing demographic and in particular the increasing trend towards smaller household sizes. In private housing schemes a minimum of 10% of housing units shall be 2-bedroom units.	PHH1 S1 W1 W2 W3 M1 M2 M3 C1		PHH1 S1 W1 W2 W3 M1 M2 M3 C1	

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mobility.		
Policy HSP17: To facilitate the provision of suitable accommodation, where a need is identified, for those with special		
needs, for the homeless and for those in need of emergency accommodation		
Policy HSP18: To require all applications for rural housing to comply with the guidance set out in Development		
Management Chapter.		
Policy HSP19: To ensure that rural housing applications employ site specific design solutions to provide proposals that		
integrate into the landscape and that respect their location in terms of siting, design, materials, finishes and landscaping.		
Policy HS20: To require that new houses in the rural areas ensure the protection of water quality in the arrangements		
for on-site waste water disposal, ensure provision of a safe means of access in relation to road and public safety and		
ensure the conservation of sensitive areas such as natural habitats, the environs of protected structures and other		
aspects of heritage.		
Policy HS21: Apply a presumption against extensive urban generated rural development, ribbon development,		
unsustainable, speculator driven residential units in order to safeguard the potential for incremental growth of the towns		
and their potential beyond the plan period, to utilise existing physical and social infrastructure and to avoid demand for		
the uneconomic provision of new infrastructure.		
Commentary		

The housing provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for housing development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the Housing provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The housing measures make certain provisions – including those relating to sequential development, infrastructure provision, housing density, approach towards alternative uses of vacant unit's, unfinished residential development resolution, accommodation for all sectors of society rural housing and urban generated rural development – that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components.

As the housing measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

8.6.4 Chapter 4: Economic Development

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

	Likely to Improve	Probable Conflict	Mitigated	No Likely
	status of SEOs	with status of SEOs	Conflicts	interaction with
		- unlikely to be		status of SEOs
		mitigated		
Strategic Objective EDSO1 To promote Monaghan as a local and regional centre of trade, business and tourism and	B1 B2 B3 B4		B1 B2 B3 B4	
to build on its strong spirit of enterprise to create a dynamic local economy with job creation at its heart.	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
	W3 M1 M2 M3		W3 M1 M2 M3 C1	
	C1 CH1 CH2 L1		CH1 CH2 L1	
Commentary				

The economic provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for economic development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the economic provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

Retail Policies and Objectives		
RTP1 To ensure the orderly development of future retail development in County Monaghan and to keep the County	B1 B2 B3 B4	B1 B2 B3 B4
Retail Strategy under review having regard to changes in the retail sector.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
RTP2 Support the vitality and viability of existing town and village centres and facilitate a competitive and healthy retail	W3 M1 M2 M3	W3 M1 M2 M3 C1
environment by ensuring that future growth in retail floorspace responds to the identified retail hierarchy.	C1 CH1 CH2 L1	CH1 CH2 L1
RTP3 Assess all retail planning applications against the criteria set down in the County Monaghan Retail Development		

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Strategy 2016-2022 and the Retail Planning Guidelines for Planning Authorities 2012 (and the accompanying Retail			
Design Manual).	1		
RTP4 To direct retail development to serviced areas to reinforce the role and function of the core retail areas.	1		
RTP5 The preferred location for large scale retail developments is in town centres, with an explicit presumption against	1		
large out of town retail centres, in particular, those located adjacent or close to existing, new or planned national roads.	1		
Alternative locations will only be considered in accordance with the Sequential Test, as required under the Retail	1		
Planning Guidelines for Planning Authorities 2012.	1		
RTP6 To promote and encourage the enhancement of retail floorspaces and town centre functions in order to reduce	1		
retail expenditure leakage out of the County and to sustain competitiveness of retail centres in the County.	1		
RTP7 To encourage reuse of derelict sites and vacant town centre commercial premises for alternative uses and adapt a	1		
flexible approach to reoccupation, particularly where this can complement the existing service base.	1		
RTP8 To reduce retail expenditure leakage out of the County to competing town centres by working collaboratively with	1		
local groups to develop the retail offering in the county within key retail sectors where this leakage occurs.	1		
RTP9 To encourage and facilitate innovation and diversification of the County's retail offer, including tourism, agri-	1		
tourism and craft related ventures and markets where appropriate.	1		
RTP10 To improve the public realm of urban centres through the encouragement of high quality design.	1		
RTP11 To ensure that all new retail and commercial development proposals respect the character and scale of the	1		
existing streetscape.	1		
RTP12 To improve the accessibility of town centres by encouraging a pedestrian and cyclist friendly environment.	1		
RTP13 To promote complementary non-retail uses in town centres, particularly where this can encourage cross-	1		
visitation.	l		
RTP14 To promote activities that will bring enhanced footfall, such as festivals, events and farmers' markets in town	l		
centres.	I		
Commentary			

The retail provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for retail development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the retail provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The retail measures make certain provisions – including those relating to directing retail development to serviced areas with a preference for large scale retail developments in town centres, reusing derelict and vacant sites, improving the public realm of urban centres and encouraging a pedestrian and cyclist friendly environment – that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environments.

As the retail measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects to arise with regard to all environmental components and the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated.	ects
would be mitigated by measures including those that have been integrated into the Plan (see Section 9).	

Industry Policies and Objectives		
INDP1 The Planning Authority will encourage industrial development at appropriate scales and locations in line with the	B1 B2 B3 B4	B1 B2 B3 B4
County's settlement strategy. Generally, where the proposed development is considered to be a significant employer	PHH1 S1 W1 W2	PHH1 S1 W1 W2
and/or intensive in nature, such developments shall preferably located within the settlement envelope for Monaghan	W3 M1 M2 M3	W3 M1 M2 M3 C1
Town or the Core Strategy's Tier 2 or 3 towns. In exceptional circumstances for particular industries that are tied to a	C1 CH1 CH2 L1	CH1 CH2 L1
fixed resource and/or require extensive sites or specific settings, to locate in rural locations subject to nnormal planning		
criteria and environmental legislation requiremets.		
INDP2 To assist anyone who wishes to establish or expand industrial, commercial or other such endeavours that will		
provide increased employment opportunities in the county, subject to normal development management requirements		
and technical criteria.		
INDP3 To promote the use of appropriate lands within Lough Egish for the development of employment generating,		
industrial and other such uses in order to enhance and contribute to its growth as a centre for industrial development.		
INDP4 To zone sufficient and appropriate land for the facilitation of industrial and commercial activities that will		
stimulate the economic viability and vibrancy of the County, without compromising environmental and residential		
amenity levels.		
INDP5 To acquire and develop suitable sites and actively encourage industry to locate at such selected centres through		

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the provision of serviced land banks for the development of industrial/business parks.		
INDP6 To consider other uses for agricultural land outside of settlement boundaries subject to assessment on a case-		
by-case basis against relevant development management standards and technical criteria, including any relevant policies		
and objectives contained elsewhere within this Plan.		
INDP7 Proposals for specialised high-tech industry/business with significant employment potential will be favourably		
considered subject to appropriate access arrangements and servicing, alongside compliance with development		
management and technical standards and other relevant policies of this Plan.		
INDP8 To encourage the establishment of suitable small-scale industrial/commercial/tourism developments on family		
owned land relating to and promoting rural diversification, subject to the satisfaction of normal planning and technical		
criteria.		
INDP9 To require proposals for industrial and commercial purposes to be designed to a high standard in accordance		
with the specific provisions set out in the Development Management Chapter so as to provide quality environments with		
adequate allowance where necessary for landscaping, machinery parking and circulation, and the appropriate disposal of		
foul and surface water.		
INDP10 To ensure the protection of the environment by promoting the application of the Best Available Technology		
(BAT) principle with regard to pollution mitigation and the installation of new developments.		
INDP11 To encourage and assist any undertakings to educate, train and upskill the County's workforce in respect of		
attracting and retaining employment opportunities.		
INDP12 To encourage the reuse of sites and/or existing building stock, where possible.	L l	
Commentary		

The industry provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for industrial development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the industry provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The industry measures make certain provisions – including those relating to a general preference for significant employers to be located within larger towns, planning criteria and environmental legislation, environmental and residential amenity levels, access arrangements and servicing, high standards of design and the application of the Best Available Technology – that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components.

As the industry measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Agriculture Policies and Objectives		
AGP1 To promote the agricultural industry, appropriate rural development and diversification. In this regard, proposed	B1 B2 B3 B4	B1 B2 B3 B4
development should consider potential environmental, heritage and landscape impacts and where required identify	PHH1 S1 W1 W2	PHH1 S1 W1 W2
mitigating measures to alleviate negative impacts.	W3 M1 M2 M3	W3 M1 M2 M3 C1
AGP2 To consider proposals for farm diversification schemes (forestry potential, tourism based activities, educational	C1 CH1 CH2 L1	CH1 CH2 L1
facilities, etc) where the new development is to be run in harmony with the established agricultural operations on-site		
and have regard to the following:		
(i) Where applicable and as far as possible, the proposed development should reuse or adapt existing/redundant		
farm buildings.		
(ii) Any new proposed building must be of a scale, form and design appropriate to the rural area.		
(iii) The developer must demonstrate that the new development can be adequately serviced and complies with		
all other relevant policies of the Development Plan.		
AGP3 To control, through the development management process and the relevant environmental legislation, effluent		
spreading on land in order to protect ground and surface water sources in the County. This may limit spreading to		
certain times of the year and/or prohibit spreading in certain areas.		
AGP4 To require sufficient provision for the collection, storage and disposal of effluent produced from agricultural		
developments. Developers are required to comply with relevant Department of Agriculture Guidelines and the Nitrates		
Regulations in this regard.		
AGP5 Agricultural developments shall be designed to a high standard in accordance with the specific provisions set out		
in Development Management Chapter so as to provide quality environments with adequate allowance where necessary		

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for landscaping, machinery parking and circulation and the appropriate disposal of foul and surface water.		
AGRP6 To realise the positive potential of forestry on rural economies through the promotion of appropriate policies in		
related industries and tourism.		
AGRP7 To protect natural waters, wildlife habitats, conservation areas, heritage areas, prominent landscape features,		
archaeological sites, nature designations and scenic routes within forest sites from pollution or injury.		
AGRP8 To protect access to forestry and other amenity facilities, in co-operation with Coillte and private		
owners/operators, for walking routes and nature trails for the benefit of local communities and tourists.		

The agriculture provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for agricultural development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the agriculture provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

Agriculture is essential to the sustenance of rural populations and associated existing sustainable rural management practices which can often sustain biodiversity (SEOs B2 B3 B4). The agriculture measures make certain provisions – including those relating to the consideration and mitigation of environmental impacts and controlling effluent spreading on land in order to protect ground and surface water sources – that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components.

Forestry and access to forestry for amenity would contribute towards the sustenance of rural populations and can improve the biodiversity value of the countryside. Depending on how it is developed, forestry has the potential to adversely affect various environmental components including biodiversity and flora and fauna, water and human health, the landscape.

As the agriculture measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Tourism Policies and Objectives		
Policy TMP1 To promote the development and strengthening of Monaghan as a destination, by mirroring the quality of	B1 B2 B3 B4	B1 B2 B3 B4
the natural environment with improving the appeal of the built environment of settlements.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
Policy TMP2 Applications for tourism development will be considered in line with usual planning criteria and will be	W3 M1 M2 M3	W3 M1 M2 M3 C1
subject to high standards of design and materials, particularly when sensitively located.	C1 CH1 CH2 L1	CH1 CH2 L1
Policy TMP3 To promote and facilitate the sustainable use of the County's existing historical, cultural and landscape		
assets for tourism purposes.		
Policy TMP4 To support the development of angling tourism initiatives throughout the County and particularly at Lough		
Muckno, building on the amenity and recreational potential of the angling sector. In this regard the Council shall		
facilitate the development and upgrading of angler access, stands, car parks and their associated facilities, in accordance		
and consultation with relevant management strategies, key stakeholders and bodies including Inland Fisheries Ireland.		
Policy TMP5 To support the continued development of the Ulster Canal project and the expansion of the Greenway		
from Clones to Armagh.		
Policy TMP6 To support the reopening of the Ulster Canal given its tourism and economic potential for County		
Monaghan and the wider region.		
Policy TMP7 To facilitate, where appropriate, the provision of high quality tourism products and services within the		
County in order to increase the level of activity and the sustainability of the tourism market. In particular the provision of		
quality hotels and visitor accommodation facilities, and the development of tourism projects, facilities, activities, and		
attractions shall be a priority.		
Policy TMP8 To promote events, festivals and the development of linked tourist trails that showcase the wealth of		
natural, historical and cultural heritage of the County and contribute towards its unique identity and quality of life.		
Policy TMP9 To promote appropriate innovation and entrepreneurship in the tourism sector, subject to other policies of		
this Plan, including those relating to settlement, amenities, environment, heritage, landscapes and technical design		
standards. In particular, the Council shall support the development and enhancement of the 'Borderlands' concept.		
Policy TMP10 To promote the local food, drinks and crafts industries by (i) encouraging the development of premises,		
(ii) promoting festivals/events and (iii) managing an attractive public realm.		
Policy TMP11 To promote growth in the events and festivals sector to facilitate the development of Monaghan as an		
events destination.		
Policy TMP12 To support appropriate agri-tourism initiatives in the form of on-farm visitor accommodation and		

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associated and spin-off activities such as health farms, heritage and nature trails, pony trekking and water-based		
activities.		
Policy TMP13 To encourage and support increased coordination, cohesion and linkages between the Council's own		
departments and relevant outside agencies such as Fáilte Ireland, Waterways Ireland, in the promotion and assessment		
of tourism related developments.		
Policy TMP14 To work in conjunction with adjoining local authorities to extend and design new walking and cycling		
routes that will promote sustainable tourism development.		
Policy TMP15 To seek to manage any increase in visitor numbers in order to avoid significant effects including loss of		
habitat and disturbance, including ensuring that new any projects, such as greenways, are a suitable distance from		
ecological sensitivities, such as riparian zones.		
Policy TMP16 To support the implementation of the objectives set out in the Draft Sliabh Beagh Masterplan and any		1
subsequent versions.		1

The tourism provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for tourism development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the tourism provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The tourism measures make certain provisions – including those relating to the natural and built environment, high standards of design, sustainable tourism development, management of any increase in visitor numbers and ensuring that new any projects are a suitable distance from ecological sensitivities, such as riparian zones – that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environments.

As the tourism measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

The development of new and existing greenways, trails and walking and cycling routes, including those between County Monaghan, adjoining counties and Northern Ireland (e.g. the Ulster Canal), has the potential to contribute towards sustainable mobility (SEO C1) and a better management of tourism in sensitive areas, thereby benefitting various environmental components including habitats at certain locations (SEOs B1 B2 B3). The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (see Policy TMP15 and the various provisions identified at Section 9) and by measures arising from lower tier assessments (including those for the preparation of lower tier strategies, plans or programmes).

Extractive industry Policy		
EIP1 To safeguard for future extraction, all identified locations of major mineral deposits in the County.	B1 B2 B3 B4	B1 B2 B3 B4
EIP2 To promote development involving the extraction of mineral reserves and their associated processes, where the	PHH1 S1 W1 W2	PHH1 S1 W1 W2
Planning Authority is satisfied that any such development will be carried out in a sustainable manner that does not	W3 M1 M2 M3	W3 M1 M2 M3 C1
adversely impact on the environment or on other land uses. Consideration in this regard shall be given to the impact of	C1 CH1 CH2 L1	CH1 CH2 L1
the development on the local economy.		

Commentary

The extractive industry provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for extractive industry development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the extractive industry provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The extractive industry measures make certain provisions – including those relating to development undertaken in a sustainable manner that does not adversely impact on the environment or on other land uses – that will contribute towards both sustainable development and beneficial effects upon the protection/management of all environmental components.

The extractive industry measures present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

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Small Scale Businesses in Rural Areas Policies and Objectives			
BRP1 Consideration shall be given to the establishment, or suitable expansion, of small scale businesses in rural areas	B1 B2 B3 B4	B1 B2 B3 B4	
where (i) it is demonstrated that the proposal could serve as a valuable addition to the local economy and (ii) normal	PHH1 S1 W1 W2	PHH1 S1 W1 W2	
development management and technical requirements are complied with.	W3 M1 M2 M3	W3 M1 M2 M3 C1	
BRP2 To require proposals for the development, or suitable expansion, of small scale businesses in rural areas to	C1 CH1 CH2 L1	CH1 CH2 L1	
demonstrate that the proposed location is suitable and that the proposal would not be viable at an alternative location.			
BRP3 In assessing an application for the establishment, or suitable expansion, of a small scale business in a rural area,			
the following information shall be taken into consideration and, where necessary, such required information shall be			
submitted as part of any application:			
1. Positive contribution that the proposed development will make to the rural economy			
2. Nature and scale of the proposal			
3. Is the business more suitably accommodated at the proposed location than an urban setting?			
4. Potential impact on public health, environment and amenity			
5. Potential traffic impact on the road network in the area			

Commentary

The small scale businesses in rural areas provisions detailed above contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for small scale businesses in rural areas in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The measures make certain provisions – including those relating to the suitable accommodation of such development, the potential impact on public health, environment and amenity and the potential traffic impact on the road network – that will contribute towards both sustainable development and beneficial effects upon the protection/management of all environmental components.

The provisions present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Home-Based Business Policy			
HBP 1 Consideration shall be given to proposals for establishing small-scale, home-based businesses in rural areas	B1 B2 B3 B4	B1 B2 B3 B4	
where (i) the business use is subordinate to the main use of the dwelling as residential accommodation, (ii) the business	PHH1 S1 W1 W2	PHH1 S1 W1 W2	
activity is of a limited scale (1 or 2 workers) and (iii) normal development management and technical requirements are	W3 M1 M2 M3	W3 M1 M2 M3 C1	
complied with.	C1 CH1 CH2 L1	CH1 CH2 L1	

Commentary

The home-based business policy detailed above contributes towards the preferred selection of alternatives for the Plan and provides a planning framework for home-based business in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

By allowing different uses within homes in rural areas, this policy could contribute towards sustainable mobility and reduce the need to build new development in these areas.

The provisions present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

8.6.5 Chapter 5: Community

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be mitigated	<u>Mitigated</u> <u>Conflicts</u>	No Likely interaction with status of SEOs
Strategic Objective	•			•
CMSO1 To protect and enhance existing community and recreation facilities throughout the County and to secure the provision of additional facilities subject to demand and availability of resources in cooperation with the relevant stakeholders, the Local Community Development Committee and their associated Local Economic Community Plan. Policies and Objectives Community Facilities	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 L1 B1 B2 B3 B4		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 L1 L1 B1 B2 B3 B4	
 CF01 To consider development proposals for new social and community infrastructure/service related development (healthcare, sports/recreational facilities, playgrounds, community resource buildings, education facilities, etc) at: a) Locations within the settlement boundaries which are within walking distance of local services whereby social inclusion is promoted. An alternative location may be considered where it is clearly demonstrated that there are no suitable sites available within the settlement and strong justification is given to the development of such a particular site. b) In rural locations in close proximity to existing rural infrastructure (schools, sports facilities, churches etc) where it is demonstrated that the development is intended to serve an exclusive rural need or where there is no site available which meet the locational criteria set out in (a) above. CF02 To assist and promote community groups in determining local projects that will engage and support local community development and to support them in any funding application opportunities which may arise. Educational Facilities CF02 To ensure that suitable and sufficient lands are available in appropriate and accessible areas in the larger settlements of County Monaghan for the provision, expansion and/or improvement of educational facilities and to restrict development relation public educational facilities which would hinder the planned future expansion of such facilities and any associated ancillary infrastructure. CF03 To facilitate the implementation of Department of Education and Skills programe of capital investment in schools in line with the proper planning and sustainable development, July 2008. b) Technical Guidance Document TGD20-TGD25 Department of Education and Skills 2007 Sustainable Residential Development in Urban Areas, Department of the Environment, Heritage and Local Government May 2009 (and the accompanying Urban Design Manua) <!--</td--><td>PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</td><td></td><td>PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</td><td></td>	PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

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Childcare			
CF09 To facilitate and support, where a need is identified and in cooperation with the Monaghan County Childcare			
Committee, the provision of childcare facilities in appropriate locations, and where possible within settlement boundaries			
and/or adjacent to existing community facilities in order to facilitate localised provision, accessibility and sustainable			
development.			
CF10 To assess proposals for childcare facilities in accordance with the following criteria:			
a) The suitability of the site and type of facility proposed.			
b) The availability of an appropriate external play area.			
c) The provision of safe access, adequate car parking, drop off and circulation area for clients and staff.			
d) The implications of the proposed development on the traffic flow and general road safety of the area.			
e) The accessibility of the proposed development, particularly in relation to pedestrian access from residential			
areas, places of work and existing educational facilities.			
f) The proposed operating hours of the facility and the impact on same on the amenities of the surrounding			
area.			
Cycling and Walking			
CF11 To promote and facilitate the development of walkways and cycleways in appropriate locations throughout the			
County as identified in the County Walk and Cycling Strategy.			
CF12 To promote and encourage the development of looped walks and cycle ways in accordance with the Smarter			
Travel Policy and to protect established routes from development which would adversely impact upon them.			
CF13 To develop in conjunction with adjoining local authorities and cross border bodies an extension of the Monaghan			
Greenway along The Ulster Canal including along disused railway lines to connect the main urban centres throughout the			
mid Ulster region.			
CF14 To work with in conjunction with adjoining local authorities including Meath, Louth and Cavan to develop the			
border kingdoms route across Dundalk, Inniskeen, Carrickmacross, Kingscourt, Nobber, Navan and Drogheda.			
CF15 To support schools in providing safe routes between schools and surrounding residential areas to facilitate safe			
routes to schools, park and stride and other active travel initiatives.			
Parks & Public Open Spaces			
CF14 To protect and enhance public open spaces and established recreational green areas. CF15 To support the protection of lands zoned as amenity/open space in settlement plans for recreational/amenity use			
and to resist the loss of existing designated areas of public open space except where a higher quality of designated open			
space is being provided in lieu of its loss.			
Public Rights of Way			
CF15 To identify and preserve existing public rights of way to recreational areas and to commence the process of			
mapping and listing public rights of way in the County over the lifetime of this development plan, as resources allow,			
under the provisions of Section 14 of the Planning and Development Act (as amended).			
Commentary		I	1
oonmontary			

The community provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for community development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the community provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The community measures make certain provisions – including those relating to walking distance, protecting and enhancing public open spaces and established recreational green areas, proximity to existing rural infrastructure, appropriate and accessible areas, proper planning and sustainable development – that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components.

As the community measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

The development of new and existing greenways, trails and walking and cycling routes, including those between County Monaghan, adjoining counties and Northern Ireland (e.g. the Ulster Canal), has the potential to contribute towards sustainable mobility (SEO C1) and a better management of tourism in sensitive areas, thereby benefitting various environmental components including habitats at certain locations (SEOs B1 B2 B3). The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the

construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (see Section 9) and by measures arising from lower tier assessments (including those for the preparation of lower tier strategies, plans or programmes).

8.6.6 Chapter 6: Heritage

	Likely to Improve	Probable Conflict	Mitigated	No Likely
	status of SEOs	with status of SEOs	Conflicts	interaction with
		- unlikely to be		status of SEOs
		mitigated		
HCLSO Strategic Objective				
To promote and encourage the conservation and preservation of the County's natural environment, cultural heritage and	B1 B2 B3 B4		B1 B2 B3 B4	
amenities in accordance with legislation, plans and policies developed to specifically address these areas and to ensure a	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
rich cultural landscape, healthy environment and the full provision of ecosystems services in the county.	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
	CH1 CH2 L1		CH1 CH2 L1	
Policies and Objectives		1		
Protection of Biodiversity including Natura 2000 Network	B1 B2 B3 B4		B1 B2 B3 B4	
HLP1 To implement in partnership with all relevant stakeholders the objectives and actions detailed within the County	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
Monaghan Heritage Plan 2017-2022 and any subsequent versions	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
HLP2 To adopt and implement in partnership with all relevant stakeholders the objectives and actions detailed in the	CH1 CH2 L1		CH1 CH2 L1	
Biodiversity Action Plan and any relevant action plan.				
HLP3 To contribute as appropriate towards the protection of designated sites in compliance with relevant EU Directives				
and applicable National Legislation.				
HLP4 No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising				
from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air),				
transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be				
permitted on the basis of this plan (either individually or in combination with other plans or projects ⁸³).				
HLP5 To recognise that nature conservation is not just confined to designated sites and acknowledge the need to				
protect non-designated habitats and landscapes and to conserve the biological diversity.				
HLP6 To support the implementation of any relevant recommendations contained in the National Peatlands Strategy. Landscape Policies and Objectives				
HLP7 To ensure the preservation of the County's landscapes, by having regard to the character, value and sensitivity of				
the landscape as identified in the County Monaghan Landscape Character Assessment, 2008 (or any subsequent				
versions) when considering planning applications.				
HLP8 To protect the landscapes and natural environments of the County by ensuring that any new developments in				
designated sensitive rural landscapes do not detrimentally impact on the character, integrity, distinctiveness or scenic				
value of the area. Any development which could unduly impact upon such landscapes shall be resisted.				
HLP9 To co-operate with adjoining local authorities north and south of the border, to ensure that the natural				
environment is maintained in a sustainable manner and to encourage a collaborative and consistent policy approach with				
adjoining areas on matters of environmental and landscape protection and to identify threats to the integrity of such				
sites through a transboundary approach.				
HLP10 To contribute towards the protection of County and local level landscape designations from incompatible				
developments. Proposals for development that have the potential to significantly adversely impact upon these				

⁸³ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

a) no alternative solution available,

b) imperative reasons of overriding public interest for the project to proceed; and

c) Adequate compensatory measures in place

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designations shall be accompanied by an assessment of the potential landscape and visual impacts of the proposed			
development. This shall demonstrate that landscape impacts have been anticipated and avoided to a level consistent			
with the sensitivity of the landscape and the nature of the designation.			
HLP11 Support, as appropriate, any relevant recommendations contained in the National Landscape Strategy for			
Ireland.			
Habitat Designation and Protection			
HLP12 To resist development in or adjacent to any Natura 2000 site (SPA or SAC) where it would result in the			
deterioration of that habitat or any species reliant on it. The onus will be on the developer to demonstrate that any such			
development will not adversely impact on the qualifying interest of such sites subject to the preparation of an			
appropriate assessment exercise under the provisions of the EU Habitats Directive			
HLP13 To resist development in or adjacent to an NHA or pNHA (listed in Appendix) where it would result in the			
deterioration of that habitat or detrimentally impact on any species reliant on it. The onus will be on the developer to			
demonstrate that any such development will not adversely impact on the conservation of such areas.			
HLP14 To ensure that all proposed developments comply with the DoECLG publication "Appropriate Assessment of			
Plans and Projects in Ireland- Guidance for Planning Authorities 2010"			
HLP15 Any plan or projects that could have a significant adverse impact (either by themselves or in combination with			
other plans and projects) upon the conservation objectives of any Natura 2000 site will not be permitted.			
HLP16 Any plan or project which is likely to impact on the conservation objectives of a Natura 2000 site shall be			
screened for Appropriate Assessment (AA) and where pertinent a Stage 2 Appropriate Assessment (Natura Impact			
Statement) shall be undertaken in order to make a determination. Natura 2000 sites outside the county and located			
within 15km of the proposed development site should also be screened for Appropriate Assessment. A Natura Impact			
Statement (NIS) shall incorporate a written statement which sets out mitigation measures to prevent the risk of invasive			
species onto a Natura 2000 site.			
HLP17 Development within the vicinity of groundwater or surface water of dependant Natura 2000 sites (Kilroosky			
Lough Cluster SAC) will not be permitted where there is potential for a likely significant impact upon the groundwater or			
surface water supply to the Natura 2000 site. Where appropriate, the applicant shall demonstrate with hydro geological			
evidence, that the proposed development will not adversely affect the quality or quantity of groundwater or surface			
water supply to the Natura 2000 sites.			
HLP18 To liaise with the Regional Authorities, adjacent planning authorities, public agencies and community groups to			
protect the environmental quality of regionally significant heritage assets.			
HLP19 To support the implementation of a Conservation Plan in conjunction with stakeholders, to improve the			
conservation status of habitats and species on Sliabh Beagh.			
HLP20 To cumulatively contribute towards, in combination with other users and bodies, the achievement of the			
objectives of the regulatory framework for environmental protection and management, including compliance with EU			
Directives - including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the			
Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental			
Assessment Directive (2001/42/EC) – and relevant transposing Regulations.			
HLP21 To require lower levels of decision making and environmental assessment to consider the sensitivities identified			
in the SEA Environmental Report set out in the appendix of this Plan.			
Policy HLP22 To protect the County Sites of Biodiversity Importance as set out in Table 6.4 by ensuring that any new			
developments does not detrimentally impact on the character, integrity, distinctiveness or scenic value of the area. Any			
development which could unduly impact upon such landscapes shall be resisted.			
Areas of Primary Amenity			
PAP 1 To restrict development in Areas of Primary Amenity to sites where it can be demonstrated to the satisfaction of			
the Planning Authority that the proposed development would not threaten the scenic or environmental quality of the			
area.			
Areas of Secondary Amenity			
RSAP 1 To limit development in Areas of Secondary Amenity Value and to only permit compatible amenity			
developments where they do not unduly impact on visual amenity.			

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Scenic Routes/Views		
SRP 1 To prohibit development that would disrupt or adversely affect a view from/along any scenic route as identified in		
Appendix 5.		
SRP2 To protect the scenic quality of lakes by prohibiting development located between a public road and a lake where		
the development would interrupt a view of the lake or adversely affect its setting. Development may be permitted		
between a public road and the lakeshore where the development is screened from the lake by existing topography or		
vegetation.		
SRP3 An exception may be made for short term let tourist accommodation or recreational development where a specific		
need has been identified. Any such proposal should be sensitively sited and designed. Development on high exposed		
sites overlooking lakes or waterways shall be resisted.		
Geology		
GEP1 To promote awareness of and access to sites of geological interest in consultation with landowners (where		
appropriate) and on reccommendations regarding Safety with GSI		
GEP2 Where a proposed development is likely to impact on the setting or integrity of a CGS listed in the Monaghan		
County Development Plan 2019-2025 the Geological Survey of Ireland shall be consulted.		
GEP3 Protect from inappropriate development and maintain the integrity and conservation value of those features in		
areas of geological interest that are listed in the plan or any sites proposed by the Department of the Environment,		
Heritage and the Gaeltacht or Geological Survey of Ireland during the lifetime of the plan.		
GEP4 To contribute towards the appropriate protection and maintenance of the character, integrity and conservation value		
GEP5 To promote CGS15 and CGS16 as unique landscapes as per the recommendations of the Geological Survey of		
Ireland of features or areas of geological interest.		
Green Infrastructure		
GIP1 It shall be an objective of Monaghan County Council to prepare a Green Infrastructure Strategy for the County		
over the plan period.		
GIP2 To prepare a detailed Green Infrastructure network for the towns of Monaghan, Carrickmacross, Castleblayney,		
Ballybay and Clones.		
GIP3 To support the improvement and enhancement of existing Green Infrastructure within the settlements.		
GIP4 Development proposals located within or adjacent to areas of Green Infrastructure shall incorporate any important		
biodiversity features into the overall development in a sustainable manner.		
GIP5 Any development which impacts on the integrity of existing Green Infrastructure shall be resisted; an exception to		
this may be where compensatory features can be provided.		
GIP6 To contribute towards the protection and enhancement of biodiversity and ecological connectivity, including		
woodlands, trees, hedgerows, rivers, streams, other landscape features and associated wildlife where these form part of		
the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of		
the Habitats Directive.		
GIP7 To encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure		
that recognises the synergies that can be achieved with regard to the following:		
Provision of open space amenities		
Sustainable management of water		
Protection and management of biodiversity		
Protection of cultural heritage Destantian of protected landscape consistivities		
Protection of protected landscape sensitivities.		
Wetlands WLP1 Development that would destroy, fragment or degrade any wetland will be resisted.		
WLP1 Development that would destroy, fragment of degrade any weitand will be resisted. WLP2 Where it is proposed to infill or reclaim a wetland area, an Ecological Impact Assessment will be required.		
WLP3 To implement the relevant parts of the Planning and Development (Amendment) (No. 2) Regulations 2011 and the European Communities (Amendment to Planning and Development) Regulations 2011 which require planning		
permission to be applied for where the area impacted by works relating to the drainage or reclamation of a wetland		
exceeds 0.1 hectares or where such works may have a significant effect on the environment. Such planning applications		
would need to be supported by an Appropriate Assessment where necessary.		

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Trees & Woodlands		
TWP1 To minimise loss of tree(s) and hedgerow associated with any development proposal and encourage the retention		
of existing mature trees, hedgerows and woodlands in new developments. Where removal is unavoidable consideration		
should be given to transplanting trees and/or providing compensatory planting on the site.		
TWP2 To preserve trees and/or groups of trees that have a significant amenity value, where appropriate a TPO should		
be designated.		
Invasive Species		
ISP1 To ensure that development proposals to not lead to the spread of invasive species and to ensure that landscaping		
proposals do not include invasive species.		
ISP2 To support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control and manage the		
spread of non-native invasive species on land and water. Where the presence of non-native invasive species is identified		
at the site of any proposed development or where the proposed activity has an elevated risk of resulting in the presence		
of these species, details of how these species will be managed and controlled will be required.		
Built Heritage and Architectural Conservation		
BHP1 To protect and conserve, where appropriate all structures included in the Record of Protected Structures and to		
encourage the sympathetic re-use and long-term viability of such structures without detracting from their special interest		
and character.		
BHP2 To contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in		
particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the		
National Monuments Act, 1930 (as amended).		
BHP3 To contribute towards the protection of architectural heritage by complying, as appropriate, with the legislative		
provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and the policy		
guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document).		
BHP3 To maintain and update the Record of Protected Structures in consultation with the National Inventory of		
Architectural Heritage and to encourage their sympathetic conservation, renewal and repair by any available means and		
as resources allow.		
BHP4 Planning permission for the demolition of any protected structure shall not be granted except in exceptional		
circumstances and in accordance with Section 57(10)(b) of the Planning and Development Act 2000.		
BHP5 To ensure that any new development proposed to or in the vicinity of a Protected Structure will complement and		
be sympathetic to the structure and its setting in terms of its design, scale, height massing and use of materials and to		
resist any development which is likely to impact on the building's special interest and/ or any views of such buildings and		
their setting.		
BHP6 To facilitate the retention and sympathetic re-use of protected structures and their settings in circumstances		
where the proposal is compatible with their character and special interest. In certain instances, land use zoning		
restrictions and site development standards may be relaxed to secure the conservation and reuse of a protected		
structure and to provide a viable use for any building which is at risk by virtue of being derelict or vacant		
BHP7 To require that proposals for works to a protected structure shall be carried out in accordance with best practice		
as advocated in the Architectural Heritage Protection Guidelines 2011 (and any subsequent guidelines)		
BHP8 To use the provisions of the Planning and Development Act 2000 and the Derelict Sites legislation to prevent the		
loss or deterioration of the County's Architectural Heritage.		
Architectural Conservation Areas		
ACP1 To prepare character appraisals for each of the designated Architectural Conservation Areas in the County to		
guide new development proposals and environmental improvements by identifying the character of each ACA and		
designing objectives to ensure that their distinctiveness and special interest are preserved and enhanced.		
ACP2 To resist development that would adversely affect the character and appearance of the Architectural Conservation		
Area. New development or alterations to existing building(s) in an ACA shall reflect the historic architecture in terms of		
scale, design and materials used. Regard shall be had to any objectives contained in the character appraisals (where		
applicable).		

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Records of Monuments and Places		
PMP1 To protect the Record of Monuments and Places listed in Appendix x (and any subsequent additions by the		
National Monuments Service) to ensure that the setting of the recorded monument or site is not materially injured and		
to co-operate with all recommendations of Statutory bodies in the achievement of this objective.		
PMP2 To ensure that any development adjacent to an archaeological monument or site shall not be detrimental to the		
character of the archaeological sites or its setting and shall be sited in a manner which minimises the impact on the		
monument and its setting. Development which is likely to detract from the setting of such a monument or site shall be		
resisted.		
PMP3 To protect archaeological sites and monuments which are listed in the Record of Monument and Places and to		
require their preservation in situ (or at a minimum preservation by record) through the planning process.		
PMP4 When considering new development in the vicinity of archaeological monuments/sites the planning authority may		
require one or more of the following to ensure the preservation and enhancement of the recorded monument;		
a. The provision of an appropriate buffer between the proposed development and the archaeological monument/		
site		
b. The submission of a Visual Impact Assessment to assess the potential impact on the setting of the recorded		
monument		
c. The carrying out of an onsite archaeological investigation prior to a permission being granted		
d. Revisions to the proposed development to reflect any advice and/or recommendations made by the		
Department of the Arts, Heritage & the Gaeltacht (and any other relevant statutory consultee)		
PMP5 To identify where appropriate Archaeological sites in the Plan area to which public access could be provided or		
improved in consultation with landowners.		
PMP6 To contribute, as appropriate, towards the protection of archaeological sites and monuments and their settings,		
archaeological objects and underwater archaeological sites that are listed in the Record of Monuments and Places, in the		
ownership/guardianship of the State, or that are subject of Preservation Orders or have been registered in the Register		
of Historic Monuments. Contribute, as appropriate, towards the protection and preservation of archaeological sites,		
which have been identified subsequent to the publication of the Record of Monuments and Places. To contribute, as		
appropriate, towards the protection and preservation of underwater archaeological sites in riverine or lacustrine		
locations.		
PMP7 To consult with the National Monuments Service in relation to proposed developments adjoining archaeological		
sites.		
Commentary		

The heritage provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for heritage in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the heritage provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

Heritage provisions are primarily concerned with the protection and management of the environment, benefitting environmental components including:

- Biodiversity, flora and fauna (SEOs B1 B2 B3);
- Landscape sensitivities (SEO L1);
- Cultural heritage (SEO CH1 CH2);
- Waters (SEOs W1 W2);
- Soil (SEO S1);
- Flood risk management (SEOs W3 PHH1);
- Human health (SEO PHH1); and
- Sustainable mobility and associated reductions in travel related emissions (SEO C1).

Certain types of development which are supported by some of the provisions – e.g. SRP3 "An exception may be made for short term let tourist accommodation or recreational development...", GIP3 "To support the improvement and enhancement of existing Green Infrastructure....", BHP2 "sympathetic enhancement of archaeological heritage" and BHP6 "retention and sympathetic re-use of protected structures and their settings" – could potentially conflict with environmental components and would contribute towards the overall sustainable development of the County in combination with other plans and

objectives. Adverse effects would be mitigated by both measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.

The development of green infrastructure would facilitate: contributions towards increases in sustainable mobility and reductions in greenhouse gas emissions (SEO C1); increases in flood risk management (SEO W3) and protection of human health (SEO PHH1); protection and management biodiversity and water quality (SEOS B1 B2 B3 W1 W2); and protection cultural heritage and landscape sensitivities (SEOS CH1 CH2 L1). The development of green infrastructure also potentially conflicts with most environmental components (SEOS B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1). This type of infrastructure is often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects (including in-combination effects across County borders and with Northern Ireland) would be mitigated by measures that have been integrated into other provisions within the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission. The preparation of a lower-tier Green Infrastructure Strategy or network (GIP1 and GIP2) would have to be subject to lower-tier environmental assessment processes as relevant.

By limiting the development of the settings of architectural and archaeological heritage, provisions relating to built heritage have the potential to improve other environmental components including biodiversity, flora and fauna, soil, water, human health and flood risk management (SEOs B1 B2 B3 S1 PHH1 W1 W2 W3). By allowing for sympathetic re-development of urban sites, these provisions would contribute towards sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).

8.6.7 Chapter 7: Transport and Infrastructure

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be mitigated	<u>Mitigated</u> <u>Conflicts</u>	No Likely interaction with status of SEOs
Strategic Objectives				
TP01 To achieve a sustainable, efficient and integrated transport system and ease of movement throughout County Monaghan by enhancing the existing transport infrastructure in terms of the road, cycling and pedestrian facilities and by promoting more compact urban forms close to existing facilities to encourage more sustainable movement patterns. National & Regional Transport Policy Context Policies/Objectives	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
TP01 To implement government policy as set out in Transport 21, A Sustainable Transport Future - A new transport	B1 B2 B3 B4		B1 B2 B3 B4	
policy for Ireland 2009-2020, Spatial Planning and National Roads – Guidelines for Planning Authorities 2012, National	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
Cycle Policy Framework 2009, Traffic and Transport Assessment Guidelines 2014, Smarter Travel and any other National	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
Policy which is adopted during the lifetime of this development plan.	CH1 CH2 L1		CH1 CH2 L1	
TPO2 To support the creation of an integrated and sustainable transport system to promote a choice of transport modes including public transport, cycling and walking facilities.				
TPO3 To capitalise on the County's existing transport infrastructure by implementing appropriate traffic management				
measures to reduce congestion and minimise travel times.				
TP04 To plan for future traffic and transportation needs in County Monaghan and to ensure that new development does				
not prejudice the expansion of road and cycling corridors in the County. Proposed road routes, road realignment scheme				
and future cycle route corridors shall be kept free from free development that would compromise their future delivery.				
TP05 To ensure that all new developments and extensions to existing developments have adequate car parking provision.				
TPO6 To prepare a Transportation Study for Carrickmacross Town and environs subject to the availability of resources.				
TP07 To support the provision of charging infrastructure for electric vehicles to meet the objectives set out in the				
National Renewable Energy Action Plan for 10% electric vehicles by 2020 or any other related target adopted during the				
lifetime of this plan.				
Roads Policies/Objectives				
Policy NRP1 It is a policy of the Council to protect the traffic carrying capacity of national roads, the level of service	B1 B2 B3 B4		B1 B2 B3 B4	
they deliver and the period over which they continue to perform efficiently, by avoiding the creation of new access	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
points or the generation of increased traffic from existing accesses onto the N-2, N-53, N-54, and N-12 outside the 60	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
km/h speed limit, in accordance with the DoECLG's publication Spatial Planning and National Roads -Guidelines for Planning Authorities (2012).	CH1 CH2 L1		CH1 CH2 L1	
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Policy NRP2 Notwithstanding NRP1, in exceptional circumstances, developments of national and regional strategic		
importance may be considered where the locations concerned have specific characteristics that make them particularly		
suitable for the developments proposed, subject to such developments being provided for through the Local Area Plan or		
Development Plan making process, including in consultation with the TII and ongoing commitment to road safety for all		
road users.		
Policy NRP3 To provide for limited development along stretches of national primary road in the 60kph zone where a		
less restrictive approach to that outlined in the Spatial Planning and National Roads – DoEHLG 2012 may be applicable.		
Such sites may be considered in exceptional circumstances for developments of a national or regional strategic		
importance with the potential to deliver significant economic and employment benefits and subject to meeting the		
criteria set out in Section 2.6 (1) (1-10) of the 2012 Guidelines.		
Policy NRP4 To permit direct access to zoned lands along national roads within the 50km/h speed limit subject to		
normal planning considerations. Within transitional speed limits (between 50 km/hr and 60 km/h) access shall be		
permitted where it is to facilitate orderly urban development and subject to the preparation of a Road Safety Audit and a		
Traffic and Transport Assessment (if applicable).		
Policy NRP5 To prohibit the erection of non-traffic road signage on or adjacent to National Roads in line with the		
provisions of the Department of Environment, Community and Local Governments - Spatial Planning and National Roads		
(2012)		
Policy NRP6 Any development with the potential to impact on the carrying capacity and/or safety of any national		
primary or national secondary road shall include proposals to avoid, remedy or mitigate the impact on the national road		
network. Such proposals may include the payment of a contribution toward the cost of any required mitigation works.		
Policy NNRP1 Facilitate the improvement of non-public accommodation roads under the Local Improvement Scheme		
Programme funded by state grants and contributions from benefiting landowners.		
Policy NNRP2 To carry out improvement works on local roads subject to the availability of resources		
Policy NNRP3 To ensure that the traffic carrying capacity and the strategic nature of the County's road network is not		
adversely affected.		
Policy NNRP4 Carry out improvement works including specific works on bridges, signage, road markings, footpaths,		
public lighting and traffic management facilities to improve road safety and traffic management		
Policy NNRP5 Upgrade roads, junctions, footpaths and car parking facilities within the County's towns and villages in		
accordance with the provisions of the Design Manual for Urban Roads and Streets subject to the availability of resources.		
Policy NNRP6 Relieve traffic congestion and facilitate the development of new roads and safe access points to		
serviceable lands, in partnership with benefiting landowners and developers, to improve traffic management and access		
in and around urban centres.		
Public Transport Policies/Objectives		
PTP1 To support the provision of new transport routes and infrastructure by public and private public transport	B1 B2 B3 B4	B1 B2 B3 B4
operators in County Monaghan.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
PTP2 To support the continued operation and expansion of the Local Link bus service operated by the Cavan Monaghan	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
Transport Co-ordination Unit and any other relevant operators providing such a service in the County.	CH1 CH2 L1	CH1 CH2 L1
Electric Vehicles Policies/Objectives		
EVP1 New residential development with communal parking areas should provide a minimum of one car parking space	B1 B2 B3 B4	B1 B2 B3 B4
equipped with an EV charging point.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
EVP2 New non-residential development should accommodate at least one car parking equipped with an EV charging	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
points.	CH1 CH2 L1	CH1 CH2 L1
EVP3 Car charging spaces should be clearly demarcated with appropriate signage.		
Cycling and Walking Policies/Objectives	·	•
CWP1 To promote and facilitate the development of walkways and cycleways in appropriate locations throughout the	B1 B2 B3 B4	B1 B2 B3 B4
County as identified in the County Walking and Cycling Strategy and any subsequent strategy document.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
CWP2 To promote and encourage the development of looped walks and cycleways in accordance with the Smarter	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
Travel Policy and to protect established routes from development which would adversely impact upon them.	CH1 CH2 L1	CH1 CH2 L1
CWP3 To develop in conjunction with adjoining local authorities and cross border bodies an extension of the Monaghan		
Greenway along The Ulster Canal including along disused railway lines to connect the main urban centres throughout		
central Ulster.		1

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CWP5 To encourage the provision of bicycle infrastructure such as shelters and parking facilities in appropriate locations and make provisions for such infrastructure in new developments.		
Telecommunications Policies/Objectives		
TC01 Strategic Objective To facilitate the development of a high quality and sustainable telecommunications network	B1 B2 B3 B4	B1 B2 B3 B4
for County Monaghan to support economic growth, improve quality of life and enhance social inclusion.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
TCP1 To support the delivery of high capacity Information Communications Technology Infrastructure and broadband	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
connectivity throughout the county, in order to promote economic competitiveness and to facilitate more flexible work	CH1 CH2 L1	CH1 CH2 L1
practices.		
TCP2 To co-operate with the Department of Communications, Energy and Natural Resources and public and private		
agencies where appropriate, in improving high quality broadband infrastructure throughout the County.		
TCP3 To achieve a balance between facilitating the provision of telecommunications infrastructure in the interests of		
economic and social progress, and maintaining residential amenity and environmental quality.		
Protective and Emergency Services Policies/Objectives		· · ·
ESP1 To provide for fire stations on suitable sites in proximity to the towns of Castleblayney and Ballybay and to	B1 B2 B3 B4	B1 B2 B3 B4
facilitate accommodation of fire service vehicles and fire personnel welfare provisions in appropriate locations.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
ESP2 To provide and support facilities to operate the various Civil Defence Activities.	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
	CH1 CH2 L1	CH1 CH2 L1

The transport and infrastructure (including telecommunciations) provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for transport and infrastructure development in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the transport and infrastructure provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

The transport and infrastructure measures make certain provisions that will contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components, specifically those relating to:

- The achievement of a sustainable, efficient and integrated transport system;
- Implementation of appropriate traffic management measures to reduce congestion and minimise travel times;
- Ensuring that new development does not prejudice the expansion of road and cycling corridors;
- Provision of charging infrastructure;
- Development of walkways and cycleways in appropriate locations;
- Provision of bicycle infrastructure; and
- Maintainence of residential amenity and environmental quality.

As the transport and infrastructure measures provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components, if unmitigated. These effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Provisions relating to transport will primarily contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEOs C1 PHH1). Directly (from the construction and operation of transport infrastructure) and indirectly (from facilitating non-transport development) these provisions have the potential to result in significant adverse effects (including in-combination effects across County borders and across the border in Northern Ireland) upon most environmental components including ecology (SEOs B1 B2 B3), soil function (SEO S1), the status of water bodies (SEOs W1 W2), flood risk (SEO W3 PHH1), cultural heritage (SEOs CH1 CH2), the landscape (SEO L1) and emissions and energy usage (SEOs C1 PHH1). Potential adverse effects would be mitigated by the measures that have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.

With regard to roads provisions arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these would have the potential to give rise to a range of adverse impacts including contributing towards motorised transport and associated emissions and energy usage (SEOs C1 PHH1). Projects arising would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred selection of alternatives for the Plan.

The development of new and existing greenways, trails and walking and cycling routes, including those between County Monaghan, adjoining counties and Northern Ireland (e.g. the Ulster Canal), has the potential to contribute towards sustainable mobility (SEO C1) and a better management of tourism in sensitive areas, thereby benefitting various environmental components including habitats at certain

locations (SEOs B1 B2 B3). The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (see Section 9) and by measures arising from lower tier assessments (including those for the preparation of lower tier strategies, plans or programmes).

8.6.8 Chapter 8: Environment

	Likely to Improve	Probable <u>Conflict</u> with status of SEOs	Mitigated	No Likely
	status of SEOs	- unlikely to be mitigated	Conflicts	interaction with status of SEOs
Environment Policies/Objectives		miligated		
EECSO1- Strategic Objectives	B1 B2 B3 B4		B1 B2 B3 B4	
To afford a high level of environmental protection in County Monaghan through the provision of quality environmental	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
services which adhere to the precautionary principle, to provide for sustainable development through the promotion of	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
energy efficiency and renewable energy to deliver a low carbon future for County Monaghan, to implement measures to	CH1 CH2 L1		CH1 CH2 L1	
reduce the human causes of climate change and to consider its effects when formulating development plan policies.				
Water Resources and Quality Policies/Objectives			•	
WPP1 In assessing applications for developments the Council will consider the impact on the quality of surface waters	B1 B2 B3 B4		B1 B2 B3 B4	
and will have regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
subsequent local or regional plans.	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
WPP2 In assessing applications for development, the planning authority shall ensure compliance with the European	CH1 CH2 L1		CH1 CH2 L1	
Communities Environmental Objectives (Surface Waters) Regulations, 2009 (S.I. No 272 of 2009) and the European				
Communities Environmental Objectives (Groundwater Regulations, 2010 (S.I. No. 9 of 2010).				
WPP3 To protect known and potential groundwater reserves in the county. In assessing applications for developments,				
the planning authority will consider the impact on the quality of water reserves and will have regard to the				
recommended approach in the Groundwater Protection Response Schemes published by GSI. The employment of the				
methodology identified in the 'Groundwater Protection Scheme Reports for County Monaghan public supply sources'				
(available at <u>www.gsi.ie</u>) and 'Guidance on the Authorisation of Discharges to Groundwater' (available at <u>www.epa.ie</u>)				
will be required where appropriate.				
WPP4 Require submission of a water protection plan and detailed site drainage plans with all planning applications.				
Maps of sensitive areas waters, a Water Protection Plan Checklist (Appendix 16) and latest water body status information				
at <u>www.catchments.ie</u> will assist in the preparation of plans at application stage.				
WPP5 To preserve a 20m riparian corridor where development shall not be permitted to prevent further degradation of				
habitat within riparian corridors and the prevention of any in stream works, or culverting of waterways unless in				
accordance with Inland Fisheries Ireland (IFI) guidance document 'Requirements for the Protection of Fishery Habitat				
During Construction and Development Works at River Sites'. The IFI should be consulted prior to the submission of any				
plans involving works close to waterbodies.				
WPP6 Development shall be not permitted within 200 metres of any lake where relevant, that is the source of a water supply, where that development has the potential to pollute the lake.				
WPP7 Details of land spreading arrangements including a Fertiliser Plan for manures or sludge arising from industrial or				
intensive agricultural development shall be submitted to the planning authority with all planning applications.				
WPP8 Ensure that industrial or intensive agricultural developments generating manure, organic fertilisers or sludge, that				
are dependent on off-site recovery or disposal take account of sensitive area mapping including lands with impaired				
drainage/percolation properties, steeply sloping topography and lands where rock outcrop and extreme vulnerability of				
groundwater is present. The EPA guidance document 'Landspreading of Organic Waste' shall be consulted when				
assessing land suitability				
WPP9 To restrict the use of imported manure/slurry in relation to water supply source catchments, high status				
waterbodies and "At Risk" water bodies. Consult www.catchment.ie for maps of waterbodies and their classifications.				

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WPP10 Development within the vicinity of groundwater or surface water dependant Natura 2000 sites (Kilroosky Lough				
Cluster SAC) will not be permitted where there is potential for a likely significant impact upon the groundwater or surface				
water supply to the Natura 2000 site. Where appropriate, the applicant shall demonstrate with hydro geological				
evidence, that the proposed development will not adversely affect the quality or quantity of groundwater or surface				
water supply to the Natura 2000 sites.				
WPP11 Development which would have an unacceptable impact on the water environment, including surface water and				
groundwater quality and quantity, river corridors and associated wetlands will not be permitted.				
WPP12 To require developments to connect to the public sewer where available.				
WPP13 To require all agricultural developments to submit the agricultural development application form and have				
regard to the text set out in Section 8.6 of the Monaghan County Development Plan 2019-2025.				
WPP14 To ensure that development is not permitted in the vicinity of high status waters where there is a possibility to				
deteriorate status.				
WPP15 To protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated				
undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine and wetland				
areas as appropriate.				
WPP16 To support the implementation of the relevant recommendations and measures as outlined in the relevant River				
Basin Management Plan, and associated Programmes of Measures, or any such plans that may supersede same during				
the lifetime of the plan. Proposals for development should not have an unacceptable impact on the water environment,				
including surface waters, groundwater quality and guantity, river corridors and associated woodlands. Also, to have				
cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 which provides				
guidance on exemptions to the environmental objectives of the Water Framework Directive.				
WPP17 To contribute towards the protection of existing and potential water resources, and their use by humans and				
wildlife, including rivers, streams, groundwater and associated habitats 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 (SI No.				
272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives				
(groundwater) Regulations, 2010 (S.I. No. 9 of 2010) and other relevant EU Directives, including associated national				
legislation and policy guidance (including any superseding versions of same). To also support the application and				
implementation of a catchment planning and management approach to development and conservation, including the				
implementation of Sustainable Drainage System techniques for new development.				
WPP18 To encourage the use of catchment-sensitive farming practices, in order to meet Water Framework Directive				
targets and comply with the relevant River Basin Management Plan.				
WPP19 To prevent river fragmentation and to encourage, where possible, the connectivity or the re-connectivity of				
fisheries waters in consultation with Inland Fisheries Ireland.				
Irish Water Policies/Objectives	D4 D2 D2 D4		D4 D2 D2 D4	
WWP1 To collaborate with, support and co-operate with Irish Water, as relevant and appropriate, to deliver a sustainable water supply in line with the objectives set out in the Core Strategy.	B1 B2 B3 B4 PHH1 S1 W1 W2		B1 B2 B3 B4 PHH1 S1 W1 W2	
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WWP2 To liaise with Irish Water to establish source management and protection zones around drinking water supply			CH1 CH2 L1	
sources and advance appropriate management and maintenance measures for these sources (both ground and surface	CH1 CH2 L1			
water). WWP3 To co-operate with and advise Irish Water in order to identify, prioritise and advance the delivery of water and				
water water projects throughout the County during the Development Plan period and to only permit development in				
instances where there is sufficient capacity in the public water and wastewater infrastructure.				
WWP4 To implement in conjunction with Irish Water, EPA and statutory requirements in compliance with the provision				
of the Urban Wastewater Treatment Regulations and the Wastewater Discharge (Authorisation) Regulations 2007 as				
amended.				
WWP5 To implement in conjunction with Irish Water, EPA and statutory requirements in compliance with the provisions				
of the EU (Drinking Water) Regulations, the Drinking Water Regulations (SI No 122 of 2014).				
WWP6 To, in conjunction with Irish Water, undertake recommendations made by the EPA arising from any failure to				
meet drinking water standards and any enlistment on the EPA's Remedial Action List.				
WWP7 To co-operate with the Federation of Group Water Schemes to improve the quality and capacity of water supply				
wwwr r to co-operate with the recertation of Group water schemes to improve the quality and capacity of Water supply				

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to areas served by group water schemes.		
Energy Policies/Objectives		
 EP01 To support and advance the provision of renewable energy resources and programmes in line with the Government's National Renewable Energy Action Plan (NREAP), the Governments' Energy White Paper "Irelands Transition to a Low Carbon Energy Future 2015-2030 and any other relevant policy adopted during the lifetime of this plan. EP02 To prepare a Renewable Energy Strategy for the County over the lifetime of this plan and subject to the availability of resources. This strategy will support the development of renewable energy infrastructure to deliver government objections on energy efficiency and the transition to a low carbon future. 	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
 EP03 To facilitate the sustainable development, renewal and maintenance of energy generation infrastructure in order to maintain a secure energy supply while protecting the landscape, archaeological and built heritage and having regard to the provisions of the Habitats Directive. EP04 To support the production of sustainable energy from renewable sources such as wind, solar, bio-energy and the development of waste to energy/Combined Heat and Power Schemes at suitable locations and subject to compliance with the Habitats Directive. 		
EP05 To ensure that new wind energy developments and modifications to existing development meet the requirements as set out in the DoEHLG Wind Energy Development Guidelines 2006 and any updated guidelines. EP07 To encourage the development of small-scale wind energy development and single turbines in urban and rural areas and industrial parks provided they do not negatively impact upon environmental quality, landscape, wildlife and habitats or residential amenity.		
 EP08 To support and promote the use of renewable energy technologies in the conversion and re-use of existing built developments. EP09 To support and promote the development and use of passive solar design principles in all new developments taking account of national guidelines and development management policies for rural and urban areas. EP10 To work in partnership with local communities to develop energy efficient and renewable energy projects to benefit the local area subject to development management standards 		
Waste Management Policies/Objectives		
WMP1 To implement and support the strategic objectives WMP1 To implement and support the strategic objectives of the Connaught- Ulster Regional Waste Management Plan 2015-2021 and any subsequent Waste Management Plan adopted during the current plan period. WMP2 To implement the provisions of the Litter Management Plan 2014 -2016 and any subsequent revisions. WMP3 To apply the 'Polluter Pays' Principle, proximity principle, and the precautionary principle in respect of all waste management activities. WMP4 To require that all construction projects are carried out in accordance with Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects. WMP5 To encourage best environmental practice in all agricultural, industry, business and local authority activities. WMP6 To support the circular and bio-economy through the efficient use of resources and to support any development	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
proposals which contribute to this concept. WMP7 To support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible and to safeguard the environment by seeking to ensure that residual waste is disposed of appropriately. WMP8 To continue to fulfil 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.		
 WMP9 To require that treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit) and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste). 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 and be in accordance with Section 8.29. WMP 10 To have regard to the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites. 		

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Climate Change Policies/Objectives	·	
CCP1 To Support and encourage the implementation of the National Adaptation Framework 2018 and any updated	B1 B2 B3 B4	B1 B2 B3 B4
versions during the lifetime of this development plan.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
CCP2 To prepare a Climate Change adaptation strategy for County Monaghan having regard to relevant national	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
guidelines and in co-operation with all relevant stakeholders.	CH1 CH2 L1	CH1 CH2 L1
CCP3 To promote a settlement strategy which provides for the re-use of brownfield lands the consolidation of existing		
settlements and integration of land use and transportation.		
CCP4 To ensure new development is appropriately located, so as not to be exposed to risk of flooding		
CCP6 To promote the protection of the County's green infrastructure resources		
CCP7 To support and assist a shift to a low carbon society and a reduction in the dependence on fossil fuels in County		
Monaghan by implementing measures to deliver energy efficiency, compact urban forms and sustainable transport		
patterns.		
CCP8 To promote and encourage the use of renewable energy in all areas subject to compliance with development		
management standards and policies.		
CCP9 To support diversification and innovation in the local economy by endorsing investment in emerging products,		
services and technologies that assist in the delivery of a low carbon future for County Monaghan.		
CCP10 Support and facilitate European and national objectives for climate adaptation and mitigation as detailed in the		
National Mitigation Plan, National Adaptation Framework and relevant Sectoral Adaptation Plan(s).		
Flood Risk Management Policies/Objectives		
FMP1 To fully implement and support in conjunction with the OPW the provisions of the EU Flood Risk Directive, The	B1 B2 B3 B4	B1 B2 B3 B4
Flood Risk Regulations, The Planning System and Flood Risk Management- Guidelines for Planning Authorities and any	PHH1 S1 W1 W2	PHH1 S1 W1 W2
updated legislation or guidelines issued during this plan period.	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
FMP2 To restrict development in areas susceptible to flooding except where;	CH1 CH2 L1	CH1 CH2 L1
The proposed development can be justified on strategic grounds.		
The flood risk can be managed to an acceptable degree and without increasing flood risk beyond the site		
itself.		
Appropriate and detailed mitigation measures can be implemented to remove/minimise flood effects.		
FMP3 Development proposals on land identified as being at risk of flooding shall be accompanied by a site-specific Flood		
Risk Assessment (FRA) carried out in accordance with the methodology set out in The Planning System and Flood Risk		
Management - Guidelines for Planning Authorities, 2009. Such assessments shall be carried out by competent		
professionals with hydrological experience and identify the risk and extent of any proposed mitigation measures.		
FMP4 All applications in areas prone to flooding shall be subject to the justification test set out in the Flood Risk		
Management Guidelines. Compensatory flood storage provision or the provision of flood defences will not override the		
need for completion of the justification test.		
FMP5 To protect the capacity of rivers, streams, riparian corridors, flood plains and wetlands from inappropriate		
development which will contribute to increased flood risk. Development on or within a floodplain will not be permitted.		
Surface Water Drainage Policies/Objectives		
SDP1 To require best practice in the design, construction and operation of expanding and new developments to ensure	B1 B2 B3 B4	B1 B2 B3 B4
minimum effects on the aquatic environment. Sustainable Urban Drainage Systems designed to ensure both water	PHH1 S1 W1 W2	PHH1 S1 W1 W2
quality protection and flood minimisation should be included in developments for commercial, industrial, residential,	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
intensive agricultural, public and institutional premises with significant roof or hard surface areas and multiple residential	CH1 CH2 L1	CH1 CH2 L1
developments. For guidance refer to Monaghan County Councils Storm Water Technical Guidance Document 2017.		
SDP2 To ensure that new development is adequately serviced with surface water drainage infrastructure and promote		
the use of Sustainable Drainage Systems as appropriate to minimise the effect of a development on flooding and		
pollution of existing waterways.		
SDP3 To require that planning applications are accompanied by a comprehensive SUD's assessment that addresses run-		
off quantity, run-off quality and its impact on the existing habitat and water quality.		
SDP4 To ensure that all storm water discharges shall be restricted onsite attenuation and or other measures to the pre-		
development levels (green field) in all new developments. All attenuated storage volumes must take in to consideration		
climate change. Guidance is available from The Greater Dublin Strategic Drainage Study Technical Document, Volume 5.		
SDP5 To require all run off from new developments in towns/villages to be restricted to the pre development		

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levels(green field) by storm water attenuation on site and use of SUDs (sustainable urban drainage systems), as a		
measure to assist in flood avoidance. For guidance refer to Monaghan County Councils Storm Water Technical Guidance		
Document 2017.		
Dangerous Structures and Places Policies/Objectives	• •	
DSP2 To implement the provisions of the Derelict Site Act, 1990 in respect of dangerous structures or places.	B1 B2 B3 B4	B1 B2 B3 B4
	PHH1 S1 W1 W2	PHH1 S1 W1 W2
	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
	CH1 CH2 L1	CH1 CH2 L1
Veterinary Services		
VSP1 To support the implementation of the veterinary functions of the Council.	B1 B2 B3 B4	B1 B2 B3 B4
	PHH1 S1 W1 W2	PHH1 S1 W1 W2
	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
	CH1 CH2 L1	CH1 CH2 L1
Lighting Policies/Objectives	offi offizier	
LP1 To control lighting in urban and rural areas and in particular in sensitive locations, in order to minimise impacts on	B1 B2 B3 B4	B1 B2 B3 B4
residential amenity and habitats and species of importance.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
LP2 To require the use of energy efficient public lighting in all new development proposals.	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
LP3 To require that lighting fixtures should provide only the amount of light necessary for personal safety and should be	CH1 CH2 L1	CH1 CH2 L1
designed so as to avoid creating glare or emitting light above a horizontal plane. Lighting fixtures should also have	CHT CHZ LT	
minimum environmental impact and protect light sensitive species such as bats.		
Noise Policies/Objectives		
NP1 To promote the implementation of the Noise Directive 2002/49/EC and associated Environmental Noise Regulations	B1 B2 B3 B4	B1 B2 B3 B4
2006.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
2006.	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
	CH1 CH2 L1	CH1 CH2 L1
Air Quality Paliaing (Objectives	CHICHZLI	CHI CH2 LI
Air Quality Policies/Objectives	D1 D2 D2 D4	B1 B2 B3 B4
AQP1 Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated	B1 B2 B3 B4	
with new developments are within Environmental Quality Standards as out in the Air Quality Standards Regulations 2011	PHH1 S1 W1 W2	PHH1 S1 W1 W2
(SI No. 180 of 2011) (or any updated/superseding documents). Promote the preservation of best ambient air quality	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
compatible with sustainable development in accordance with the EU Ambient Air.	CH1 CH2 L1	CH1 CH2 L1
AQP2 To contribute toward compliance with air quality legislation; greenhouse gas emission targets; management of		
noise levels; and reductions in energy usage.		
Environmental Hazard Zones Policies/Objectives		
EHZ1 To comply with the provisions of the SEVESCO Directive in respect of any development with the potential to cause	B1 B2 B3 B4	B1 B2 B3 B4
a major accident.	PHH1 S1 W1 W2	PHH1 S1 W1 W2
	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1
	CH1 CH2 L1	CH1 CH2 L1

Commentary

The environment provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide a planning framework for various types of development under the "environment" heading in County Monaghan that is line with the provisions of the Core Strategy (see Section 8.5.2 above, including Commentary). Such types of development include those relating to Water Resources and Quality, Irish Water, Energy, Waste Management, Climate Change, Flood Risk Management, Surface Water Drainage, Dangerous Structures and Places, Veterinary Services, Lighting, Noise, Air Quality and Environmental Hazard Zones. The evaluation against Strategic Environmental Objectives (SEOs) provided for the environment provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.3.

Environment provisions are primarily concerned with the protection and management of the environment, benefitting environmental components including:

- Human health (SEO PHH1);
- The status of waters (SEOs W1 W2);
- Biodiversity, flora and fauna (SEOs B1 B2 B3);
- Water services provision (SEOs M1 M2);

- Flood risk management (SEOs W3 PHH1);
- Soil (SEO S1); and
- Climate emissions (SEO C1).

With regard to provisions relating to water resources and services, by protecting water resources (SEOs W1 W2), appropriately treating waste water (SEO M1) and providing safe drinking water (SEO M2) the protection of various environmental components would be contributed towards including:

- Human health (SEO PHH1);
- Biodiversity, flora and fauna (SEOs B1 B2 B3);
- The status of waters (SEOs W1 W2);
- Flood risk management (SEOs W3 PHH1); and
- Soil (SEO S1).

There would be potential for significant adverse environmental effects upon various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1) to arise during construction of water services infrastructure. Such potential significant adverse effects could also arise during operation:

- Outflow could conflict with various components (SEOs W1 W2 PHH1 B1 B2 B3 S1 M2); and
- Abstracting water could conflict with various components (SEOs W1 W2 PHH1 B1 B2 B3 S1).

With regard to provisions relating to energy, these would contribute towards achieving various government objectives including those relating to the amount of energy to be consumed from renewable sources and reducing greenhouse gas emissions. Further general commentary on the types of potential effects arising from certain renewable energy types is provided below.

Wind Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets Potential Negative Effects, if unmitigated:

- Potential impacts include those associated with construction and operation of the turbines and ancillary facilities and infrastructure (including roads and electrical infrastructure)
- Potential human health impact: shadow flicker, noise, and impacts arising from bog bursts and landslides
- Potential impact upon designated and non-designated biodiversity and flora and fauna including birdlife
- Potential interactions leading to change in structure of soil and geology and changes to drainage
- Potential impacts on water status during construction this could interact with drinking water sources and biodiversity
- Potential impacts upon the context of protected archaeological and architectural heritage including the context of this heritage as well as unknown archaeological heritage
- Potential impacts upon traffic during construction due to transportation of turbine components
- Changes to the character of areas would be likely to occur however visual impacts would depend on various factors including the size, number and spacing of the turbines, perception of the relevant areas and any cumulative effect arising from multiple wind farms

Hydropower

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

Potential Negative Effects, if unmitigated:

- Depending on the scale and location of the development there is potential for impacts to occur on biodiversity, in particular aquatic biodiversity
- · Potential to impact upon the morphological, biological and chemical status of waters this could interact with drinking water sources (in freshwater) and biodiversity
- Potential interactions leading to change in structure of soil and geology
- Operation could impact upon flood risk elsewhere
- Potential impacts upon archaeological heritage or nearby architectural heritage, including context
- Changes to the character of locations may occur however visual impacts would depend upon, inter alia, the size of the installation, ancillary facilities and the perception and visibility of the relevant area

Bio-Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Can provide for the use of agricultural and other wastes

Potential Negative Effects, if unmitigated:

- Potential impact upon designated and non-designated biodiversity and flora and fauna arising from changes in vegetation. Soil structure may also be impacted upon.
- Changes in farming practices may lead to changes in drainage and runoff which could impact upon biological and chemical status of waters this could interact with drinking water sources and biodiversity
- Potential human health impact: odour and noise from operation of plants
- Potential impacts upon traffic during operation due to transportation of fuel to plants
- Fuels derived from bio-mass still produce emissions however these are less than those derived from fossil fuels
- Changes to the land cover of areas could occur however visual impacts would depend on perception of the relevant area;
- Biomass plants may have visual impacts these would depend on perception of the relevant area

Solar Energy and Solar Thermal Energy

Positive Effects: Contribution towards renewable energy targets

Potential Negative Effects, if unmitigated:

- Potential impacts on architectural heritage including the context of this heritage at micro scale
- Potential impacts on habitats and species and micro scale
- Large scale installations may have visual impacts these would depend on perception of the relevant area -, however these are unlikely to be provided for

Geothermal Energy

Positive Effects: Contribution towards renewable energy targets

Potential Negative Effects, if unmitigated:

• Potential impacts upon the status of waters and ecology contained within, especially arising from changes in the temperature of groundwater which can impact upon the structure and ecology of the aquifer and any dependent surface waters - this could interact

with drinking water sources

- Potential interactions leading to change in structure of soil and geology
- Potential impacts upon archaeology, including unknown underground archaeology
 Potential impacts upon on site water services
- Potential impacts upon on site water services
 Potential impacts upon context of archaeological and archite
- Potential impacts upon context of archaeological and architectural heritage arising from surface installation
 Large scale installations may have visual impacts these would depend on perception of the relevant area

With regard to provisions relating to climate change, these have the potential to result in significant beneficial environmental effects:

- Land use planning, providing for the location of new development close to existing development and serviced by public transport, at an appropriate density, can reduce the need to travel by car and contribute towards increases in sustainable mobility and reductions in greenhouse gas emissions (SEO C1).
- Adaptation measures such as flood risk management infrastructure could, inter alia, help to protect humans (SEO PHH1) from flood risk (SEO W3), prevent the loss of biodiversity and heritage (SEOs B1 B2 B3 CH1 CH2 L1) and protect existing infrastructure and services (SEOs M1 M2 M3 W1 W2) with resultant protection of the status of waters and soils during flood events (SEOs W1 W2 S1).

Certain climate change adaptation actions such as flood defence infrastructure and the development of green infrastructure have the potential to result in significant adverse environmental effects during construction and operation on most environmental components. The preparation of a lower-tier Climate Change Adaptation Strategy (CCP2) would have to be subject to its own lower-tier environmental assessment processes as relevant.

With regard to provisions relating to waste management, the implementation of these provisions, including the construction and operation of waste management infrastructure, would facilitate the reduction of waste levels (SEO M3) at the same time as presenting potential conflicts with various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 CH1 CH2 L1). These conflicts would be mitigated by, inter alia, measures which have been integrated into the Plan and the Regional Waste Management Plan – compliance with these measures would contribute towards the protection of human health (PHH1) and various environmental components including air, soil, water, and ecology (SEOs B1 B2 B3 C1 W1 W2 S1). The provision of waste management facilities (SEO M3) in certain locations could reduce transport related emissions (SEOS C1 PHH1).

With regard to provisions relating to drainage and flood risk management, appropriate management of both storm and surface water and flood risk (SEO W3) would contribute towards the protection of various environmental components including:

- Human health (SEO PHH1);
- Biodiversity, flora and fauna and cultural heritage (SEOs B1 B2 B3 CH1 CH2); and
- Existing infrastructure and services (SEOs M1 M2 M3) with resultant protection of the status of waters, soils, human health and ecology during flood events (SEOs W1 W2 S1 PHH1 B1 B2 B3).

Flood risk management infrastructure may have the potential to result in significant adverse environmental effects during construction and operation on most environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1).

Potential adverse effects arising from all provisions contained within this section would be mitigated by measures which have been integrated into the Plan (see Section 9).

8.6.9 Chapter 9: Strategic Objectives

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Specific Strategic Objectives for Settlement Plan Towns			•	•
SH01 Monaghan Town: To facilitate the development of Monaghan to maintain its position as the principle town in	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
the County at the top of the settlement hierarchy and to ensure that its expansion takes place in an orderly and	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
sustainable fashion that will not detract from the vitality and viability of its town centre.	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
SH02 Carrickmacross & Castleblayney: To promote the Strategic Towns as prosperous and thriving local	CH2 L1		CH1 CH2 L1	
development and service towns where the principles of environmental, economic and social sustainability including				
protection of the town's heritage and natural and built environment is enshrined.				

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SH03 Clones & Ballybay: To promote and develop Tier 3 Service Towns in order to create self-sufficient sustainable				
and vibrant communities which will act as local development and service centres for the border catchment and the mid				
Monaghan hinterland.				
Strategic Objectives for All Settlements within County Monaghan				
SSO1 To create a clear strategic framework for the sustainable development of the towns and their hinterlands through	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
the zoning and servicing of lands in a manner consistent with the Core Strategy as set out in Chapter 2.	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
SS02 Provide a basis for public and private sector investment in infrastructure, services and development, offering clear	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
guidance to both sectors in framing development proposals, in partnership with the community.	CH2 L1		CH1 CH2 L1	
SSO3 Facilitate the provision of adequate services and facilities in the areas of education, medical/health, transport and				
public administration and encourage co-location of these services.				
SSO4 Attract investment and new employment opportunities to the towns while supporting sustainable enterprises.				
SSO5 Promote the towns as residential, employment, retail and service centres as well as industrial and commercial				
centres.				
SSO6 Protect and enhance the heritage, character and streetscape of the towns and ensure they are attractive places to				
live and work in.				
SSO7 Provide a wide range of amenity, sporting and cultural facilities including public spaces and parks.				
SS08 Provide as resources permit specific action area plans and/or masterplans for the towns to provide for the most				
efficient and suitable co-ordinated development to take place.				
SSO9 To designate development limits around the urban areas in order to manage development in a sustainable				
manner and restrict urban sprawl and the merging of distinctive areas.				
SSO10 Promote the development of all settlements with an appropriate range of facilities and services including social infrastructure, retail units, commercial offices and local enterprise in accordance with provisions of the Core Strategy.				
SSO11 Promote sustainable compact development forms, including more comprehensive backland development where				
appropriate and promote the efficient use of available public infrastructure and services.				
SSO12 Facilitate and/or provide the infrastructure and services necessary to accommodate anticipated population				
growth in each settlement.				
SSO13 Protect important landscape features within or on the edge of settlements by prohibiting development within				
designated Landscape Protection/Conservation (LPC) areas unless it is proven to the satisfaction of the Planning				
Authority that the proposed development would not detrimentally impact on the amenity of the LPC areas or the wider				
setting or character of the settlement.				
SSO14 Promote public transport strategies that could facilitate services in the lower tier settlements.				
SSO15 Encourage the development of specialist niche activities or roles that could help distinguish them and thereby				
promote their development.				
SSO16 Ensure that new development within settlements is appropriate in terms of use, siting, scale, layout, design,				
materials and character.				
SSO17 Promote and encourage the delivery of the refurbishment and regeneration of the back lands of the towns as				
well as appropriate development on infill sites, derelict sites, vacant plots and brownfield sites.				

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Land Use Zoning Policies/Objectives		
Policy LZP1 To implement the following land use zoning categories and objectives in each of the settlement plan areas:	B1 B2 B3 B4 PHH1	B1 B2 B3 B4
>refer to the Plan for details of land use zoning objectives<	S1 W1 W2 W3 M1	PHH1 S1 W1 W2
Urban Residential Developments	M2 M3 C1 CH1	W3 M1 M2 M3 C1
UDO 1 To promote the towns as residential centres and encourage the development of new residential accommodation	CH2 L1	CH1 CH2 L1
on zoned housing lands.		
UDO 2 To ensure there is sufficient zoned, serviceable land to meet the future housing needs of the towns as set out in		
the Chapter 2, Core Strategy, Monaghan County Development Plan 2013-2019.		
UDO 3 To provide directly or in partnership with the voluntary or private sector sufficient social and affordable housing		
to meet the needs of the area.		
UDO 4 To encourage social integration and a mixture of tenures in all housing developments.		
UDO 5 To encourage the refurbishment and reuse of derelict buildings and development on derelict lands and infill sites		
in the towns.		
UDO 6 To comply with the Housing Strategy for County Monaghan 2013 and any subsequent amending strategy.		
UDO 7 To require developers of residential lands along existing and proposed roads to provide and employ appropriate		
buffers to protect the residential amenity of proposed dwellings, and to protect the visual amenity of the setting of the		
town. The design, scale, form and detailing of the buffer shall be dependent on the likely impact of the road or the		
development on amenity.		
UDO 8 To promote compact forms of residential development such as infill and backland development and ensure		
through the development management process that access points to backland areas are reserved or that adequate		
frontage is reserved to provide future road access, to enable comprehensive backland development.		
UDO 9 To implement an Active Land Management Strategy in relation to vacant land within County Monaghan and to		
maintain and update as required a Vacant Sites Register to ensure efficient and sustainable use of the County's land		
resources.		
UDO10 To encourage and support proposals for new residential development that will result in the		
regeneration/renewal of town centre areas and/or a reduction in vacancy/dereliction in the context of the proposed		
planning and sustainable development of the area.		
Town Centres		
TCO1 Promote and develop the town centres as the principle location for retail, office, leisure, entertainment, cultural		
and service uses and to encourage the refurbishment, renewal and re-use of existing buildings and derelict sites within		
it.		
TCO2 Protect the vitality and viability of the town centres by promoting a diversity of uses, with a presumption in favour		
of development that would make a positive contribution to ensuring that the town centres continue to provide a focus		
for shopping.		
TCO3 Promote the vitality and viability of the town centres by prohibiting, except in exceptional circumstances, the		
location of town centre uses such as financial institutions, offices etc outside the designated town centres.		
TCO4 Use statutory legislation to discourage and prevent dereliction and encourage regeneration and development in		
the town.		
TCO5 Ensure that sufficient parking is available for town centre uses.		
TCO6 Continue to provide public investment directly and in partnership with the voluntary and private sector to support		
the vibrancy of the town.		
TCO7 Encourage the principle of living over the shop within the town centres.		
TCO8 Encourage and facilitate the under grounding of utility cables in the town centres.		
TCO9 Continue to encourage and accommodate the regeneration of backlands in the towns were appropriate, including		
the construction of new urban streets to provide access to inaccessible lands.		
Retailing		
SRO 1 Protect the vitality and viability of the town centres as the principal shopping area by encouraging development		
that would maintain and consolidate the retail core (as defined by the town centre boundary) of the towns.		
SRO 2 Prohibit the location of retail development outside the town centres unless where it is compliant with the policies		
as laid out in the Retail Development Strategy for County Monaghan (and any subsequent strategy), and the DECLG		
Retail Planning Guidelines for Planning Authorities (and any subsequent guidelines).		

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SRO 3 Encourage the provision of a wider range of convenience and comparison goods and size of retail units in the		
town centres.		
Industry, Enterprise and Employment		
IEO 1 Ensure that sufficient and suitable land is reserved for new industrial development at appropriate locations, where		
there are existing infrastructural facilities, services and good communications, or where they can be provided at a		
reasonable cost.		
IEO 2 Facilitate the growth and/or expansion of existing industrial enterprises where appropriate, subject to		
development management guidelines as set out in Development Management Guidelines, Monaghan County		
Development Plan 2019-2025. Such developments should not unduly impact on the residential amenity of existing		
residential properties.		
IEO 3 Encourage and promote the sustainable development of industry within the towns over the plan period.		
IEO 4 Co-operate with IDA Ireland, Enterprise Ireland, community groups and other relevant bodies to ensure a co-		
ordinated approach to the provision of necessary infrastructure and services to support industrial development.		
IEO 5 Ensure that a high standard of design, layout and amenity is provided and maintained in all new industrial		
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developments.		
IEO 6 Continue to support and facilitate cross-border co-operation and trade between County Monaghan and the North		
of Ireland.		
Roads and Parking		
RPO 1 Construct new roads and improve the existing road network in, around and through the towns, to open up		
development lands and improve traffic safety.		
RPO 2 Reduce traffic congestion and improve access and traffic flow throughout the towns.		
RPO 3 Construct and maintain pedestrian and traffic safety measures, and implement traffic control measures, where		
required, throughout the towns.		
RPO 4 Regulate and manage car-parking facilities throughout the towns in accordance with Development Management		
Guidelines, Monaghan County Development Plan 2019-2025 and ensure that adequate off-street car parking and		
servicing space is provided in all new developments.		
RPO 5 Strengthen and reconstruct all deficient sections of road pavement and footpath, and provide additional		
pavements and footpaths in residential areas when resources become available.		
RPO 6 Co-operate with developers in the provision of access points, roads, footpaths and services where it is deemed		
necessary.		
RPO 7 Ensure that, where appropriate, adequate space is provided in all new developments for off-street car parking		
and require adequate provision of loading space within the curtilage of new developments.		
RPO 8 Control and restrict any new direct access points or intensification of use of existing accesses onto the national		
road network within the general speed limit areas in accordance with the policies contained within Development		
Management Guidelines, Monaghan County Development Plan 2019-2025.		
Protection of Natural & Built Heritage		
SNO 1 Prohibit development that would detrimentally impact on the value or designation of areas of natural amenity in the towns.		
SNO 2 Protect individual trees, groups of trees and woodland areas because of their nature conservation value or their approximation of available and require the retention of available avail		
contribution to amenity of the town, and require the retention of existing mature trees and hedgerows in all new		
developments, except in exceptional circumstances.		
SNO 3 Prohibit development in Landscape Protection/Conservation Areas unless in exceptional circumstances, where it has been clearly proven to the Planning Authority that the works would not be contrary to the zoning objective as		
outlined in Chapter 9, Monaghan County Development Plan 2013-2019.		
SNO 4 Have regard to nature conservation issues when considering proposals for development which may detrimentally impact on habitats, species, or features worthy of protection.		
SNO 5 Protect and preserve the Protected Monuments and Structures located within the towns.		
SNO 5 Protect and preserve the Protected Monuments and Structures located within the towns. SNO 6 Protect existing Architectural Conservation Areas by ensuring that all developments within them comply with the		
policies set out in, Monaghan County Development Plan 2019-2025 and the DEHLG Architectural Heritage Protection		
Guidelines. In these areas repair and refurbishment of existing buildings will be favoured over demolition and new build.		
ourdennes. In mese areas repair and returnishment of existing buildings will be lavoured over demontion and new build.		

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SNO 7 To protect the architectural quality of the towns by investigating the potential of designating additional				
Architectural Conservation Area(s) (ACAs) in accordance with DEHLG Architectural Heritage Protection Guidelines, during				
the plan period.				
SNO 8 Protect and conserve the streetscape character, architectural quality and heritage of the towns.				
SNO 9 Encourage new developments to refurbish existing buildings and back lands to eliminate dereliction and reinforce				
the town centre where possible.				
SNO 10 Ensure that new developments enhance, respect and compliment the form and scale of the existing town				
streetscape and architecture.				
SNO 11 Preserve features which contribute to the townscape and character of the town, (e.g. archways facades,				
stonework, iron railings, etc.)				
Recreation and Amenity				
REO 1 Prohibit development on zoned recreation/open space lands unless where it is clearly demonstrated that it is of				
compatible amenity value and that there will be no adverse effect on the environment.				
REO 2 Provide sufficient recreation/open space and amenity areas within the towns for their populations and prevent				
the loss of existing or private open space unless alternative facilities are provided in a suitable location elsewhere.				
REO 3 Support the development of social, recreational, sporting and community facilities in appropriate locations.				
REC 3 support the development of social, recreational, sporting and community facilities in appropriate locations.				
REO 4 Co-operate with relevant educational authorities in developing additional facilities in the towns with the view of				
improving the availability of education.				
REO 5 Maintain existing rights of way and investigate the creation of additional public rights of way either, by				
agreement or by use of compulsory powers.				
REO 6 Recreational facilities such as a Cinema or Bowling Alley shall be located within the town centre. Alterative out of				
town centre sites shall only be considered acceptable where it is clearly demonstrated to the satisfaction of the Planning				
Authority that there are no town centres or edge of centre sites that are suitable, viable or available. (Sequential				
approach).				
Tourism				
STO 1 Promote and facilitate the development of County Monaghan as a tourism centre in co-operation with the public				
and private sector.				
STO 2 Accommodate sustainable tourism related projects related to natural assets of the towns.				
STO 3 Encourage and accommodate the reopening of the Ulster Canal.				
STO 4 Promote and develop improved cross border networks to encourage tourism and business to operate in both				
Northern Ireland and the Republic of Ireland.				
STO 5 Develop facilities to provide accessible tourist information throughout the towns and their environs within the				
plan period.				
Objectives for Local Area Action Plans	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
APO 1 To require, in areas which have been identified as requiring the preparation of a Local Area Action Plan, that any	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
such plan shall be prepared and agreed with the Planning Authority prior to any development application being	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
considered on the subject lands.	CH2 L1		CH1 CH2 L1	
APO 2 A written statement and a plan indicating the objectives, in such detail as may be determined by the Planning				
Authority, for the proper planning and sustainable development of the area to which it applies shall be provided.				
APO 3 Proposals in relation to the overall design of the proposed development including maximum heights, external				
finishes of structures and general appearance and design, including that of the public realm. Designs should be				
sympathetic to the nature of the area as well as sympathetic to the town.				
APO 4 Linkages shall be demonstrated with the Town Core in terms of safe and accessible pedestrian and vehicular				
linkages.				
APO 5 Require that all plans are consistent with the policies and objectives of the County Development Plan.				
APO 6 Guidance shall be set out with regard to quality architectural treatment, topography, urban structure and built				
form consistent with the established character of the town.				
Specific Strategic Objectives for Village Plan Areas				
To promote and facilitate development that is commensurate with the nature and extent of the existing settlement to				
support their role as local service centres.				

Tier 4 Settlements Policy VIL1 To require applications for residential development within these settlements to demonstrate the following: The developer has provided evidence to the satisfaction of the planning authority that there is demand for the proposed residential development taking account of the extent, nature and status of extant permissions for residential development taking account of the extent, nature and status of extant permissions for residential development, unfinished housing developments and vacant residential properties in the settlement. The proposal contributes to the sequential development of the settlement of land from the centre outwards and/or represents an infilling of the existing settlement envelope. The application comprises a maximum of 25% of the residential units required to satisfy the housing demand in the settlement for the plan period. It can be demonstrated to the satisfaction of the planning authority that the application does not comprise lands that are in the same ownership or have been disposed of from another land parcel, upon which planning permission for residential development has already been granted and of which more than 25% of the units remain unoccupied or undeveloped. The quantum and location of the proposal must be in accordance with the provisions of the Core Strategy set out in Chapter X. Policy VIL2 To consider applications for industrial and commercial development which cannot be accommodated within the village envelopes shall be given preference over those located in the open countryside and any proposal shall comply with all other relevant policicies set out in this Plan.		2020	
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Policy VIL2 To consider applications for industrial and commercial development which cannot be accommodated within the village envelopes due to conflict of land uses or amenity on the fringes of the village envelope. Sites of the edges of the village envelopes shall be given preference over those located in the open countryside and any proposal shall comply	• The quantum and location of the proposal must be in accordance with the provisions of the Core Strategy set		
the village envelopes due to conflict of land uses or amenity on the fringes of the village envelope. Sites of the edges of the village envelopes shall be given preference over those located in the open countryside and any proposal shall comply	out in Chapter X.		
the village envelopes shall be given preference over those located in the open countryside and any proposal shall comply	Policy VIL2 To consider applications for industrial and commercial development which cannot be accommodated within		
	the village envelopes due to conflict of land uses or amenity on the fringes of the village envelope. Sites of the edges of		
with all other relevant policies set out in this Plan.	the village envelopes shall be given preference over those located in the open countryside and any proposal shall comply		
	with all other relevant policies set out in this Plan.		

Commentary

The Strategic Objective provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide more detail to the planning framework for development that is assessed under previous chapters. These objectives are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Various Strategic Objective provisions would contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components, including, for example:

- SSO1 "sustainable development"
- SSO3 "adequate services and facilities"
- SSO4 "sustainable enterprises"
- SSO6 "Protect and enhance the heritage, character and streetscape of the towns"
- UD0 7 "protect the residential amenity of proposed dwellings, and to protect the visual amenity of the setting of the town"
- UDO 8 "To promote compact forms of residential development such as infill and backland development"
- TCO4 "Use statutory legislation to discourage and prevent dereliction and encourage regeneration and development"
- SNO 1 "Prohibit development that would detrimentally impact on the value or designation of areas of natural amenity in the towns"
- SNO 4 "Have regard to nature conservation issues when considering proposals for development"
- SNO 5 "Protect and preserve the Protected Monuments and Structures located within the towns"
- SNO 8 "Protect and conserve the streetscape character, architectural quality and heritage of the towns"

The preparation of a lower-tier plans including Local Area Action Plans would have to be subject to their own lower-tier environmental assessment processes as relevant.

8.6.10 Chapter 10: Monaghan Town

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

	Likely to Improve	Probable Conflict	Mitigated	No Likely
	status of SEOs	with status of	Conflicts	interaction
		SEOs - unlikely to		with status of
		be mitigated		SEOs
Specific Strategic Objectives for Settlement Plan Towns				
MTSO1: To facilitate the development of Monaghan to maintain its position as the principle town in the County at the	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
top of the settlement hierarchy and to ensure that its expansion takes place in an orderly and sustainable fashion that	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
will not detract from the vitality and viability of its town centre.	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
	CH2 L1		CH1 CH2 L1	
Specific objectives				
Town centre	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
1. Ensure that all development proposals in the vicinity of Dublin Street/Roosky have regard to the Local Area	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
Action Plan for lands to the North East of Dublin Street.	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
2. Ensure that all development proposals within the Dublin Street Regeneration Plan area have regard to the	CH2 L1		CH1 CH2 L1	
regeneration strategy and development objectives of the Dublin Street Regeneration Plan.				
3. To provide a new multiuser Peace Campus on the old Machinery yard site within the lifetime of the plan				
subject to the availability of funding.				
4. Encourage new developments which refurbish existing buildings and back lands in order to eliminate				
dereliction and reinforce the town centre				
Retailing				
5. Extend the town's retail base as the County Town and the Tier 1 designation in the County Monaghan Retail				
Strategy 2016				
Industry and Enterprise				
6. Promote Monaghan as the key industrial and employment centre in line with its County Town Status				
Tourism				
7. To support the established festivals and events and to deliver on increased bed nights in suitable locations.				
8. To support the re-opening of the Ulster Canal in Monaghan Town				
Recreation, amenity and open space				
9. Ensure Peter's Lake and its environs are a key amenity area both for urban dwellers and the general public.				
10. To provide sufficient open space and amenity areas within and adjacent to the town.				
11. Encourage and facilitate the provision of appropriate and sensitive recreational development within Rossmore				
Park				
Natural and Built Heritage				
12. To protect natural amenities such as Peter's Lake, Rossmore Park, and Wright's Wood from intrusive				
development that would detrimentally impact on them or their designation				
13. To protect and enhance the character of the Architectural Conservation Areas within the town.				
Commentary		•	•	

The provisions for Monaghan Town detailed in this chapter contribute towards the preferred selection of alternatives for the Plan (including Alternative 1 for Monaghan Town) and provide more detail to the planning framework for development that is assessed under previous chapters. These provisions are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Various provisions would contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components in Monaghan Town, including, for example Specific Objectives 2, 4, 12 and 13. The preparation of a lower-tier plans including Local Area Plans would have to be subject to their own lower-tier environmental assessment processes as relevant.

8.6.11 Chapter 11: Carrickmacross

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Strategic Objectives for Settlement Plan Towns	T			1
CXSO1: To promote Carrickmacross town as a prosperous and thriving local development and service town where the principles of environmental, economic and social sustainability including protection of the town's heritage and natural and built environment are enshrined.	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Specific Objectives				
 Town Centre Support the existing town centre use along Main Street while developing an expanded town centre south of the town. Prepare and implement Local Area Action Plans (LAAP) for lands identified on map CKDP1, between Main Street and Mullinary Street, and lands between Chapel Lane and O'Neill Street. Require that any development along the by-pass provides appropriate buffers to protect the residential amenity and the visual amenity of the setting of the town. The design, scale, forms and detailing of the buffer shall be dependent on the likely impact of the road or the development on amenity. Industry, Enterprise and Employment Promote Carrickmacross as the key industrial centre in the south of the County. Promote lands to the east of Carrickmacross bypass for strategic industrial development with potential for significant employment generation. 	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
 Tourism Promote and facilitate the development of Carrickmacross as a tourism centre in co operation with the public and private sector. To support the refurbishment of the Market House building within the lifetime of the plan. 				
Recreation and Amenity				
 Bevelop lands at the Ardee Road as the primary location for active recreational development in the town. Develop and expand the town park at Lisanisk Lake Protect Bath Avenue from intrusive development To support the implementation of the Carrickmacross Active Travel Town - Walking and Cycling Strategy 2017 and any subsequent versions. 				
 Natural and Built Heritage 12. To protect the natural amenities from intrusive development that would detrimental impact on their designation as areas of secondary amenity. 13. To protect and enhance the character of the architectural conservation areas within the town. 14. Prohibit development within the environs of Lough Naglack, unless in exceptional circumstances, where it has been proven to the satisfaction of the Planning Authority that the integrity of the Lough and its surrounding landscape will not be threatened 				

Commentary

The provisions for Carrickmacross detailed in this chapter contribute towards the preferred selection of alternatives for the Plan (including Alternative 1 for Carrickmacross) and provide more detail to the planning framework for development that is assessed under previous chapters. These provisions are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Various provisions would contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components in Carrickmacross, including, for example Specific Objectives 3, 12, 13 and 14.

The preparation of a lower-tier plans including Local Area Plans would have to be subject to their own lower-tier environmental assessment processes as relevant.

8.6.12 Chapter 12: Castleblayney

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

	1	1		1
	Likely to Improve	Probable Conflict	Mitigated	<u>No Likely</u>
	status of SEOs	with status of	Conflicts	interaction
		SEOs - unlikely to		with status of
		be mitigated		SEOs
Specific Strategic Objectives for Settlement Plan Towns				
CYSO1 - To promote Castleblayney as a prosperous and thriving local development and service town where the	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
principles of environmental, economic and social sustainability including protection of the towns heritage, natural and	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
built environment are enshrined.	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
	CH2 L1		CH1 CH2 L1	
Specific objectives				
Town centre	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
1. Prepare and implement a Local Area Action Plan (LAAP) for lands to the rear of Muckno Street in consultation	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
with landowners.	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
2. To encourage new developments which refurbish existing buildings in order to regenerate the town centre and	CH2 L1		CH1 CH2 L1	
to eliminate dereliction.				
Industry and Enterprise				
3. Promote Castleblayney as a key industrial centre and employment centre.				
Roads				
4. To require that a 15-metre corridor is maintained between the zoned lands and the fence line either side of				
the Castleblayney by pass to protect the road for any future upgrade works.				
Tourism				
5. To promote Lough Muckno and its environs as the premier tourist attraction in the town.				
6. To accommodate sustainable tourism related projects in an around Lough Muckno which are compatible with				
Chapter x of the Monaghan County Development Plan 2019-2025				
7. To support the recommendations of the CHL Options & Appraisal Report on Hope Castle and its annex				
buildings.				
Recreation, amenity and open space				
8. To support the implementation of the Castleblayney Walking and Cycling Strategy 2012 and any updated				
versions.				
9. Develop a townpark at Drumillard within the lifetime of this plan subject to the availability of resources.				
Natural and Built Heritage				
10. Encourage and facilitate the restoration and refurbishment of the Courthouse during the plan period and				
subject to resources being available.				
11. To provide for the restoration/reuse of Hope Castle during the lifetime of this plan and subject to the				
availability of resources.				
12. Prohibit development within the environs of Lough Muckno, unless in exceptional circumstances, where it has				
been proven to the satisfaction of the Planning Authority that the integrity of the Lough and its surrounding				
landscape will not be threatened.				
13. Protect and conserve the River Fane and Gas Lake and its environs from inappropriate development.				

Commentary

The provisions for Castleblaney detailed in this chapter contribute towards the preferred selection of alternatives for the Plan (including Alternative 1 for Castleblaney) and provide more detail to the planning framework for development that is assessed under previous chapters. These provisions are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Various provisions would contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components in Castleblaney, including, for example Specific Objectives 2, 10, 11, 12 and 13.

The preparation of a lower-tier plans including Local Area Plans would have to be subject to their own lower-tier environmental assessment processes as relevant.

Material Alteration of Note:

One Material Alteration to the original Draft Plan that was placed on public display provided for changing the zoning objective from the Draft Plan's 'Landscape Protection and Conservation' to 'Industry Enterprise and Employment' with Flood Risk.

This Alteration changed the zoning objective of a site that is identified by the SFRA undertaken by the Council to be located within/partially within Flood Zone A (the area with the highest level of flood risk) from "Landscape Protection and Conservation" to "Industry Enterprise and Employment with Flood Risk". The key environmental sensitivities at these lands relate to flood risk. If the lands subject to this Alteration were developed in the absence of mitigation, there would be a heightened risk of flooding and associated adverse effects on people and their assets and the wider environment. Such effects are identified below and range from loss of life, to damage to property, to loss of income. In addition to these effects on people and property, there would be potential, in the absence of mitigation, for water quality to be adversely affected (including as a result of flooding of water treatment systems and collection networks).

Tangible Effects	Intangible Human and Other Effects	
Damage to buildings (houses)	Loss of life	
Damage to contents of buildings	Physical injury	
Damage to new infrastructure e.g. roads	Increased stress	
Loss of income	Physical and psychological trauma	
Disruption of flow of employees to work causing knock on effects	Increase in flood related suicide	
Enhanced rate of property deterioration and decay	Increase in ill health	
Long term rot and damp	Homelessness	
	Loss of uninsured possessions	

As part of the SFRA/Plan preparation process undertaken by the Council, the Council subjected this Proposed Material Alteration to the Justification Test provided for by the Flood Risk Management Guidelines and the proposal passes this test.

The SFRA in combination with the SEA has facilitated the integration of provisions into the Draft Plan that will help to ensure the implementation of the Flood Risk Management Guidelines at lower tiers of decision making and will help to facilitate improved levels of sustainable drainage in the County. These measures mitigate the potential adverse effects of zoning these lands and include the undertaking of site specific FRA in accordance with the Guidelines on land identified as being at risk of flooding.

8.6.13 Chapter 13: Clones

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

		Likely to Improve	Probable Conflict	Mitigated	No Likely
		status of SEOs	with status of	Conflicts	interaction
			SEOs - unlikely to		with status of
			be mitigated		SEOs
	Strategic Objectives for Settlement Plan Towns		1	1	1
	To promote and develop Clones as a service town to create self sufficient sustainable and vibrant community	B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
which wi	Il act as a local development and service centre for the border catchment and the west Monaghan hinterland	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
		M2 M3 C1 CH1		W3 M1 M2 M3 C1	
		CH2 L1		CH1 CH2 L1	
Specific	Objectives for the regeneration of Clones Town		•		
Regener		B1 B2 B3 B4 PHH1		B1 B2 B3 B4	
1.	To support the aims of the BCERP with an objective to reverse the economic and social decline of the town	S1 W1 W2 W3 M1		PHH1 S1 W1 W2	
	and provide an improved quality of life for the people of Clones and its hinterland population.	M2 M3 C1 CH1		W3 M1 M2 M3 C1	
Town ce		CH2 L1		CH1 CH2 L1	
2.	To prioritise development on brownfield lands and derelict sites and incentivise such development by applying				
	flexibility to development management requirements for any such redevelopment proposals.				
3.	Regenerate the town centre as a residential, retail and services centre, with particular emphasis on Fermanagh				
	Street and the Diamond and encourage the refurbishment, renewal and re-use of existing buildings and				
	derelict sites.				
	Il Development				
	To promote the location of start up enterprises to Clones Town.				
Tourism					
5.	Encourage the provision of a hotel and other tourist accommodation on appropriate zoned lands in Clones.				
6.	Upgrade and develop angling facilities in Clones and the Erne East Area in co-operation with Inland Fisheries				
	Ireland and other relevant water bodies.				
7.	Encourage and accommodate the reopening of the Ulster Canal and complementary developments along the				
	route of the Ulster Canal, including the development of the proposed Ulster Canal Greenway network, and the				
	provision of a marina at an appropriate location within the town as it provides a vehicle for regeneration.				
8.	Develop a new image for the town through promoting its heritage assets such as the Round Tower, High				
	Cross, Clones Castle the Ulster Canal and its sporting tradition as the home of Ulster GAA.				
	and Built Heritage				
9.	Protect and preserve the Protected Monuments and Structures located within the town of Clones in particular				
	Clones Fort, the Round Tower and Abbey, and the High Cross on the Diamond, in accordance with the				
	Council's statutory duties.				
10.	Protect and conserve the streetscape character, architectural quality, and heritage of the Diamond, MacCurtain				
	Street, Cara Street and Fermanagh Street.				

The provisions for Clones detailed in this chapter contribute towards the preferred selection of alternatives for the Plan (including Alternative 1 for Clones) and provide more detail to the planning framework for development that is assessed under previous chapters. These provisions are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Various provisions would contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components in Clones, including, for example Specific Objectives 2, 3, 10 and 11.

8.6.14 Chapter 14: Ballybay

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

status of SEOs	with status of SEOs - unlikely to be mitigated	<u>Conflicts</u>	interaction with status of SEOs
·			
B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
	B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	SEOs - unlikely to be mitigated B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	SEOs - unlikely to be mitigated B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1 B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1

The provisions for Ballybay detailed in this chapter contribute towards the preferred selection of alternatives for the Plan (including Alternative 1 for Ballybay) and provide more detail to the planning framework for development that is assessed under previous chapters. These provisions are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures

including those that have been integrated into the Plan (see Section 9).

Various provisions would contribute towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components in Ballybay, including, for example Specific Objectives 1, 11, 12 and 13.

8.6.15 Chapter 15: Development Management Standards

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 75.

	Likely to Improve status of SEOs	Probable <u>Conflict</u> with status of SEOs - unlikely to be	Mitigated Conflicts	No Likely interaction with status of SEOs
		mitigated		
Development Management Strategic Objective, Policies and Objectives				
DMO1 To ensure the orderly and sustainable development of County Monaghan by setting out policies and standards	B1 B2 B3 B4		B1 B2 B3 B4	
for the management of development within the County.	PHH1 S1 W1 W2		PHH1 S1 W1 W2	
	W3 M1 M2 M3 C1		W3 M1 M2 M3 C1	
This chapter includes a variety of Development Management Policies and Objectives under various headings. Please refer	CH1 CH2 L1		CH1 CH2 L1	
to the County Development Plan for detailed Development Management Policies and Objectives.				
Public Realm Policies/Objectives				

Commentary

The Development Management provisions detailed in this chapter contribute towards the preferred selection of alternatives for the Plan and provide more detail to the planning framework for development that is assessed under previous chapters. These provisions are consistent with the approach outlined by the Core Strategy (see Section 8.5.2 above, including Commentary). The evaluation against Strategic Environmental Objectives (SEOs) provided for the these provisions is consistent with that provided for the preferred selection of alternatives identified in Section 7 and with that provided for the planning framework for development that is assessed under previous chapters. The interactions with SEOs reflect the effects detailed on Table 8.3. Potential adverse effects would be mitigated by measures including those that have been integrated into the Plan (see Section 9).

Various Development Management provisions are primarily focused on contributing towards both sustainable development and beneficial effects upon sustainable mobility and the protection/management of all environmental components, including policies and objectives under the following headings: Development Management within Architectural Conservation Areas, Residential Amenity, Ribbon Development, Effluent Treatment, Appropriate Assessment, Construction & Environmental Management Plan and Flooding.

The preparation of a lower-tier plans including Local Area Plans would have to be subject to its own lower-tier environmental assessment processes as relevant.

Section 9 Mitigation Measures

9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- Integration of environmental considerations into zoning provisions of the Plan.

9.2 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval and the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Monaghan County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors including:

- Housing;
- Economic Development;
- Community;
- Heritage;
- Transport and Infrastructure; and
- Environment.

9.3 Integration of individual SEA, AA and SFRA provisions into the text of the Plan

Various provisions have been integrated into the text of the Plan through the Plan-preparation and SEA, SFRA and AA processes. Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

Table 9.1 links key mitigation measure(s) to the likely significant effects of implementing the Plan, if unmitigated. The measures generally benefit multiple environmental components i.e. a measure

providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

9.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of high flood risk. Various provisions have been inserted into the Plan which provide for flood risk management at project level.

Also taken into account were other environmental considerations including sustainable mobility and sensitivities relating to cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

SEA Environmental Report for the Monaghan County Development Plan 2019-2025 Table 9.1 Integration of Environmental Considerations into the Plan

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including	Residual Adverse Non- Significant Effects
All	All	All	Regulatory framework for environmental protection and management HLP14 To cumulatively contribute towards, in combination with other users and bodies, the achievement of the objectives of the regulatory framework for environmental protection and management, including compliance with EU Directives - including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.	All
All	All	All	 Corridor and Route Selection Process Section 7.15 The following Corridor and Route Selection Process will be undertaken for relevant new infrastructure: Stage 1 – Route Corridor Identification, Evaluation and Selection Environmental constraints and opportunities (such as existing linear infrastructure) will assist in the identification of possible route corridor options; Potentially feasible corridors within which infrastructure could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, advised by relevant specialists; and In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors. Stage 2 – Route Identification, Evaluation and Selection Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferred routes will avoid constraints and meet opportunities to the optimum extent, advised by relevant specialists; and In addition, Evaluation and Selection Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferred routes will avoid constraints and meet opportunities to the optimum extent, advised by relevant specialists, taking into account project level information and potential mitigation measures that are readily achievable; In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and In addition to environmental co	All
All	All	All	 Construction and Environmental Management Plan Section 15.30 Significant planning applications will be required to submit a Construction and Environmental Management Plan (CEMP) that shall incorporate relevant mitigation measures indicated in any lower tier Environmental Impact Assessment or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development. The following information and issues should be included: a) Location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse, b) Location of areas for construction site offices and staff facilities, c) Details of site security fencing and hoardings, d) Details of on-site car parking facilities for site workers during the course of construction, site and associated directional signage, f) Measures to obviate queuing of construction traffic on the adjoining road network, g) Measures to prevent the spillage or deposit of clay, rubble or other debris, h) Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works, j) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels, j) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater, k) Disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, j) A water and sediment management plan, providing for means to ensure that surface water runoff is 	All

		SE	A Environmental Report for the Monaghan County Development Plan 2019-2025	
Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including	Residual Adverse Non- Significant Effects
Biodiversity and	Contributes	Arising from both	 controlled such that no silt or other pollutants enter local water courses or drains, m) Details of a water quality monitoring and sampling plan. n) If peat is encountered, a peat storage, handling and reinstatement management plan is required. o) Measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed). p) Appointment of an ecological clerk of works at site investigation, preparation and construction phases. q) Details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity. Policy CEMP1: To require all significant planning applications to submit an appropriate Construction and Environmental Management Plan in accordance with the criteria set out in Section 15.30 of Chapter 15 of the Monaghan County Development Plan 2019-2025. Also see measures under soil, water and material assets below. 	• Loss of an extent of
Flora and Fauna	 contributes convards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental 	 construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport 	 Appropriate Assessment Section 15.29 Policy AAP1: All projects and plans arising from this plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that: The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects): or The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of the Natura 2000 network; or The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project will have a significant adverse effect on the integrity or any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and undertake all compensatory measures necessary to reasons of overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public intere	 habitats and species arising from the replacement of semi- natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation).

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Environmental	Significant	Potentially	A Environmental Report for the Monaghan County Development Plan 2019-2025 Mitigating Measures, including	Residual Adverse Non-
Component	Positive Effect,	Significant		Significant Effects
	likely to occur	Adverse Effects, if unmitigated		
	vectors, including air and water. • Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain	corridors) and displacement of protected species.	 Protection of European Sites HLP4 No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects³⁴). Ecological Corridors GIP6 To contribute towards the protection and enhancement of biodiversity and ecological connectivity, including woodlands, trees, hedgerows, rivers, streams, other landscape features and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive. Green Infrastructure GIP7 To encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following: - Provision of open space amenities - Sustainable management of water - Protection and management of biodiversity - Protection of cultural heritage - Protection of protected landscape sensitivities. Protection of Riparian Zone and Waterbodies and Watercourses WPP16 To protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine and wetland areas as appropriate. Drainage or Reclamation of Wetlands WLP3 To implement the relevant parts of the Planning and Development (Amendment) (No. 2) Regulations 2011 and the European Communities (Amendment to Planning and Development Regulations 2014 which require planning particis to be applied for where the area impacted by works relating to the drainage or reclam	

⁸⁴ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:
a) no alternative solution available,
b) imperative reasons of overriding public interest for the project to proceed; and
c) Adequate compensatory measures in place.
CAAS for Monaghan County Council

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Effects, if	A Environmental Report for the Monaghan County Development Plan 2019-2025 Mitigating Measures, including	Residual Adverse Non- Significant Effects
Population and Human Health	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services. 	 Potential interactions if effects upon environmental vectors such as water and air are not mitigated. 	Also see measures under soil, water and material assets below. Human Health DM2 To assess proposals for development in terms of, inter alia, 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 followed order to eliminate adverse environmental impacts or reduce them to an acceptable operating level. Major Accidents Directive WMP 10 To have regard to the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites. Radon Policy CEMP2 : To 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).	Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility, flood risk management and infrastructural provision.
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services. 	Damage to the hydrogeological and ecological function of the soil resource.	Also see measures under water below. Geological Interest GEP1 To promote awareness of and access to sites of geological interest in consultation with landowners (where appropriate). GEP2 Where a proposed development is likely to impact on the setting or integrity of a CGS listed in the Monaghan County Development Plan 2019-2025 the Geological Survey of Ireland shall be consulted. GEP3 Protect from inappropriate development and maintain the integrity and conservation value of those features in areas of geological interest that are listed in the plan or any sites proposed by the Department of the Environment, Heritage and the Gaeltacht or Geological Survey of Ireland during the lifetime of the plan. GEP4 To contribute towards the appropriate protection and maintenance of the character, integrity and conservation value of features or areas of geological interest. Contamination and Remediation Section 8.29 Monaghan County Council will ensure that adequate soil protection measures are undertaken where appropriate. 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. The EPA's publication 'Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites' (2007) shall be taken into account as relevant by proposals for development within or adjacent to old landfill sites. 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 remediation incorporating international best practice and expertise on innovative ecological restoration techniques. These include 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. Prior to	 Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Effects, if unmitigated	A Environmental Report for the Monaghan County Development Plan 2019-2025 Mitigating Measures, including	Residual Adverse Non- Significant Effects
			 How any contaminated soil or water encountered will be appropriately dealt with. Waste Management Regulations and Closed Landfills WMP8 To continue to fulfil 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. 	_
Water	Contributes towards protection and management of ground and surface waters, including coastal waters downstream, due to facilitating development within established and serviced settlement centres.	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding. 	Also see measures under soil above and material assets below. Water Framework Directive and associated legislation WPP17 To contribute towards the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, groundwater and associated habitats 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 2009 (SI No. 272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same). To also support the application and implementation of a catchment planning and management approach to development. River Basin Management Plan WPP16 To support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan, and associated Programmes of Measures, or any such plans that may supersede same during the lifetime of the plan. Proposals for development should not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated voodlands. Also, to have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 which provides guidance on exemptions to the environmental objectives of the Water Framework Directive. Catchment-sensitive farming practices WPP18 To encourage the use of catchment-sensitive farming practices, in order to meet Water Framework Directive targets and comply with the relevant River Basin Management Plan. Surface Water Drainage and Sustainable Drainage Systems (SuDs) SDP2 To ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as ap	 Increased loadings as a result of development to be in compliance with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events.
		Increase in flood risk	 As integrated through Strategic Flood Risk Assessment: WPP15 To protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine and wetland areas as appropriate. CCP4 To ensure new development is appropriately located, so as not to be exposed to risk of flooding FMP1 To fully implement and support in conjunction with the OPW the provisions of the EU Flood Risk Directive, The Flood Risk Regulations, The Planning System and Flood Risk Management- Guidelines for Planning Authorities and any updated legislation or guidelines issued during this plan period. FMP2 To restrict development in areas susceptible to flooding except where; The proposed development can be justified on strategic grounds. The flood risk can be managed to an acceptable degree and without increasing flood risk beyond the site itself. Appropriate and detailed mitigation measures can be implemented to remove/minimise flood effects. FMP3 Development proposals on land identified as being at risk of flooding shall be accompanied by a site-specific Flood Risk Assessment (FRA) carried out in accordance with the methodology set out in The Planning System and Flood Risk Management – Guidelines for Planning System and Flood Risk Assessment (FRA) carried out in accordance with the methodology set out in The Planning System and Flood Risk Management – Guidelines for Planning Authorities, 2009. Such assessments shall be carried out by competent professionals with hydrological experience and identify the risk and extent of any proposed mitigation 	

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Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including	Residual Adverse Non- Significant Effects
			 measures. FMP4 All applications in areas prone to flooding shall be subject to the justification test set out in the Flood Risk Management Guidelines. Compensatory flood storage provision or the provision of flood defences will not override the need for completion of the justification test. FMP5 To protect the capacity of rivers, streams, riparian corridors, flood plains and wetlands from inappropriate development which will contribute to increased flood risk. Development on or within a floodplain will not be permitted. SDP1 To require best practice in the design, construction and operation of expanding and new developments to ensure minimum effects on the aquatic environment. Sustainable Urban Drainage Systems designed to ensure both water quality protection and flood minimisation should be included in developments for commercial, industrial, residential, intensive agricultural, public and institutional premises with significant roof or hard surface areas and multiple residential developments. For guidance refer to Monaghan County Councils Storm Water Technical Guidance Document 2017. SDP2 To ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate to minimise the effect of a development on flooding and pollution of existing waterways. SDP3 To require that planning applications are accompanied by a comprehensive SUD's assessment that addresses run-off quality, run-off quality and its impact on the existing habitat and water quality. SDP4 To ensure that all storm water discharges shall be restricted onsite attenuation and or other measures to the pre-development levels (green field) in all new developments. All attenuated storage volumes must take in to consideration climate change. Guidance is available from The Greater Dublin Strategic Drainage Study Technical Document, Volume 5. SDP5 To require all run o	
			accompanied by a site specific FRA that corresponds with Chapter 5 of the 2009 Guidelines. Such assessments shall be prepared by suitably qualified experts with hydrological experience and shall quantify the risk and the effects of any necessary mitigation together with the measures needed or proposed to manage residual risks.	
Material Assets	 Allows for use of planned infrastructure including water services, transport and drainage infrastructure. Makes use of existing water 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to 	Also see measures under soil above and material assets below. Irish Water / Water Services Provisions WWP1 To collaborate with, support and co-operate with Irish Water, as relevant and appropriate, to deliver a sustainable water supply in line with the objectives set out in the Core Strategy. WWP2 To liaise with Irish Water to establish source management and protection zones around drinking water supply sources and advance appropriate management and maintenance measures for these sources (both ground and surface water). WWP3 To co-operate with and advise Irish Water in order to identify, prioritise and advance the delivery of water and waste water projects throughout the County during the Development Plan period and to only permit development in instances where there is sufficient capacity in the public water and wastewater infrastructure.	 Residual wastes to be disposed of in line with higher level waste management policies.

			A Environmental Report for the Monaghan County Development Plan 2019-2025	
Environmental	Significant	Potentially	Mitigating Measures, including	Residual Adverse Non-
Component	Positive Effect,	Significant		Significant Effects
	likely to occur	Adverse Effects, if		
		unmitigated		
	services, transport and drainage infrastructure.	 ensure the mitigation of potential conflicts) ⁸⁵. Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the 	 WWP4 To implement in conjunction with Irish Water, EPA and statutory requirements in compliance with the provision of the Urban Wastewater Treatment Regulations and the Wastewater Discharge (Authorisation) Regulations 2007 as amended. WWP5 To implement in conjunction with Irish Water, EPA and statutory requirements in compliance with the provisions of the EU (Drinking Water) Regulations, the Drinking Water Regulations (SI No 122 of 2014). WWP6 To, in conjunction with Irish Water, undertake recommendations made by the EPA arising from any failure to meet drinking water standards and any enlistment on the EPA's Remedial Action List. WWP7 To co-operate with the Federation of Group Water Schemes to improve the quality and capacity of water supply to areas served by group water schemes. 	
		 mitigation of potential conflicts). Increases in waste levels. Interactions between agricultural 	 Construction and Demolition WMP4 To require that all construction projects are carried out in accordance with Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects. Waste Hierarchy WMP7 To support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible and to safeguard the environment by seeking to ensure that residual waste is disposed of appropriately. Waste Management Regulations WMP8 To continue to fulfil 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. Contaminated Material WMP9 To require that treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit) and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste). 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 and be in accordance with Section 8.29. AGP2 Specific Intensive Agriculture /Poultry & Pig Farming The following additional information to Policy AG01 will be required for assessing applications for intensive poultry units or similar specialised agri-developments the Council: 	
		waste and soil, water, biodiversity and	 An Environmental Impact Statement (EIS) and/or Appropriate Assessment depending on the size of the unit. Details of the scale and intensity of existing operations in the vicinity of the site, including the cumulative 	

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Effects, if unmitigated	A Environmental Report for the Monaghan County Development Plan 2019-2025 Mitigating Measures, including	Residual Adverse Non- Significant Effects
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non- motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to 	human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter • Emissions to air including greenhouse gas emissions and other emissions.	 impact of similar type developments within close proximity of the site. Methods for waste management including frequency and location of disposal relative to the proposed unit. Details of air pollution arising from the units and effluent storage, transportation and spreading. Proximity of development to aquifers and water courses. The potential impact of the proposal on the residential amenity of adjoining occupiers must be considered. A unit shall not be developed at a distance of less than 100 metres from a dwelling within the rural area (i.e. outside of a designated settlement) unless the third party has given written consent, witnessed by a solicitor or a peace commissioner. Details of associated activities such as cleaning, ventilation and heating should be provided. A comprehensive landscaping plan, A statement outlining why a particular location on the landholding was deemed more appropriate to alternative options. If the Planning Authority consider a more appropriate location is available on the landholding the application may not receive favourable consideration, Traffic management plans and traffic assessment associated with the proposed development may be required for large proposals. Air Quality AOP1 Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as out in the Air Quality standards regulations 2011 (SI no. 180 of 2011) (or any updated/superseding documents).Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air. Climate Adaptation and Mitigation CCP10 Support and facilitate European and national objectives for climate adaptation Plano, sea detailed in the National Mitigation Plan, National Adaptation Framework and relevant Sectoral Adaptation Plano, sea detailed i	 An extent of trave related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.
Cultural Heritage	 air. Contributes towards protection of 	Potential effects on protected and unknown	Archaeological Heritage BHP2 To contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended).	Potential alteration to the context and setting c

Environmental	Significant	Potentially	A Environmental Report for the Monaghan County Development Plan 2019-2025 Mitigating Measures, including	Residual Adverse Non-
Component	Positive Effect.	Significant		Significant Effects
•	likely to occur	Adverse Effects, if		Ū
	.,	unmitigated		
	cultural	archaeology and	Protection of Archaeological Sites, including Underwater Archaeological Sites PMP6 To contribute, as	architectural heritage
	heritage in	protected	appropriate, towards the protection of archaeological sites and monuments and their settings, archaeological	however these will
	wider region	architecture	objects and underwater archaeological sites that are listed in the Record of Monuments and Places, in the	occur in compliance
	by facilitating	arising from	ownership/guardianship of the State, or that are subject of Preservation Orders or have been registered in the	with legislation.
	development	construction and	Register of Historic Monuments. Contribute, as appropriate, towards the protection and preservation of	 Potential alteration to
	within existing	operation	archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and	the context and
	settlements.	activities.	Places. To contribute, as appropriate, towards the protection and preservation of underwater archaeological sites	setting of
			in riverine or lacustrine locations.	archaeological
			Consultation PMP7 To consult with the National Monuments Service in relation to proposed developments	heritage however this
			adjoining archaeological sites.	will occur in
			Architectural Heritage BHP3 To contribute towards the protection of architectural heritage by complying, as	compliance with
			appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in relation to	legislation.
			architectural heritage and the policy guidance contained in the Architectural Heritage Protection Guidelines 2011	 Potential loss of
Landscape	 Contributes 	Occurrence of	Landscape Designations HLP6 To contribute towards the protection of County and local level landscape	• The Plan as varied
	towards	adverse visual	designations from incompatible developments. Proposals for development that have the potential to significantly	contributes towards
	protection of	impacts and	adversely impact upon these designations shall be accompanied by an assessment of the potential landscape and	the protection of
	wider	conflicts with	visual impacts of the proposed development. This shall demonstrate that landscape impacts have been anticipated	landscape
	landscape and	the appropriate	and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.	designations and the
	landscape	protection of	National Landscape Strategy HLP7 Support, as appropriate, any relevant recommendations contained in the	landscape.
	designations	designations	National Landscape Strategy for Ireland.	Landscapes will
	by facilitating	relating to the		change overtime as a
	development	landscape		result of natural
	within existing			changes in vegetation
	settlements.			cover combined with
				new developments.

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Section 10 Monitoring Measures

10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Plan. Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

10.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions.

Table 10.1 overleaf shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated.

The Monitoring Programme may be updated to deal with specific environmental issues including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

10.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the Council and the relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Internal monitoring of the environmental effects of grants of permission in the Council will provide monitoring of various indicators and targets on a *grant of permission*⁸⁶ basis. Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

10.4 Reporting

the Stand-alone Monitoring Reports on significant environmental effects of implementing the Plan will be prepared both at interim review of the achievement of the Plans objectives and in advance of the beginning of the review of the Plan. This report should address the indicators set out below. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of evaluation report(s), monitoring the publication of these reports and, if necessary, the carrying out of corrective action.

10.5 Thresholds

Thresholds at which corrective action will be considered include:

- The occurrence of flood events;
- Court cases taken by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs regarding impacts upon archaeological heritage including entries to the RMP;
- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan;
- Boil notices on drinking water; and
- Fish kills.

⁸⁶ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. By documenting this determination (e.g. whether a proposed development will impact upon a Protected Structure or whether a proposed development can be adequately served with water services) while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan can be achieved.

Table 10.1 Selected Indicators, Targets and Monitoring Sources

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ⁸⁷	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs' National Monitoring Report for the Birds Directive under Article 12 (every 3 years). Department of Agriculture, Environment and Rural Affairs Northern Ireland Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
	 B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species 	 B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the Plan B3i: No significant impacts on the protection of listed species 	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years). Review of Council Ecological Network Mapping Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation - see Section 10.4) Department of Agriculture, Environment and Rural Affairs Northern Ireland.
	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management	Review of CSO figures for the County (every five years)

⁸⁷ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:
(a) no alternative solution available;

⁽b) imperative reasons of overriding public interest for the plan to proceed; and(c) adequate compensatory measures in place.

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Population and Human Health	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive, Environmental Protection Agency, Department of Health (Northern Ireland) and Northern Ireland Environment Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	 Consultations with EPA and Health Service Executive and Department of Health Northern Ireland (at monitoring evaluation - see Section 10.4).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Water	W1: Classification of Overall Status (comprised of ecological and chemical status) under the Water Framework Directive	W1: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ⁸⁸	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland and Northern Ireland (multi-annual).
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland and Northern Ireland (multi-annual).
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood</i> <i>Risk Management Guidelines for Planning</i> <i>Authorities</i>	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Material Assets	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 ⁸⁹ which present a potential danger to human health as a result of implementing the Plan	 EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual). EPA Remedial Action List (every quarter). Drinking Water Quality Northern Ireland (annual)
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	 EPA National Waste Reports EPA Ireland's Environment Reports
Air and Climatic Factors	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	 CSO Population Data (every c. 5 years).

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⁸⁹ Corresponding guidance from Northern Ireland legislation: Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (as amended) CAAS for Monaghan County Council

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context these entries within the surrounding landscape where relevant- protected from adverse effects resulting from development which is granted permissions under the Plan	CH1: Protect entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context of these entries within the surrounding landscape where relevant – protected from adverse effects resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Department of Communities Northern Ireland (at monitoring evaluation - see Section 10.4).
	CH2: Percentage of entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context from significant adverse effects arising from new development granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Department of Communities Northern Ireland (at monitoring evaluation - see Section 10.4).
Landscape	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

Appendix I Relationship with Legislation and Other Plans and Programmes

This appendix is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Directive/ Protocol/	High Level Aim/ Purpose/ Objective	Lower level objectives, actions etc.	Relevant legislation in	Relevance to the CDP
Strategy/Programme EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects	 Promoting GI in the main EU policy areas; Supporting EU-level GI projects; Improving access to finance for GI projects, and Improving information and promoting innovation 	Ireland not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
UN Kyoto Protocol (2ND Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.	 The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II) EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system 	National Policy Position and final Heads of the Climate Action and Low-Carbon Development Bill	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
EU 2020 climate and energy package	 Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020 Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels Aims to raise the share of EU energy consumption produced from renewable resources to 20% Achieve a 20% improvement in the EU's energy efficiency 	 Four pieces of complimentary legislation: Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps Member States have agreed national targets for non-EU ETS emissions from countries outside the EU Meet the national renewable energy targets of 16% for Ireland by 2020 Preparing a legal framework for technologies in carbon capture and storage 	The Framework for Climate Change Bill European Communities (Renewable Energy) Regulations 2011 (S.I. No. 147/2011)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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Habitats Directive (92/43/EEC)	 Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of Community interest Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. 	 Propose and protect sites of importance to habitats, plant and animal species Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range Carry out comprehensive assessment of habitat types and species present Establish a system of strict protection for the animal species and plant species listed in Annex IV 	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Birds Directive (2009/147/EC)	 Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats Protect, manage and control these species and comply with regulations relating to their exploitation The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution 	 Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas); ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance. 	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
European Union Biodiversity Strategy to 2020	 Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible 	 Outlines six targets and twenty actions to aid European in halting the loss to biodiversity and eco-system services The six targets cover: Full implementation of EU nature legislation to protect biodiversity Maintaining, enhancing and protecting for ecosystems, and green infrastructure Ensuring sustainable agriculture, and forestry Sustainable management of fish stocks Reducing invasive alien species Addressing the global need to contribute towards averting global biodiversity loss 	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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The Clean Air for Europe Directive (2008/50/EC) Fourth Daughter Directive (2004/107/EC)	 The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive) Sets new air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values Allows the possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air 	 Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole Aims to assess the ambient air quality in Member States on the basis of common methods and criteria; Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and Community measures; Ensures that such information on ambient air quality is made available to the public; Aims to maintain air quality where it is good and improving it in other cases; Aims to promote increased cooperation between the Member States in reducing air pollution. 	Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (S.I. No. 58 of 2009)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Noise Directive 2002/49/EC	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	 The Directive requires competent authorities in Member States to: Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels; Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and Inform and consult the public about noise exposure, its effects, and the measures considered to address noise. The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities. 	Environmental Noise Regulations 2006 (S.I. No. 140 of 2006)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Floods Directive (2007/60/EC)	 Establishes a framework for the assessment and management of flood risks Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community 	 Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3 Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above 	European Communities (Assessment and Management of Flood Risks) Regulations (S.I. 122/2010) European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012 (S.I. No. 470/2012)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

		•	Inform the public and allow the public to participate in planning process		
Water Framework Directive (2000/60/EC)	 Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies Promote sustainable water usage The Water Framework Directive repealed the following Directives: The Drinking Water Abstraction Directive Sampling Drinking Water Directive Shellfish Directive Shellfish Directive Groundwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive 	•	Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive Achieve "good status" for all waters Manage water bodies based on identifying and establishing river basins districts Involve the public and streamline legislation Prepare and implement a River Basin Management Plan for each river basin district identified and a Register of Protected Areas Establish a programme of monitoring for surface water status, groundwater status and protected areas Recover costs for water services	European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) (as amended)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Groundwater Directive (2006/118/EC)	 Protect, control and conserve groundwater Prevent the deterioration of the status of all bodies of groundwater Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals. 	•	Meet minimum groundwater standards listed in Annex 1 of Directive Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II	European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9/2010) (as amended)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Drinking Water Directive (98/83/EC)	 Improve and maintain the quality of water intended for human consumption Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean 	•	Set values applicable to water intended for human consumption for the parameters set out in Annex I Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a) Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5 Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause	European Union (Drinking Water) Regulations 2014 (S.I. No. 106 of 2007) (as amended) European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

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		•	Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action Undertake remedial action to restore the quality of the water where necessary to protect human health Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial		
Urban Waste Water Treatment Directive (91/271/EEC)	 This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors The objective of the Directive is to protect the environment from the adverse effects of waste water discharges 	•	Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment Annex II requires the designation of areas sensitive to eutrophication which receive water discharges Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors	European Communities (Urban Waste Water Treatment) Regulations 2001 (S.I. No. 254/2001)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Environmental Liability Directive (2004/35/EC)	 Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage 	•	Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7.	European Communities (Environmental Liability) Regulations, 2008	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

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	Deriving the concernent of the cruiterenents!	 The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive The competent authority shall be entitled to initiate cost recovery proceedings against the operator The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are meter 			
EIA Directive (2011/92/EU as amended by 2014/52/EU)	 Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4 	 All projects listed in Annex I are considered as having significant effects on the environmental and require an EIA For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made The information to be provided by the developer in accordance with paragraph 1 shall include at least: a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects; the data required to identify and assess the main effects which the project is likely to have on the environmental; an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environment; an on-technical summary of the information referred to each of the above. 			

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European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.	 To this end shall be considered to be elements of the archaeological heritage all remains and objects and any other traces of mankind from past epochs: the preservation and study of which help to retrace the history of mankind and its relation with the natural environment for which excavations or discoveries and other methods of research into mankind and the related environment are the main sources of information; which are located in any area within the jurisdiction of the Parties 	Not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	To reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	 The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co-operation between states and regions. 	Not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of Conventions
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	 Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time; A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations. 	 Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights Recognise individual and collective responsibility towards cultural heritage Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society Greater synergy of competencies among all the public, institutional and private actors concerned 	Not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of Conventions
European Landscape Convention	 The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes 	 To Promote protection, management and planning of landscapes To organise European co-operation on landscape issues 	Not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

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National Policy/ Framework / Initiative / Strategy	 Outlines objectives and actions aimed at developing a strong cycle network in Ireland Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed High Level Aim/ Purpose/ Objective 	 Sets a target where 10% of all journeys will be made by bike by 2020 Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative Lower level relevant objectives, actions etc. 	not applicable Relevant legislation	In combination with this Framework the CDP will contribute towards smarter travel and associated positive environmental effects. Relevance to the CDP
Infrastructure and Capital Investment 2012-16: Medium Term Exchequer Framework	 Reviews infrastructure and capital spending over a medium timeframe to ensure investment is made in the best areas Identifies gaps in existing infrastructure that require addressing to aid economic recovery, social cohesion and environmental sustainability 	 The approach identifies four main components of the investment strategy as follows: Economic infrastructure – encompassing transport networks, energy provision and telecommunications capacity Investment in the productive sector and human capital – such as direct supports for enterprise development; science, technology and innovation advancement; supports for tourism, agriculture, fisheries and forestry; and capital investment in education infrastructure Environmental infrastructure – including our waste and water systems and investment for environmental sustainability Critical social investment – such as the health service and social housing programmes 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Building on Recovery; Infrastructure & Capital Investment 2016-2021	• The framework sets out the Government's commitment to an investment plan of some 42 billion euro of which, 27 billion euro was from direct Exchequer investment with additional investment of 15 billion euro from the wider State-Owned Enterprise (SOE) sector, non-commercial State bodies and PPs.	 Enable economic growth through targeted investment in key public infrastructure Improve the delivery of services to communities; and Maximise the benefits of support by providing Exchequer investment throughout the country 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges	 Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	 Outlines a policy for how a sustainable travel and transport system can be achieved Sets out five key goals: To reduce overall travel demand. To maximise the efficiency of the transport network. To reduce reliance on fossil fuels. To reduce transport emissions. 	 Others lower level aims include: reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment ensuring that alternatives to the car 	not applicable	In combination with this Policy the CDP will contribute towards smarter travel and associated positive environmental effects.

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	 To improve accessibility to transport. 	 are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies strengthening institutional arrangements to deliver the targets 			
Ireland's First National Cycle Policy Framework (2009- 2020)	 Outlines objectives and actions aimed at developing a strong cycle network in Ireland Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed 	 Sets a target where 10% of all journeys will be made by bike by 2020 Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative 	not applicable	In combination with this Framework the CDP will contribute towards smarter travel and associated positive environmental effects.	
Scoping Study for a National Cycle Network (NCN)	 Investigated the feasibility of developing a National Cycle Network for recreational routes in rural areas, urban areas and connecting larger urban areas Resulted in a recommended National Cycle Network 	not applicable	not applicable	In combination with this Study the CDP will contribute towards smarter travel and associated positive environmental effects.	
Strategic Framework for Integrated Land use and Transport (SFILT) – Department of Transport, Tourism And Sport	 Presents the findings and conclusions of a steering group which was convened and tasked with overseeing the preparation of an integrated, evidence-based framework that would guide key land transport investment decisions. 	 Key features of the framework policy include the following: Focus on economic growth Principles to frame future investment 	not applicable	In combination with this Study the CDP will contribute towards smarter travel and associated positive environmental effects.	
National Climate Change Strategy 2007 – 2012 (2007)	Outlines measures to be undertaken to meet greenhouse gas emission commitments	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management	
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	 White paper setting out a framework for delivering a sustainable energy future in Ireland Outlines strategic Goals for: Security of Supply Sustainability of Energy Competitiveness of Energy Supply 	 Ensuring that electricity supply consistently meets demand Ensuring the physical security and reliability of gas supplies to Ireland Enhancing the diversity of fuels used for power generation Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks Creating a stable attractive environment for hydrocarbon exploration and production Being prepared for energy supply disruptions 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management	

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National Climate Change Adaptation Framework (DECLG, 2012)	The National Climate Change Adaptation Framework provides a strategic policy focus to ensure adaptation measures are taken across different sectors and levels of government to reduce Ireland's vulnerability to the negative impacts of climate change.	 Actions include those relating to: Research and Knowledge Base Governance Local Plans Stakeholder Consultation 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' 2015 - 2030	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	 2030 will represent a significant milestone, meaning: Reduced GHG emissions from the energy sector by between 80% and 95% Ensuring that secure supplies of competitive and affordable energy remain available to our citizens and businesses. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Renewable Energy Action Plan	A strategic approach for Ireland including measures to meet European targets for 2020 including Ireland's 16% target of gross final consumption to come from renewables by 2020	not applicable	Renewable Energy Directive 2009/28/EC	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Energy Efficiency Action Plan for Ireland 2009 – 2020 (2009)	This is the second National Energy Efficiency Action Plan for Ireland	 The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Sustainable Development – A Strategy for Ireland (1997)	 Provides an analysis and a strategic framework for sustainable development in Ireland Identifies the approaches required to support sustainable development 	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	 The act provides protection and conservation of wild flora and fauna 	 Provides protection for certain species, their habitats and important ecosystems Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection 	not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation

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Actions for Biodiversity 2017-2021 Ireland's National Biodiversity Plan	 Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally 	 Or the Monaghan County Development Plan 2019- To mainstream biodiversity in the decision-making process across all sectors To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity To increase awareness and appreciation of biodiversity and ecosystems services To conserve and restore biodiversity and ecosystem services in the wider countryside To conserve and restore biodiversity and ecosystem services in the management of protected areas and legally protected species To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband throughout Ireland.	 The Plan sets out: A clear statement of Government policy on the delivery of High Speed Broadband Specific targets for the delivery and rollout of high speed broadband and the speeds to be delivered The strategy and interventions that will underpin the successful implementation of these targets; and A series of specific complementary measures to promote implementation of Government policy in this area. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)	 Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process Ensures flood risk is a key consideration in preparing development plans and local area plans and in the assessment of planning applications Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels 	 Avoid inappropriate development in areas at risk of flooding Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off Ensure effective management of residual risks for development permitted in floodplains Avoid unnecessary restriction of national, regional or local economic and social growth Improve the understanding of flood risk among relevant stakeholders Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management. 	 Planning and Development Act 2000 (as amended) S.I. No. 122/2010 EC (Assessment and Management of Flood Risks) Regulations 2010 S.I. No. 470/2012 European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012. 	The Council is obliged to comply with, as relevant and appropriate, the requirements of these Guidelines
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) European Communities (Water Policy) Regulations	 Transpose the Water Framework Directive into legislation Outlines the general duty of public authorities in relation to water Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and 	 Implements River basin districts and characterisation of RBDs and River Basin Management Plans Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs 	Water Framework Directive 2000/60/EC	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation

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of 2003 (SI 350 of 2014) European Communities	 gives EPA and the CER the authority to regulate and supervise their actions Transpose the requirements of the Water 	 Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies Allows the competent authority to recover the cost of damage/destruction of status of water body Outlines environmental objectives and programme of measures and environmental quality standards for priority substances Outlines environmental objectives to be 	Water Framework Directive	The Council is obliged to
Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)	Framework Directive into Irish Legislation	 achieved for surface water bodies Outlines surface water quality standards Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality 	2000/60/EC	comply with, as relevant and appropriate, the requirements of this legislation
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation	 Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality Sets groundwater quality standards Outlines threshold values for the classification and protection of groundwater 	Water Framework Directive 2000/60/EC Groundwater Directive (2006/118/EC) European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9/2010) (as amended)	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
Water Pollution Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division	 The Water Pollution Acts enable local authorities to: prosecute for water pollution offences; attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters; issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution; issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects; prepare water quality management plans for any waters in or adjoining their functional areas 	Water Services Act 2013	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
European Communities (Urban Waste Water Treatment) Regulations 2001 (S.I. No. 254/2001)	 Transpose the Urban Waste Water Treatment Directive into Irish Legislation Aims to protect receiving waters from environmental damage arising from Urban Wastewater 	 Sets out the legislative requirements for urban waste water collection and treatment systems Provides for monitoring programmes of discharges Specifies threshold values and minimum standards for water quality 	Urban Waste Water Treatment Directive (91/271/EEC)	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation

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Water Services Act 2007 Water Services (Amendment) Act 2012 Water Services Act (No. 2) 2013	 Provides the water services infrastructure Outlines the responsibilities involved in delivering and managing water services Identifies the authority in charge of provision of water and waste water supply Irish Water was given the responsibility of the provision of water and wastewater services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland 	 Key strategic objectives include: Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards Ensuring the provision of the remaining infrastructure needed to provide secondary 	not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
		 wastewater treatment, for compliance with the requirements of the EU Urban Wastewater Treatment Directive. Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. Ensuring a fair funding model to deliver water services. Overseeing the establishment of an economic regulation function under the CER. 		
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan 2014-2016	• This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	 Six strategic objectives as follows: Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Wastewater. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in Our Future. 	The Water Services (No. 2) Act (2013)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Grid25 Implementation Programme	Framework for the development of the electricity transmission grid in the short, medium and long terms, to support a long-term sustainable and reliable electricity supply	Seeks to implement the provisions of the 2007 Government White Paper on Energy - "Delivering a Sustainable Energy Future for Ireland" in terms of development of electricity transmission infrastructure	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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Food Harvest 2020	 Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas 	 Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Landscape Strategy 2015	 Aims to implement the European Landscape Convention in Ireland by providing for specific measures to promote the protection, management and planning of the landscape. 	 The objectives of the National Landscape Strategy are to: Recognise landscapes in law Develop a National Landscape Character Assessment; Develop Landscape Policies; Increase Landscape Awareness; Identity Education, Research and Training Needs; and Strengthen Public Participation. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Rural Development Programme	 The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas 	 At a more detailed level, the programme also: Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Forestry Programme 2014-2020	 Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020. 	Measures include the following: Afforestation and Creation of Woodland NeighbourWood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology Forest Genetic Reproductive Material Forest Management Plans	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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National Planning Framework- Ireland 2040 (NPF)	Sets out the national strategic planning context for Ireland. It is a high-level framework for the co- ordination of a range of national, regional and local authority policies, planning and investment both public and private.	 NPF Seeks too: Guide the future development of Ireland Enable people to live closer to where they work, moving away from current unsustainable trends of increased commuting Secure more compact forms of urban development in all types of settlements Regenerate rural Ireland by promoting environmentally sustainable growth patterns; prosperity 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
River Basin Management Plan	 Sets out the status of waters, the environmental objectives to fulfill Water Framework Directive requirements and the programme of measures to achieve those objectives by 2021 	 Aim to protect and enhance all water bodies and meet the environmental objectives outlined in Article 4 of the Water Framework Directive Identify and manages water bodies Establish a programme of measures for monitoring and improving water quality Involve the public through consultations 	Requirement of the Water Framework Directive (2000/60/EC) European Communities (Water Policy) Regulations, 2003 (SI No. 722) (as amended) Guidelines for the Establishment of River Basin District Advisory Councils (RBDAC)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Peatlands Strategy (draft/in preparation)	This Draft Strategy, prepared by the National Parks and Wildlife Service, will, when finalised, establish principles in relation to Irish peatlands in order to guide Government policy. The Draft Strategy aims to provide a framework for which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution.	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies are being undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are CFRAM Plans finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Draft National Bioenergy Plan (DCCAE)	The Draft Bioenergy Plan sets out a vision as follows: Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner	 Three high level goals, of equal importance, based on the concept of sustainable development are identified: To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs To increase awareness of the value, opportunities and societal benefits of 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection

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		 developing bioenergy To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources 		and management
Draft Renewable Electricity Policy and Development Framework (DCCAE)	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála. Methodology: Development of the Policy and Development Framework is to be informed by the carrying out of an SEA, including widespread consultation with stakeholders and public, and with AA under the Habitats Directive.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS)	This Draft Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Draft Framework.	Targets for alternative fuel infrastructure include the following: AFV forecasts Electricity targets Natural gas (CNG, LNG) targets Hydrogen targets Biofuels targets LPG targets Synthetic and paraffinic fuels targets	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten year plan for the agri- food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	 Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including: 85% increase in exports to €19 billion; 70% increase in value added to €13 billion 60% increase in primary production to €10 billion and The creation of 23,000 additional jobs all along the supply chain from producer level to high end value added product development. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Strategy for the Future Development of National and Regional Greenways 2018	The objective of the Strategy is to assist the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users.	The Strategy provides various objectives that relate to the delivery of greenways.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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Regional and Inter- County Plan / Programme / Guidelines	High Level Aim/ Purpose/ Objective	Lower level relevant objectives , actions etc.	Relevant legislation	Relevance to the CDP
Regional Economic and Spatial Strategies, replacing Regional Planning Guidelines [in preparation]	Regional Planning Guidelines (RPGs) provide long-term strategic planning frameworks and will be replaced by Regional Spatial and Economic Strategies (RSESs). The Regional Spatial and Economic Strategies will provide a long-term regional level strategic planning and economic framework in order to support the implementation of the National Planning Framework.	 RPGs gave regional effect to the National Spatial Strategy. RSESs give regional effect to the National Planning Framework. Account is being taken in the drafting of RSESs of the proposed spatial plans (i.e. Development Plans) and economic plans (i.e. Local, Economic, Community Plans) of local authorities to ensure that the RSESs are informed by identified local and regional needs. 	Requirement of the Planning and Development Act (2000), as amended	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Water Quality Management Plans	 Ensure that the quality of waters covered by the plan is maintained Maintain and improve the quantity and quality of water included in the Plan scope 	 Monitoring of water bodies against quality standards Outlines management programmes for water catchments Purpose is to maintain and improve the quantity and quality of groundwater 	Water Pollution Acts 1977 to 1990	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Management Plans for Natura 2000 sites	Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for Special Area of Conservation involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans.	Integrated Management Plans can be practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations and with special regard to local communities.	Habitats Directive	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Connacht-Ulster Waste Region Waste Management Plan	The Waste Plan sets out to manage our waste in a safe and compliant manner, a clear strategy, policies and actions are required. The Waste Management Plan for the Connacht Ulster Region is the framework for the prevention and management of wastes in a safe and sustainable manner.	 The Plan aims to: Reduce the quantity of household waste by 1% per annum over the period of the Plan Prepare for Reuse and Recycling rate of 50% of municipal waste by 2020 Reduce the direct disposal of residual Municipal waste to landfill to 0% in favour of higher value pre-treatment processes and indigenous recovery practices 	The Waste Framework Directive (Directive 2008/98/EC on waste)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Freshwater Pearl Mussel Basin Management Plans	 Identifies the current status of the species and the reason for loss or decline Identifies measure required to improve or restore current status 	 Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland Outlines restoration measures required to ensure favourable conservation status 	Requirement of Water Framework Directive (2000/60/EC) and Habitats Directive (92/43/EEC) European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) European Communities (Birds and Natural Habitats)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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NI Regional Landscape Character Assessment	In recognising the importance of sustaining local identity, the Northern Ireland Environment Agency (NIEA) has commissioned Landscape Character Assessments of Northern Ireland from environmental consultants, which resulted in the identification of distinct character areas within Northern Ireland	 The Northern Ireland Regional Landscape Character Assessment provides a strategic overview of the landscape in Northern Ireland and subdivides the countryside into 26 Regional Landscape Character Areas based upon information on people and place and the combinations of nature, culture and perception which make each part of Northern Ireland unique. 	Regulations 2011 (S.I. No. 477/2011) The Wildlife Act 1976 and the Wildlife (Amendment) Act 2000 The European Landscape Convention	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
NI Regional Seascape Character Assessment	The aim of this study is to provide a strategic understanding of different areas of regional seascape character along the entire Northern Ireland coast, complementing similar assessments undertaken elsewhere in the UK. This will contribute to the aims of the European Landscape Convention through promoting the protection, management and planning of the seascape, and to support the European cooperation in landscape issues.	 Identify and map the different regional seascape character areas Describe the key features and characteristics of each seascape character area Relate the description of each seascape character area to its neighbouring terrestrial landscape character areas (as described in the NI Landscape Character Assessment, 2000) and take account of boundaries identified in relation to neighbouring seascape areas for the British and Irish coastline. 	The European Landscape Convention	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
The UK Marine Policy Statement (UK MPS)	 Promote sustainable economic development Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and our heritage assets Contribution to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues. 	• The Marine Policy Statement (MPS) is the framework for preparing Marine Plans and taking decisions affecting the Marine environment. It will contribute to the achievement of sustainable development in the United Kingdom marine area.	Marine and Coastal Access Act 2009	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
The Marine Plan for Northern Ireland	The Marine Plan for Northern Ireland will inform and guide the regulation, management, use and protection of our marine area.	 DAERA is currently developing marine plans for both the inshore and offshore regions, which will be published as a single document. A Sustainability Appraisal is also being undertaken to assist in the development of the Marine Plan. 	The Marine and Coastal Access Act 2009 and the Marine Act (Northern Ireland) 2013	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

SEA Environmental Report for the Monaghan County Development Plan 2019-2025 County					
Plan / Programme / Guidelines	High Level Aim/ Purpose/ Objective	Lower level relevant objectives, actions etc.	Relevant legislation in Ireland	Relevance to the CDP	
Monaghan County Council Corporate Plan 2015-2019	The corporate Plan is the map for the council term 2015- 2019. It sets out the direction and the actions required of all relevant stakeholders who will be involved directly or indirectly in growing and bringing the County to a better place in a defined period.	 The organisation, managed through strong leadership, good governance and democratic accountability will fulfil its mission in an open, honest and transparent manner. Promote and protect a clean safe environment in a manner which is viable and sustainable. Provide support to the Business Community to stimulate growth, encourage start-up's, maximise job creation and improve competitiveness. Ensure that everyone in our Community has an opportunity to become actively engaged in shaping the future development of the County. Ensure that everyone in our Community has an opportunity to become actively engaged in shaping the future development of the County. Ensure there is an appropriately resourced, skilled and motivated workforce to meet the priorities and objectives of the organisation. Provide appropriate resources combined with agile information systems aligned to the organisation's strategy and requirements. Develop and implement sound financial, management and control systems to enable organisational and operational efficiency. 	The Local Government Reform Act 2014	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management	
County Monaghan Tourism Strategy 2015-2020	Monaghan County Council has developed this tourism strategy, in consultation with the tourism trade, key stakeholders and with the public with a view to identifying tourism opportunities and proposals which may have the potential to be implemented over the 2015 -2020 period, subject to the usual statutory consents and viability assessments.	The key objective throughout the whole process was to reach a consensus on how best County Monaghan might position itself in the coming years so as to maximize the economic benefits to be derived from tourism. In addition to delivering Key Local Authority projects, the tourism Unit will continue to act in a facilitation role, through advising and signposting projects promoters to appropriate sources of professional advice and guidance to potential sources of funding.	Not Applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management	
Monaghan Local Economic and Community Plan 2015- 2021	To deliver the actions set put in both the economic and community elements of this plan, Monaghan County Council and Monaghan LCDP will work closely with local business, community organisations, education facilities, public and private sector agencies and the voluntary	 To develop and promote a positive image of County Monaghan as a place to live, invest and visit in order to maximise and sustain economic activity, entrepreneurial spirit and employment in the county. 	Local Government Reform Act 2014	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the	

CAAS for Monaghan County Council

			onaghan County Development Plan 2019-	2023	
	sector.		To support the development of a highly		objectives of the
			skilled and educated workforce by		regulatory framework for
			supporting individuals and communities to		environmental protection
			participate in a wide range of educational		and management
			and lifelong learning opportunities that is		
			complimentary to economic development		
			in the county.		
		•	To support the development of social and		
			economic infrastructure to enhance and		
			sustain economic and community		
			development in the county.		
		•	To continue to support and strengthen		
			community & voluntary activity and civic		
			participation in the county.		
		•	To promote the health and well-being of		
		-	all people in Monaghan by ensuring equal		
			opportunity to access, participate and		
			engage in the social, economic, cultural,		
			sporting and educational opportunities		
			available in the County. 6. To protect,		
			enhance and maximise the potential of the		
			•		
			natural, cultural and heritage resources of		
Nextle and Incleased Leased			County Monaghan	Discussion of Asta (Niscutta sure	To summed at the back
Northern Ireland Local	The Council has responsibility for preparing its own Local	•	facilitate growth by coordinating public	Planning Act (Northern	To cumulatively
Development Plans	Development Plans (LDPs). The LDP will guide the future		and private investment to encourage	Ireland) 2011	contribute towards - in
including: Armagh city,	use of land in the Council area and inform developers,		development where it can be of most		combination with other
Banbridge and Craigavon	members of the general public, communities,		benefit to our community	Planning (Local Development	users and bodies - the
Borough Council, Fermanagh	government, public bodies, representative organisations	•	allocate sufficient land to meet the needs	Plan) Regulations (Northern	achievement of the
and Omagh District Council,	and other interests of the policy framework that is used		of the borough	Ireland) 2015	objectives of the
Mid Ulster District Council,	to determine development proposals.	•	provide an opportunity for all		regulatory framework for
Newry, Mourne and Down			stakeholders, including the public, to have		environmental protection
District Council	The LDPs will take account of the Council's Community		a say about where and how development		and management
	Plan providing a spatial expression to the community		within the local area should take place		
	plan and thereby linking public and private sector	•	deliver the spatial aspects of the councils'		
	investment through the land use planning system.		community plan		
	investment unough the land use planning system.				

SEA ENVIRONMENTAL REPORT APPENDIX II

NON-TECHNICAL SUMMARY

FOR THE MONAGHAN COUNTY DEVELOPMENT PLAN 2019-2025

for:

Monaghan County Council

County Offices The Glen County Monaghan



by: CAAS Ltd.

1st Floor 24-26 Ormond Quay Upper Dublin 7



March 2019

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Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Monaghan County Development Plan 2019-2025. The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in County Monaghan.

What is SEA?

Strategic Environmental Assessment (SEA) is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic, social and other considerations.

Why is it needed?

The SEA has been carried out in order to comply with the provisions of the SEA Regulations and in order to maintain high standards in environmental management and planning within County Monaghan. The output of the process is an Environmental Report which should be read in conjunction with the County Development Plan.

How does it work?

All of the main environmental issues in County Monaghan were assembled and presented to the team who prepared the Plan. This helped them to devise a Plan that protects whatever is sensitive in the environment. It also helped to identify wherever there are environmental problems in the area and ideally the Plan tries to improve these.

To decide how best to make a Plan that protects the environment as much as possible the planners examined alternative versions of the Plan. This helped to highlight the type of Plans that are least likely to harm the environment.

No significant difficulties have been encountered during the undertaking of the assessment.

What is included in the Environmental Report that accompanies the Plan?

The Environmental Report contains the following information:

- A description of the environment and the key environmental issues;
- A description and assessment of alternatives for the Plan;
- An assessment of the Plan objectives; and,
- Mitigation measures which set out to aid compliance with important environmental protection legislation - e.g. the Water Framework Directive, the Habitats Directive - and which will avoid/reduce the environmental effects of implementing the Plan.

What happens at the end of the process?

On the making of the Plan, a document, referred to as the SEA Statement, is prepared.

The SEA Statement includes information on how environmental considerations were integrated into the Plan and why the preferred alternative was chosen for the Plan in light of the other alternatives.

Section 2 The Plan

2.1 Introduction and Content of the Plan

The Monaghan County Development Plan (CDP) 2019-2025 provides an overall strategy for the proper planning and sustainable development of County Monaghan over the timescale of the Plan. Spatial planning through the development plan policies endeavours to achieve balance between the common good and the interests of those individuals.

The CDP consists of a written statement and plans that indicate the development objectives for County Monaghan.

Volume 1 contains the written statement which is made up of a number of Sections. Section 1 of the County Development Plan 2019-2025 sets out the current trends and identifies the emerging issues to be dealt with in the new Plan. Section 2 of the Plan introduces the Vision for the County and the Core Development Strategy to be put in place to achieve this vision. It develops the Core Development Strategy through the following sections:

- Housing Policy
- Social Infrastructure Strategy
- Economic Development
- Infrastructure
- Heritage Policy
- Development Standards

Volume 2 contains the settlement strategy for the County and contains zoning and settlement Plans.

Accompanying Documents include:

- Strategic Environmental Assessment (SEA) Environmental Report
- Appropriate Assessment (AA)
- Strategic Flood Risk Assessment (SFRA)

Far in advance of both the submission of the Plan to the Elected Members for approval and the placing of the Plan (and associated SEA, AA and SFRA documents) on public display, Monaghan County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors including: Housing, Economic Development, Community, Heritage, Transport and Infrastructure and Environment.

In addition, the undertaking of this SEA process as well as the preparation of an AA and SFRA were part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as summarised in Section 5 of this report.

2.2 Relationship with other relevant Plans and Programmes

The CDP sits within a hierarchy of strategic action such as plans and programmes and is subject to a number of high level environmental protection policies and objectives with which it must comply. As required by the Act, the CDP is consistent, in so far as is practicable, with such national plans, policies

and strategies. The CDP may, in turn, guide lower level strategic actions. Examples of relevant plans and programmes include the following:

Regional Spatial and Economic Strategies

The Regional Spatial and Economic Strategies will provide a long-term regional level strategic planning and economic framework in order to support the implementation of the National Planning Framework.

River Basin Management Plan and Programme of Measures

The River Basin Management Plan sets out the status of waters, the environmental objectives to fulfils Water Framework Directive requirements and the programme of measures to achieve those objectives by 2021.

Catchment Flood Risk Assessment and Management Studies

The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. Flood Risk Management Plans that were finalised in 2018 define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.

Smarter Travel 2009

"Smarter Travel, A Sustainable Transport Future, A New Transport Policy for Ireland 2009 - 2020" is the Government's action plan to free towns and cities from traffic congestion, substantially cut CO2 emissions, encourage car-based commuters to leave their cars at home, and encourage a shift toward walking, cycling and greater public transport usage.

Connacht-Ulster Waste Region Waste Management Plan

The Waste Plan sets out to manage our waste in a safe and compliant manner, a clear strategy, policies and actions are required. The Waste Management Plan for the Connacht Ulster Region is the framework for the prevention and management of wastes in a safe and sustainable manner.

Environmental Protection Objectives

The Plan is subject to a number of high level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section 3.13. An example of an Environmental Protection Objective is the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States.

Section 3 The Environmental Baseline

3.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects (those which have the greatest potential to be affected by implementation of the Plan) of the current state of the environment for various environmental components is summarised in this section.

3.2 Likely Evolution of the Environment in the Absence of the Plan

In the absence of a new Plan it is uncertain how permission for new development would be applied for and considered.

The 2013-2019 Plan has contributed towards environmental protection within County Monaghan. If the 2013-2019 Plan was to expire and not be replaced by a new 2019-2025 Plan, this would result in a deterioration of the County's planning and environmental protection framework. Although higher level environmental protection objectives – such as those of various EU Directives and transposing Irish Regulations – would still apply, the deterioration of this framework would mean that new development would be less coordinated and controlled. Such development could result in an increase in the occurrence of adverse effects on all environmental components, especially those arising cumulatively. Cumulative effects occur as a result of the addition of many small impacts to create one larger, more significant, impact.

Such adverse effects could include:

- Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed specs, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;
- Habitat loss, fragmentation and deterioration, including patch size and edge effects;
- Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species;
- Potential interactions if effects upon environmental vectors such as water and air are not mitigated;
- Damage to the hydrogeological and ecological function of the soil resource;
- Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology;
- Increase in the risk of flooding;
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)¹;
- Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts);
- Increases in waste levels;
- Interactions between agricultural waste and soil, water, biodiversity and human health including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter;
- Emissions to air including greenhouse gas emissions and other emissions;
- Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities; and

¹ Irish Water is responsible for strategic water services.

 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

3.3 Biodiversity and Flora and Fauna

Ecologically rich areas in Monaghan include hedgerows, woodlands, wetlands, rivers and lakes. These habitats support a variety of species and ecosystems that contribute to the unique biodiversity of Monaghan. Many of these areas are coming under pressure as development intensifies the demand for land. It is imperative that measures are put in place to respond to these pressures and that any development will not have a detrimental effect on the natural environment.

Ecological designations include:

- Special Protection Areas²;
- Special Areas of Conservation³;
- Natural Heritage Areas and Proposed Natural Heritage Areas⁴;
- Nature Reserves⁵;
- Freshwater Pearl Mussel catchments⁶
- Certain entries to the Water Framework Directive Register of Protected Areas⁷
- Freshwater Pearl Mussel catchments⁸;
- Wildfowl Sanctuaries (see S.I. 192 of 1979)⁹;
- Tree Preservation Orders (TPOs)¹⁰; and
- RAMSAR sites¹¹.

Relevant ecological designations in Northern Ireland include:

- European Sites (see description above);
- Areas of Special Scientific Interest;
- Nature Reserves; and

 $^{^2}$ SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - by the DECLG due to their conservation value for birds of importance in the European Union.

³ Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) - referred to as the Habitats Directive - by the DEHLG due to their conservation value for habitats and species of importance in the European Union.

⁴ NHAs are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats.

⁵ A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private landowners.

⁶ Freshwater pearl mussel is a globally threatened, long-lived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment.

⁷ In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by wildlife have been listed on Registers of Protected Areas (RPAs). RPAs include those for Protected Habitats or Species, Shellfish, Salmonid, Nutrient Sensitive Areas, Recreational Waters and Drinking Water

⁸ Freshwater pearl mussel is a globally threatened, long-lived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment.

⁹ Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries.

¹⁰ TPOs are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected by a TPO.

¹¹ The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares.

• Ramsar Sites (see description above).

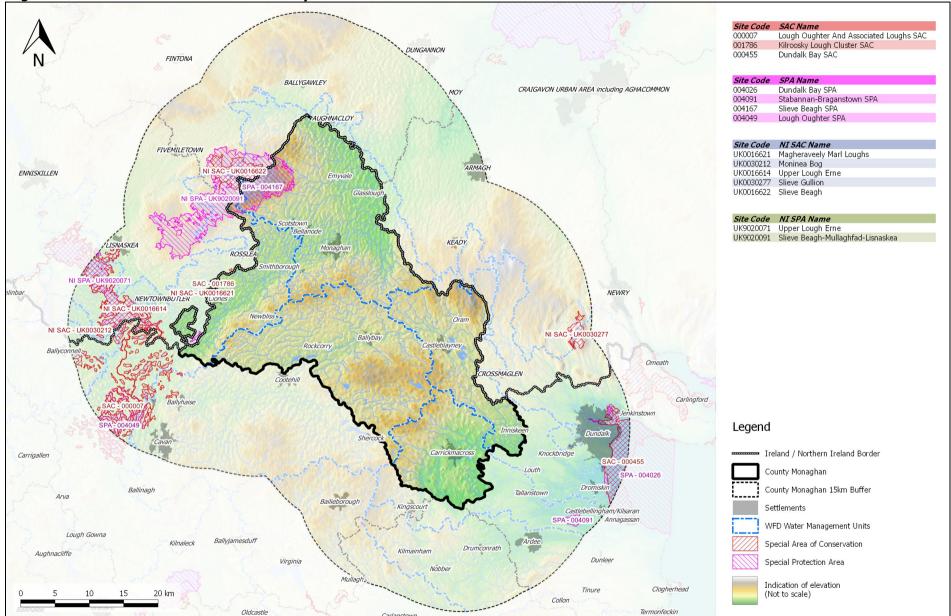
There is one SAC located within County Monaghan, Kilroosky Lough Cluster. There are two SACs located within and at the County Border with Northern Ireland, Magheraveely Marl Loughs and Slieve Beagh.

There is one SPA located within County Monaghan, Slieve Beagh. There are two SPAs located within and at the County Border with Northern Ireland, Upper Lough Erne and Slieve Beagh-Mullaghfad-Lisnaskea.

There is one Natural Heritage Area in Monaghan, Eshbrack Bog.

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as treelines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and the more urban areas of the County.





3.4 Population and Human Health

Population

The Census 2016 results show that Monaghan's population has grown by 891 persons since Census 2011, to 61,386 persons. This represents an increase of 1.5% over the intercensal period, an annual increase of 0.3% against a state average of 0.74%. These figures follow continuous population growth rates in Monaghan since the 1996 Census.

Given the change in economic trends nationally over the last ten years, along with a strong focus on emigration, the population growth within County Monaghan is considered reasonable. However, within the border counties Monaghan's population growth is relatively low to other counties over the last ten years.

Having regard to national economic conditions which impacted on population change over the 2011-2016 period, trends considered over a longer-term period demonstrate more measured and sustainable growth patterns. Taking a longer-term view of County Monaghan over the period 1991 to 2016 (25 years), the population of the County has increased by almost 10,093 persons demonstrating positive growth patterns, notwithstanding cycles of economic and population decline within this period.

In addition, positive population growth over the last ten years is also recorded at a rate of 1% per annum. Census figures indicate that there is a natural population increase and a decline in migration figures, and this is a trend which is likely to continue with anticipated continued economic growth.

Human Health

The impact of implementing the Plan on human health is determined by the impacts that the Plan will have upon environmental vectors. Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings. Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a land-use plan began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population.

Existing Problems

There is historic and predictive evidence of flooding in various locations across the County (see information on Strategic Flood Risk Assessment at Section 3.6) All recommendations made by the SFRA in relation to flood risk management have been integrated into the Plan.

Information on the status of groundwaters and surface waters is provided under section 3.6.

3.5 Soil

County Geological Sites

The Irish Geological Heritage Programme co-ordinated by the Geological Survey of Ireland (GSI) conducted an audit of geological sites in County Monaghan following a study in 2013. The audit did not identify any nationally important sites in the County however 20¹² locally important geological sites have been classified as County Geological Sites (CGS). The identification of such sites was an objective of the Monaghan County Development Plan 2013-2019 which has been realised.

Contaminated Soil

In the absence if mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species.

As is the case with other urban and semi-urban areas across the country, there is potential for contamination at sites within County Monaghan, especially where land uses occurred in the past in the past in the absence of environmental protection legislation.

3.6 Water

Potential Pressures on Water Quality

Human activities, if not properly managed, can cause deterioration in water quality. Pressures exerted by human activities include the following: sewage and other effluents discharged to waters from point sources, e.g. pipes from treatment plants; discharges arising from diffuse or dispersed activities on land; abstractions from waters; and structural alterations to water bodies. Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving "good status". All public bodies are required to coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and improve polluted water bodies to good status. Monaghan falls within two International River Basin Districts for the purpose of implementation of the Water Framework Directive; the North Western International RBD and Neagh Bann International RBD.

WFD Surface Water Status

Water quality status for surface water bodies across the County and surrounding areas is indicated on Figure 3.2. In the Republic of Ireland water status is shown by the individual water body whereas in Northern Ireland it is shown by the catchment area.

¹² These sites comprise Alphuca Cave (Fin Mc Cools Cave), Ballyloughan, Turloughs, Calliagh, Carrickatee Hill, Clontibret Stream, Creevy Cave, Donaghmoyne Rising, Fin Mc Cool's Chair and Killmactrasna Cave, Hope Mine Knocknacran Gypsum Mine, Drumlin, Lemgare, Leeg, Morkeeran Quarry, Moylan Lough, Rockorry-Cootehill ribbed moraine, Scotshouse- Redhills crosscutting ribbed, moraines, Tamlat, Tassan, Tiragarvan and Tullyvaragh.

WFD Groundwater Status

For groundwater bodies, the approach to classification is different to that for surface water. For each body of groundwater, both the chemical status and the quantitative must be determined. Both have to be classed as either *good* or *poor*.

The EPA has classified groundwater status in County Monaghan as generally being of 'good' status. There is an area around a waste facility (Scotch Corner Landfill) to the north east of Ballybay that is classified as being of 'poor' status.

Flooding

Flooding is an environmental phenomenon which can have adverse impacts upon human health, the economy and our society. The existence of flood risk within County Monaghan can be illustrated by historical information on the locations and/or extents of known flooding events. A Strategic Flood Risk Assessment (SFRA) has been prepared alongside the preparation of the Plan in response to requirements contained in *The Planning System and Flood Risk Management Guidelines for Planning Authorities* (DEHLG/OPW, 2009). The SFRA has facilitated the integration of flood risk management considerations into both the land use zoning and written provisions contained within the Plan. Flood risk within County Monaghan arises from various sources including fluvial (from rivers/streams throughout the County), pluvial (from rainwater as it falls and accumulates at locations across the County), groundwater (at a number of locations to the north and south of Carrickmacross) and surface drainage systems.

Existing Problems

Subject to exemptions provided for by Article 4 of the WFD¹³, based on available data on the status of waters within the County, most surface water bodies and one groundwater body (underlying Scotch Corner Landfill) within the County will need improvement in order to comply with the objectives of the WFD. Further details are provided in the subsections above.

The Plan includes provisions that will contribute towards improvements in the status of waters.

There is historic and predictive evidence of flooding in various locations across the County. Recommendations made by the SFRA in relation to flooding risk management have been integrated into the Plan.

¹³ Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the relevant river basin management plan.

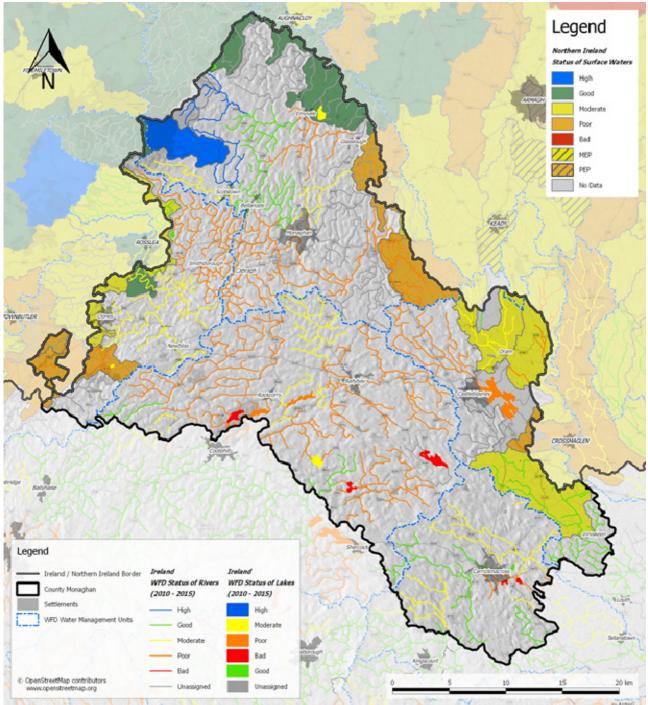


Figure 3.2 WFD Status of Rivers 2010-2015 Source: EPA (2015)

3.7 Air and Climatic Factors

Ambient Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

In order to comply with the directives mentioned above, the EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (SI No. 271 of 2002). All of County Monaghan is located within Zone D.

The Kilkitt air quality monitoring site is located within the Plan area. The current air quality at this site is identified by the EPA as being *good*¹⁴.

Climatic Factors

The key issue involving the assessment of the effects of implementing the plan on climatic factors relates to greenhouse gas emissions arising from transport. Climatic factors also interact with flooding.

The Plan facilitates improvements in sustainable mobility, thereby facilitating reductions in and limiting increases of greenhouse gas emissions. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic.

Ireland's emissions profile has changed considerably since 1990, with the contribution from transport more than doubling and the share from agriculture reducing since 1998. Travel is a source of:

- 1. Noise;
- 2. Air emissions; and
- 3. Energy use (42.2% of Total Final Energy Consumption in Ireland in 2015 was taken up by transport, the largest take up of any sector)¹⁵.

Over the period 1990 to 2015, the biggest shift in the transport market has been from petrol to diesel. While consumption of both fuels increased, consumption of diesel increased by 305% compared with just a 14% increase for petrol. Diesel's overall market share grew from 33% in 1990 to 57% in 2015.

Transport energy use peaked in 2007 and fell each year thereafter until 2013. As the economy started to expand again transport energy use grew in 2013, 2014 and 2015, by 4.2%, 4.0% and 5.9% respectively, to 4,789 ktoe. Transport energy in 2015 was 16% below the peak in 2007, or back to 2004 levels.

The EPA 2017 publication *Ireland's Greenhouse Gas Emission Projections 2016-2035*, identifies that:

- For 2016, total national greenhouse gas emissions are estimated to be 61.19 million tonnes carbon dioxide equivalent (Mt CO₂eq), 3.5% higher than emissions in 2015 and similar to 2009 levels.
- In the last 2 years, national total emissions have increased by 7.3%. In the same period, emissions in the ETS¹⁶ sector have increased by 11.2% and in the non-ETS sector by 5.8%.

^{14 08/12/17 (}http://www.epa.ie/air/quality/)

¹⁵ Sustainable Energy Ireland (2016) *Energy in Ireland 1990 – 2015*

¹⁶ The EU emissions trading system (EU ETS) was launched in 2005 as the world's first international company-level 'cap-and trade' system for reducing emissions of greenhouse gases cost-effectively. The cap makes sure that CO2 becomes a product and, thus, CO2 is valued at a price, which is determined by the supply and demand at the (trading) market.

- Agriculture emissions increased by 2.7% in 2016 (driven by higher dairy cow numbers and increases in milk production)
- Greenhouse gas emissions from the Transport sector increased by 3.7% in 2016. This is the fourth successive year of increases in transport emissions.
- Agriculture and Transport accounted for 73.3% of total non-ETS emissions in 2016.
- Emissions in the Energy Industries sector show an increase of 6.1% which is attributable to an increase in natural gas use for electricity generation by 27.7% and reductions of 6.5% and 15.6% respectively for electricity generated from wind and hydro renewables. This is reflected in a 3.8% increase in the emissions intensity of power generation in 2016 compared with 2015. Renewables now account for 25.6% of electricity generated in 2016 (down from 27.3% in 2015). Ireland exported 2.4% of electricity generated in 2016.
- Emissions from the Manufacturing Combustion¹⁷ sector decreased by 0.4% in 2016.
- The Industrial Processes sector emissions increased by 7.1%, mainly from increased cement production. Cement process emissions increased by 8.6% in 2016.
- Greenhouse gas emissions from the Residential sector remained almost unchanged with a small increase of 0.1%.
- Emissions from the Waste sector decreased by 1.2% in 2016.

In 2015, Northern Ireland's greenhouse gas emissions were estimated to be 20.7 million tonnes of carbon dioxide equivalent. This was an increase of 0.6% compared to 2014. The longer-term trend shows a decrease of 17% compared to the base year of 1990. The largest sectors in terms of emissions in 2015 were agriculture (29%), transport (21%) and energy supply (19%). Most sectors showed a decreasing trend since the base year. The largest decreases, in terms of tonnes of carbon dioxide equivalent, were in the energy supply, residential and waste sectors. They were driven by improvements in energy efficiency, fuel switching from coal to natural gas, which became available in the late 1990s, and the introduction of methane capture and oxidation systems in landfill management. Northern Ireland accounted for 4.2% of UK greenhouse gas emissions in 2015. Northern Ireland's latest greenhouse gas projection estimates that emissions in 2030 will total 17.3 million tonnes of carbon dioxide equivalent. This would mean a 31.2% decrease in emissions between 1990 and 2030.

Maximising sustainable mobility will help Ireland meet its emission target for greenhouse gases under the 2020 EU Effort Sharing target which commits Ireland to reducing emissions from those sectors that are not covered by the Emissions Trading Scheme (e.g. transport, agriculture, residential) to 20% below 2005 levels. Subsequently, by 2030, Ireland is required to reduce its carbon emissions by up to 30% compared to 2005 levels.

Land-use planning contributes to the number and the extent of which journeys occur. By addressing journey time through land use planning and providing more sustainable modes and levels of mobility (as is provided for by the Plan), noise and other emissions to air and energy use can be minimised. Furthermore, by concentrating populations, greenfield development - and its associated impacts - can be minimised and the cost of service provision can be reduced.

Provisions in relation to climate change such as a commitment to prepare a Climate Change Adaptation Strategy have been integrated into the Plan.

Provisions in relation to green infrastructure have also been integrated into the Plan. Green infrastructure has the potential to achieve objectives and synergies with regard to the following:

- Provision of open space amenities;
- Sustainable management of water;
- Protection and management of biodiversity;
- Protection of cultural heritage; and
- Protection of protected landscape sensitivities.

¹⁷ Manufacturing Combustion; includes combustion of fuels in Industry and Construction, both in ETS and non-ETS

3.8 Material Assets

Introduction

Since January 2014, Irish Water is the State body responsible for the delivery, integration and implementation of strategic water and waste water projects and infrastructural improvements. Monaghan County Council no longer has a direct role in this area, however the Council works with Irish Water to help to ensure that the land use plans and water services investment plans align.

Waste Water

Monaghan County Council operates 26 waste water treatment plants in the County. These vary in size from Monaghan Town Waste Water Treatment Works (WWTW) which has a design capacity of 37,400 population equivalent¹⁸ to plants such as Drum WWTW which has a design population equivalent of 150. Annual Environmental Reports (published in 2017) on identified issues, associated mitigation and the status of implementation at 14¹⁹ of plants are available and detailed in the SEA Environmental Report. Issues that are being addressed include orthophosphate levels from Ballybay and Environs WWTW, orthophosphate levels from Clones and Environs, Phosphorus and Ammonia levels from Castleblayney WWTW, absence of a standby pump from Carrickmacross and ruptured diffusers in the aeration tank in the Monaghan WWTW. This information is updated on an ongoing basis and future assessments will take into account future iterations of these reports.

Drinking Water

Irish Water being the Water Services body for the state and County Monaghan is responsible for providing and maintaining adequate public water supply infrastructure. Compliance with the drinking water requirements is determined by comparing the results of analyses submitted by water suppliers to the standard for 48 parameters specified in the European Communities (Drinking Water) Regulations (No. 2), 2007. To ensure that these standards are met, each water supply must be monitored on a regular basis.

The most recent drinking water report from the EPA 'Drinking Water Report 2017' (EPA, 2017) identifies that:

- There are 10 public water supplies in County Monaghan serving a population of 28,526;
- Microbiological parameter compliance for the year was 100%;
- Chemical parameter compliance for the year was 98.2%;
- No boil notices were issued in 2016; and
- No water restrictions occurred.

The EPA publishes their results in annual reports which are supported by Remedial Action Lists (RALs). The RAL identifies water supplies which are not in compliance with the Regulations mentioned above. No water supplies from County Monaghan are listed on the most recent EPA Remedial Action List (Q4 of 2018).

Waste

The Connacht Ulster Waste Management Plan 2015-2021 provides the framework for solid waste management in the region and sets out a range of policies and actions to meet specified mandatory and performance based targets. The Plan seeks to assist and support resource efficiency and waste prevention initiatives. A key Plan target includes a 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan.

¹⁸ Population equivalent is defined in the Regulations as 'a measurement of organic biodegradable load and a population equivalent of 1 (1 p.e.) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60g of oxygen per day'.

¹⁹ Scotstown, Smithborough, Knockaconny, Newbliss, Rockcorry, Ballinode, Inniskeen, Glaslough, Emyvale, Ballybay and Environs, Clones and Environs, Castleblayney, Carrickmacross and Monaghan.

Agriculture

County Monaghan is noted for its intensive agricultural activities and it benefits significantly from its successful poultry and mushroom industries. However, the intensive nature of these sectors also presents challenges for disease minimisation and environmental protection.

Existing Problems

There are a number of challenges with respect to the provision of infrastructure as referred to above.

The provisions of the new Plan will contribute towards protection of the environment with regard to impacts arising from material assets.

3.9 Cultural Heritage

Archaeological Heritage

Monaghan County's rich archaeological heritage includes a collection of ring forts, cairns, crannogs, burial grounds, headstones as well as industrial archaeology including mills, the dismantled Great Northern Railway and the Ulster Canal. Heritage features extending beyond the County border include:

- Black Pigs Dyke, a collection of a dozen individual linear earthworks, extends across the north midlands and south Ulster;
- The Ulster Canal extends from the River Bann/Lough Neagh in Northern Ireland to Lough Erne in the Republic of Ireland, passing through Monaghan along the way; and
- The Great Northern Railway extends from Belfast to various locations within the County including Glaslough, Monaghan and Clones.

The Record of Monuments and Places (RMP) was established under Section 12 of the National Monuments (Amendment) Act 1994 and structures, features, objects or sites listed in this Record are known as Recorded Monuments.

There are approximately 1383 known Recorded Monuments in the County at present. In addition, there are 7 National Monuments in state control.

Archaeological heritage designations in areas adjacent to the County in Northern Ireland include entries to the Northern Ireland Sites and Monuments Record and Areas of Significant Archaeological Interest and Archaeological Potential.

Figure 3.3 shows the spatial distribution of entries to the RMP in County Monaghan. These monuments are found throughout the County with clusters occurring in the County's towns and lower concentrations occurring in rural areas.

Architectural Heritage

County Monaghan has 712 Protected Structures on record. Architectural heritage designations in areas adjacent to the County in Northern Ireland include Listed Buildings and Historical Parks and Gardens. Figure 3.3 shows the spatial distribution of architectural heritage designations within and adjacent to County Monaghan.

Part IV of the Planning & Development Act requires every development plan to include a record of protected structures (RPS). A 'protected structure' is a structure or a specific feature of the structure as may be specified that a Planning Authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

To date in County Monaghan there has been 76 additions to the RPS from the NIAH. These include post boxes, stone bridges, water pumps, religious buildings, industrial buildings/structures and houses.

Figure 3.5 maps the location of entries to the Record of Protected Structures within County Monaghan. Also mapped on Figure 3.5 are entries to the National Inventory of Architectural Heritage (NIAH) (these provide the basis for the recommendations of the Minister for Arts, Heritage and the Gaeltacht for the inclusion of particular structures into the RPS). Concentrations of protected architectural structures are found within existing settlements.

Existing Problems

The context of archaeological and architectural heritage has changed over time within County Monaghan however no existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

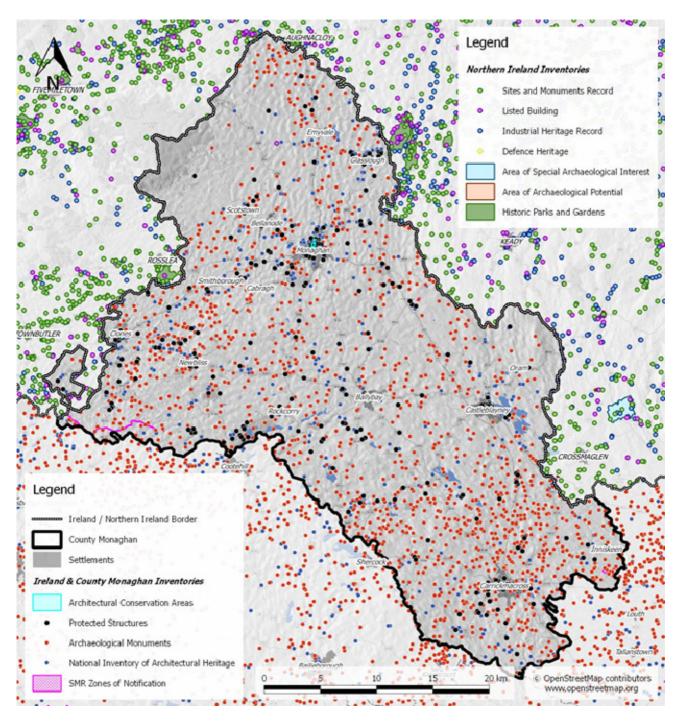


Figure 3.3 Archaeological and Architectural Heritage Source: Monaghan County Council (Unknown)

3.10 Landscape

The European Landscape Convention was ratified in Ireland in 2002, this required EU Member States to adopt national measures to promote landscape, planning, protection and management

In recognition of this Monaghan commissioned the preparation of a landscape character assessment of the County in 2008. This study was carried out in accordance with the Department of the Environment, Community and Local Government Guidelines. The purpose of landscape character assessment is to provide the foundation for policy formulation and decision making for landscape management. The landscape character assessment identified nine landscape character areas²⁰ in County Monaghan.

The following three Northern Ireland Regional Character Areas share their border with the County Monaghan/Northern Ireland border:

- Clogher Valley and Slieve Beagh Regional Character Area, located to the immediate north west of County Monaghan
- Southern Drumlins and Orchards, located to the immediate north east of County Monaghan
- Slieve Gullion and South Armagh Hills, located to the immediate east of County Monaghan.

These areas are mapped on Figure 3.6.

County Monaghan has two principle areas of outstanding landscape quality which require protection from insensitive and inappropriate development. These areas are termed Areas of Primary Amenity and comprise Lough Muckno and Environs and Sliabh Beagh and Bragan Mountain.

In addition to the areas of primary amenity, there are a number of other scenic and amenity areas²¹ that require protection from inappropriate and insensitive development.

²⁰ Sliabh Beagh Uplands; Blackwater Valley & Drumlin Farmland; Smithborough Hills; Clones River Valley & Farmed Uplands; Monaghan Drumlin Uplands, Mullyash Uplands; Ballybay/Castleblaney Lakeland's; Drumlin and Upland Farmland of South Monaghan; Carrickmacross Drumlin; and Lowland Farmland.

²¹ Emy Lough and Environs (SA1); Blackwater River Valley (SA2); Mountain Water River Valley (SA3); Mullyash Mountain (SA3);Ulster Canal and Environs (SA4); Rossmore Park and Environs (SA5); Castleshane Woods and Environs (SA6); Billy Fox Memorial Park and Environs (SA7); Annaghmackerrig Lake, Woodland and Environs (SA8); Dartrey Demense and Environs (SA9); Dromore River and Lake Systems (SA10); Lough Major and Environs (SA11); Hollywood Lake (SA12); Lisanisk Lake (SA13); Lough Naglack (SA14); and Rahans Lake (SA15).

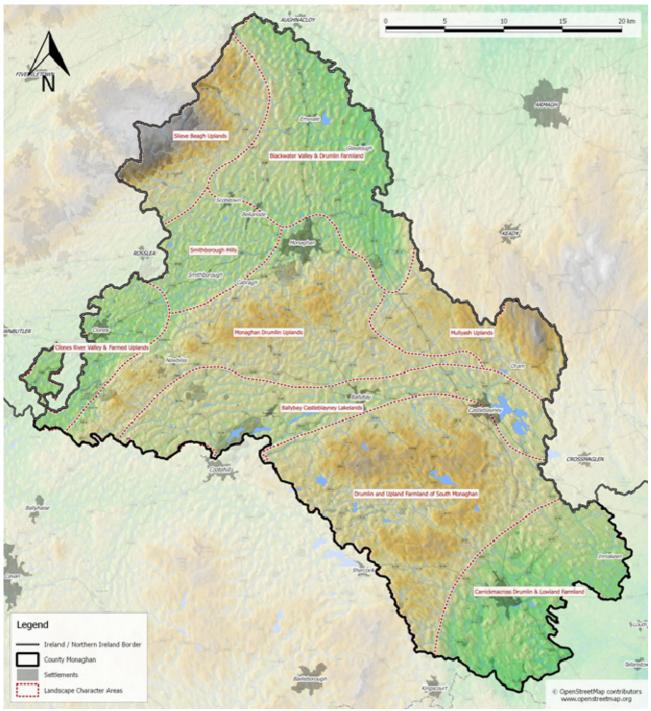


Figure 3.4 Landscape Character Areas Source: Monaghan County Council (2017)

3.11 Overlay of Environmental Sensitivity Mapping

In order to identify where most sensitivities within the County occur, a number of the environmental sensitivities described above were weighted and mapped overlapping each other.

Figure 3.5 provides an Overlay of Environmental Sensitivities in the County. Environmental sensitivities are indicated by colours which range from extreme sensitivity (red/pink colour gradients) to high sensitivity (pink/peach colour gradients) to moderate sensitivity (yellow colour gradients) to low sensitivity (green colour gradients). Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration.

The occurrence of environmental sensitivities does not preclude development; rather it flags at a strategic level that the mitigation measures - which have already been integrated into the Plan - will need to be complied with in order to ensure that the implementation of the Plan contributes towards environmental protection.

Most of the Plan area is identified as being of low to moderate sensitivity. Greater areas of moderate sensitivity are found in the southern half of the County, owing much to elevated levels of groundwater vulnerability.

Rivers and lakes identified on the map as areas of high or extreme sensitivity include the River Proules Upper (through Carrickmacross), the River Proules Lower and Monalty Lough (downstream of Carrickmacross), the River Blackwater (downstream of Monaghan Town) and Lough Muckno (downstream of Castleblaney).

The largest area of extreme and high sensitivity is located in the north west of the County, close to Slieve Beagh and at Eshbrack Bog, along the border with Northern Ireland.

A weighting system applied through Geographical Information System (GIS) software was used in order to calculate the vulnerability of all areas in the County. A slight differentiation was made in certain environmental layers including those discussed under the various environmental components above.

The scale of sensitivity for each area of the County corresponds to the sensitivity factors: 5 points corresponds to one sensitivity factor; 10 points corresponds to two sensitivity factors; 20 points corresponds to four sensitivity factors and so on. The scores for each area are added together in order to determine overall vulnerability as is shown on Table 3.1 below

Score	Vulnerability Class		
5-15	Low		
20-25	Moderate		
30-45	High		
>50	Extreme		

Table 3.1 Overall Vulnerability Classes

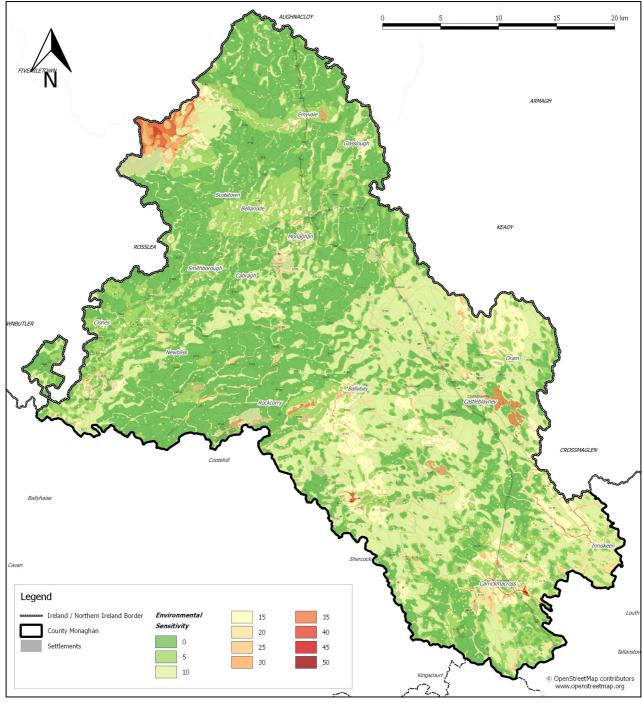


Figure 3.5 Overlay Mapping of Environmental Sensitivities Source: CAAS (2017)

3.12 Appropriate Assessment and Strategic Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) have both been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DECLG, 2009).

The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network of European Sites²².

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes. The preparation of the Plan, SEA, AA and SFRA has taken place concurrently and the findings of the AA and SFRA have informed both the Plan and the SEA.

3.13 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures against which the environmental effects of the Plan can be tested. If complied with in full, SEOs would result in an environmentally neutral impact from implementation of the Plan. The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which potential adverse impacts may occur. SEOs are distinct from the objectives of the Plan and are developed from international and national policies which generally govern environmental protection objectives. SEOs used in the assessment are as follows:

- B1: To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species
- B2: To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
- B3: To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest and to ensure the appropriate protection of listed species
- B4: To sustain existing sustainable rural management practices and the communities who support them to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
- PHH1: To protect populations and human health from exposure to incompatible landuses
- S1: To avoid damage to the hydrogeological and ecological function of the soil resource
- W1: To maintain and improve, where possible, the quality and status of surface waters
- W2P: To prevent pollution and contamination of ground water
- W3: To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009)
- M1: To serve new development with adequate and appropriate waste water treatment
- M2: To serve new development with adequate drinking water that is both wholesome and clean
- M3: To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
- C1: To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
- CH1: To protect archaeological heritage including entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record (NISMR) and/or their context
- CH2: To protect architectural heritage including entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context
- L1: To minimise significant adverse visual impacts within and adjacent to the County, especially with regard to landscape and amenity designations included in Land Use Plans

²² Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

⁽a) no alternative solution available;

⁽b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and

⁽c) adequate compensatory measures in place.

Section 4 Summary of Description and Evaluation of Alternatives and the Plan

4.1 Summary of Description of Alternative Scenarios

One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative scenarios for accommodating future growth in County Monaghan. Three tiers of alternatives are examined as follows:

Tier 1: Alternatives for Allocation of Population

The following alternatives for an urban to rural population split were considered by the Council:

- A. Continue Existing 37% Urban, 63% Rural
- B. Increase Rural 33% Urban, 67% Rural
- C. Increase Urban 41% Urban, 59% Rural

Tier 2: Consideration of Policy for Rural Areas under Strong Urban Influence

These two alternatives both provide for urban and rural growth in the County, however they have different approaches to managing development in areas surrounding urban settlements:

- **A.** One includes a "Rural Areas under Strong Urban Influence" policy that restricts development in areas surrounding urban settlements; and
- **B.** The other does not include a "Rural Areas under Strong Urban Influence" policy that restricts development in these areas.

Tier 3: Alternatives for Larger Towns

Three alternatives for each of the five settlements (Ballybay, Carrickmacross, Castleblaney, Clones and Monaghan) that are provided with land use zoning by the County Plan were considered as follows:

- A. Even Development
 - Required population split achieved;
 - The infrastructure required to be in place to achieve the growth targets is already in place;
 - New development within the lifetime of the plan generally to take place on expansion lands as indicated on maps, unless a comprehensive justification is provided for alternative residential lands;
 - Community development facilities to be developed in tandem with the targeted growth of settlements;
 - Village Centre developments would be developed in a planned and coordinated manner;

- Sufficient zoning of undeveloped lands is provided for in order to cater for projected growth of settlements.
- Open Space and Recreational Lands would be preserved.
- **B.** Sporadic Development
 - Required population split achieved;
 - Additional infrastructure would be required to accommodate sporadic development, more than would be required for Scenario 1 'Even Development';
 - New development within the lifetime of the plan generally to take place on expansion lands as indicated on maps, unless a comprehensive justification is provided for alternative residential lands;
 - Village centre development would be sporadic and uncoordinated around the village centre zonings;
 - More than sufficient zoning of undeveloped lands is provided for in order to cater for projected growth of settlements. This zoning is spread across more areas than is the case under "Alternative A Even Development".
- C. Haphazard Development
 - Required population split achieved;
 - Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'Even Development' or Alternative 2 'Sporadic Development', development would have to be serviced by private wastewater treatment systems which would have to be properly maintained;
 - Development would occur on a piecemeal and haphazard basis within settlements;
 - Ribbon and backland development would be a dominant feature within settlements;
 - Village centre development would be permitted on a number of different zonings and not concentrated on the village centre;
 - No zoning provided for with a laissez faire attitude in relation to development with each application considered on its own merits.

4.2 Summary of Evaluation of Alternative Scenarios

Significant Positive Effects common to all Alternatives

By providing for development within existing development boundaries and facilitating the use of existing utilities and brownfield sites, all alternatives would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in wider rural areas that are further from established settlements and less well serviced. This, in the context of normal proper planning and sustainable development provisions, would be likely to result in significant positive environmental effects on environmental components as indicated on Table 4.1.

Environmental Component	Significant Positive Effect, likely to occur
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water.
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services.
Water	 Contributes towards protection and management of ground and surface waters, including coastal waters downstream, due to facilitating development within established and serviced settlement centres.
Material Assets	 Allows for use of planned infrastructure including water services, transport and drainage infrastructure. Makes use of existing water services, transport and drainage infrastructure.
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air.
Cultural Heritage	 Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements.
Landscape	 Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements.

Although significant positive environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives provided in the subsections below.

Potentially Significant Adverse Effects Common to all Alternatives

All of the alternatives provide for development. Such development would have the potential to conflict with environmental components – to different degrees. Potentially significant adverse environmental effects arising from this conflict are common to all alternatives and are described on Table 4.2. For implementation of the Plan, these effects will be mitigated by provisions integrated into the Plan relating to environmental protection and management (please refer to Section 5).

Although potentially significant adverse environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives provided in the subsections below.

Table 4.2 Potentially Significant Adverse Environmental Effects, if unmitigated, common to all alternatives

Environmental Component	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	 Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.
Population and Human Health	 Potential interactions if effects upon environmental vectors such as water and air are not mitigated.
Soil	 Damage to the hydrogeological and ecological function of the soil resource.
Water	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding.
Material Assets	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)²³.
 Failure to comply with drinking water regulations and serve new develop adequate drinking water that is both wholesome and clean (water infrastructure and capacity is needed to ensure the mitigation of conflicts). Increases in waste levels. Interactions between agricultural waste and soil, water, biodiversity ar health – including as a result of emissions of ammonia from agricultural (e.g. manure handling, storage and spreading) and the production of service of s	
Air and Climatic • Emissions to air including greenhouse gas emissions and other emissions Factors • Emissions to air including greenhouse gas emissions and other emissions	
Cultural Heritage	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape

Tier 1: Alternatives for Allocation of Population

The following alternatives for an urban to rural population split were considered by the Council as follows:

- A. Continue Existing
 - 37% Urban, 63% Rural
- **B.** Increase Rural 33% Urban, 67% Rural
- **C. Increase Urban** 41% Urban, 59% Rural

All of these alternatives would help to sustain existing sustainable rural management practices - and the communities who support them – in order to ensure the continuation of long established managed landscapes and the flora and fauna that they contain. Increasing the urban population in the County ("C. Increase Urban") would improve the status of the environment the most, with the least amount of potential conflicts. Increasing the rural population in the County ("B. Increase Rural") would improve the status of the environment the least, with the most amount of potential conflicts. Increasing the urban population in the County ("A. Continue Existing") would improve the status of the environment to a moderate degree, with a moderate amount of potential conflicts.

²³ Irish Water is responsible for strategic water services.

Tier 2: Consideration of Policy for Rural Areas under Strong Urban Influence

These two alternatives both provide for urban and rural growth in the County, however they have different approaches to managing development in areas surrounding urban settlements:

A. One includes a "Rural Areas under Strong Urban Influence" policy that restricts development in areas surrounding urban settlements.

Restricting development in rural areas that are under strong urban influence would positively impact upon the protection and management of the environment and sustainable development. The restrictions would help to both reduce levels of greenfield development in areas immediately surrounding existing centres and encourage brownfield development within existing centres.

Rural development would be directed towards appropriate rural areas and urban development would be directed towards established settlements. This alternative would prevent low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

B. The other does not include a "Rural Areas under Strong Urban Influence" policy that restricts development in these areas.

Not restricting development in rural areas that are under strong urban influence would adversely impact upon the protection and management of the environment and sustainable development. The absence of restrictions would result in increased levels of greenfield development in areas immediately surrounding existing centres and less demand for brownfield development within existing centres.

Urban generated development would occur within rural areas outside of established settlements. This alternative would result in low density urban sprawl and associated adverse effects upon sustainable mobility and environmental components.

Both alternatives would help to sustain existing sustainable rural management practices - and the communities who support them – in order to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Tier 3: Alternatives for Larger Towns

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new development over a relatively small number of sites that are already or most easily served by infrastructure and could serve demand for new development

Alternative A 'Even Development' would result in the greatest degree of significant positive effects (see Table 4.1) and least degree of potential conflicts (see Table 4.2). Development would be most likely to occur within or closest to existing settlement centres on serviced sites.

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new development over a greater number of sites that could serve demand for new development

Alternative B 'Sporadic Development' would result in a relatively moderate degree of significant positive effects (see Table 4.1) and a relatively moderate degree of potential conflicts (see Table 4.2). In comparison to Alternative A, development would be spread out over a greater number of sites, some not currently serviced and some further from settlement centres. Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative A 'Even Development'.

By:

- Not identifying opportunity sites; and
- Following a 'laissez faire' approach in relation to development, with each application considered on its own merits and no land use zoning would be provided for

Alternative C 'Haphazard Development' would result in the least degree of significant positive effects (see Table 4.1) and greatest degree of potential conflicts (see Table 4.2). Development would be spread out over the entire area associated with each settlement with ribbon development a dominant feature within the settlements. Although existina Plan provisions _ includina those relating environmental to protection/management and sustainable development - would have to be complied with, the potential for cumulative adverse effects would be significantly higher with this alternative.

All of the alternatives are consistent with approach provided by the existing Plan, to sustain existing sustainable rural management practices - and the communities who support them to ensure the continuation of long established managed landscapes and the flora and fauna that they contain.

Selected Alternatives

Selected alternatives for the Plan from each of the three tiers of alternatives that emerged from the planning/SEA process are indicated on Table 4.3 below.

These alternatives have been selected and developed by the Planning Team, placed on public display and adopted by the Council having regard to both:

- 1. The environmental effects which were identified by the SEA and are detailed above; and
- 2. Planning including social and economic effects that also were considered by the Council.

Tier	Alternatives Considered	Selected Alternative
1. Alternatives for	A. Continue Existing	C. Increase Urban
Allocation of Population	B. Increase Rural	
	C. Increase Urban	
2. Consideration of Policy	A. Policy for Rural Areas under	A. Policy for Rural Areas
for Rural Areas under	Strong Urban Influence	under Strong Urban
Strong Urban Influence	B. No Policy for Rural Areas	Influence
	under Strong Urban Influence	
3. Alternatives for Larger	A. 'Even Development'	A. 'Even Development'
Towns	B. 'Sporadic Development'	
	C. 'Haphazard Development'	

Table 4.3 Selected Alternatives for the Plan

4.3 Overall Evaluation for the Plan (including Transboundary)

Monaghan County Council have integrated all recommendations arising from the SEA, AA and SFRA processes into the Plan (see Section 5). Table 4.4 provides a detailed overall evaluation of the environmental effects arising from the Plan. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation through both provisions integrated into the Plan – see Section 5.

The significant environmental effects likely to arise from implementation of the Plan encompass all incombination/cumulative effects arising from implementation of the Plan. Environmental impacts that occur will be determined by the nature and extent of multiple or individual projects and site specific environmental factors.

The scope of the assessment (including description of baseline, the relationship to other plans and programmes and the evaluation of effects) has considered the environment of both Ireland and Northern Ireland. Taking into account, inter alia, the detailed mitigation which has been integrated into the Plan (including that which is referenced at Section 5) it has been determined that significant residual adverse environmental effects will not occur in either Ireland or Northern Ireland. Relevant Plans and Programmes in both Ireland and Northern Ireland are required to comply with environmental legislation including the SEA and Habitats Directives. In order to be permitted, proposals for development in both Ireland and Northern Ireland are required to comply with environmental protection legislation and relevant higher tier Plans and Programmes.

Table 4.4 Overall Findings – Effects arising from the combination of Selected Alternatives and Plan Provisions

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Residual Adverse Non-Significant Effects
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain 	 Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. 	 Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation).
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water. 	 Potential interactions if effects upon environmental vectors such as water and air are not mitigated. 	 Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility, flood risk management and infrastructural provision.
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services. 	 Damage to the hydrogeological and ecological function of the soil resource. 	 Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.
Water	 Contributes towards protection and management of ground and surface waters, including coastal waters downstream, due to facilitating development within established and serviced settlement centres. 	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding. 	 Increased loadings as a result of development to be in compliance with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events.

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Environmental Component	Significant Positive Effect, likely to occur	n-Technical Summary Potentially Significant Adverse Environmental Effects, if unmitigated	Residual Adverse Non-Significant Effects
Material Assets	 Allows for use of planned infrastructure including water services, transport and drainage infrastructure. Makes use of existing water services, transport and drainage infrastructure. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)²⁴. Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Increases in waste levels. Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter 	 Residual wastes to be disposed of in line with higher level waste management policies.
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air. 	 Emissions to air including greenhouse gas emissions and other emissions. 	 An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.
Cultural Heritage	 Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements. 	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	 Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation. Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan.
Landscape	 Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements. 	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape 	 The Plan as varied contributes towards the protection of landscape designations and the landscape. Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments.

²⁴ Irish Water is responsible for strategic water services.

Section 5 Mitigation and Monitoring Measures²⁵

5.1 Mitigation

5.1.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- Integration of environmental considerations into zoning provisions of the Plan.

5.1.2 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval and the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Monaghan County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors including: Housing; Economic Development; Community; Heritage; Transport and Infrastructure; and Environment.

5.1.3 Integration of individual SEA, AA and SFRA provisions into the text of the Plan

Various provisions have been integrated into the text of the Plan through the Plan-preparation and SEA, SFRA and AA processes. Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

Table 5.1 links key mitigation measure(s) - which have been integrated into the Plan - to the likely significant effects of implementing the Plan, if unmitigated.

²⁵ For more details relating to the key Mitigation and Monitoring Measures, please refer to Table 9.1 and Table 10.1 in the main body of the Environmental Report.

The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

The reference codes are those which accompany the relevant measures in Section 8 of the main Environmental Report and in the Plan.

5.1.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of high flood risk. Various provisions have been inserted into the Plan which provide for flood risk management at project level.

Also taken into account were other environmental considerations including sustainable mobility and sensitivities relating to cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

5.2 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. The Environmental Report contains proposals for monitoring the Plan which are adopted alongside the Plan. Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

The Environmental Report identifies indicators - which allow quantitative measures of trends and progress in the environment over time. Measurements for indicators generally come from existing monitoring sources or from an internal monitoring of the environmental effects of grants of permission in the Council.

Stand-alone Monitoring Reports on the significant environmental effects of implementing the Plan will be prepared both at interim review of the achievement of the Plans objectives and in advance of the beginning of the review of the Plan. This report will address the indicators that are set out on Table 5.2.

Table 5.1 SEA Summary Table: Potentially Significant Adverse Effects (if unmitigated) and Mitigation Measures

Environmental Component	Potentially Significant Adverse Effects, if unmitigated	Mitigating Measures, including
All	All	Regulatory framework for environmental protection and management HLP14
		Corridor and Route Selection Process Section 7.15
		Construction and Environmental Management Plan Section 15.30
		Policy CEMP1
Biodiversity and Flora and Fauna	Arising from both construction and operation of development and associated infrastructure:	Also see measures under soil, water and material assets below.
	 Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, 	Appropriate Assessment Section 15.29 National Parks and Wildlife Service and Integrated Management Plans Section 6.8
	listed species, ecological connectivity and non-designated habitats; and disturbance to	Biodiversity Action Plan HLP2
	biodiversity and flora and fauna;	Designated Sites Legislation HLP3
	Habitat loss, fragmentation and	Protection of European Sites HLP4
	deterioration, including patch size and edge	Ecological Corridors GIP6
	effects; and	Green Infrastructure GIP7
	 Disturbance (e.g. due to noise and lighting along transport corridors) and displacement 	Protection of Riparian Zone and Waterbodies and Watercourses WPP15
	of protected species.	Drainage or Reclamation of Wetlands WLP3
	or protected species.	Light Sensitive Species LP3
		Non-designated habitats and biological diversity HLP5
		Non-native invasive species ISP2
		National Peatlands Strategy HLP6
		Increases in Visitor Numbers to Semi-Natural Areas
		Policy TMP15
Population and Human Health	 Potential interactions if effects upon environmental vectors such as water and air 	Also see measures under soil, water and material assets below.
	are not mitigated.	Human Health DM2
		Major Accidents Directive WMP 10
		Radon Policy CEMP2
Soil	Damage to the hydrogeological and	Also see measures under water below.
	ecological function of the soil resource.	Geological Interest GEP1 GEP2 GEP3 GEP4
		Contamination and Remediation Section 8.29
		Waste Management Regulations and Closed Landfills WMP8
Water	 Adverse impacts upon the status of water bodies arising from changes in quality, flow 	Also see measures under soil above and material assets below.
	and/or morphology. Increase in the risk of flooding. 	Water Framework Directive and associated legislation WPP17
		River Basin Management Plan WPP16
		Catchment-sensitive farming practices WPP18
		Surface Water Drainage and Sustainable Drainage Systems (SuDs) SDP2
	Increase in flood risk	As integrated through Strategic Flood Risk Assessment: WPP15 CCP4 FMP1 FMP2 FMP3 FMP4 FMP5 SDP1 SDP2 SDP3 SDP4 SDP5 FLP1 FLP2 FLP3

Environmental	Non-Technical Sum Potentially Significant Adverse Effects, if	Mitigating Measures, including
Component	unmitigated	
Material Assets	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) ²⁶. Failure to comply with drinking water 	Also see measures under soil above and material assets below. Irish Water / Water Services Provisions WWP1 WWP2 WWP3 WWP4 WWP5 WWP6 WWP7
	regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).	
	 Increases in waste levels. 	Construction and Demolition WMP4
		Waste Hierarchy WMP7
		Waste Management Regulations WMP8
		Contaminated Material WMP9
	 Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter 	AGP2 Specific Intensive Agriculture /Poultry & Pig Farming
Air and Climatic Factors	• Emissions to air including greenhouse gas emissions and other emissions.	Air Quality AQP1
		Air Quality, Greenhouse Gases, Noise and Energy AQP2
		Climate Adaptation and Mitigation CCP10
<u></u>		Green Infrastructure GIP7
Cultural	 Potential effects on protected and unknown 	Archaeological Heritage BHP2
Heritage	archaeology and protected architecture arising from construction and operation	Protection of Archaeological Sites, including Underwater Archaeological Sites PMP6
	activities.	Consultation PMP7
		Architectural Heritage BHP3
Landscape	Occurrence of adverse visual impacts and	Landscape Designations HLP6
·	conflicts with the appropriate protection of designations relating to the landscape	National Landscape Strategy HLP7

 $^{^{\}rm 26}$ Irish Water is responsible for strategic water services.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ²⁷	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs' National Monitoring Report for the Birds Directive under Article 12 (every 3 years). Department of Agriculture, Environment and Rural Affairs Northern Ireland Consultations with the NPWS (at monitoring evaluation.
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years). Review of Council Ecological Network Mapping
	 B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species 	 B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and Area of Special Scientific Interest resulting from development provided for by the Plan B3ii: No significant impacts on the protection of listed species 	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation. Department of Agriculture, Environment and Rural Affairs Northern Ireland.
	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management	Review of CSO figures for the County (every five years)

²⁷ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:
(a) no alternative solution available;
(b) imperative reasons of overriding public interest for the plan to proceed; and
(c) adequate compensatory measures in place.

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Population and Human Health	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive, Environmental Protection Agency, Department of Health (Northern Ireland) and Northern Ireland Environment Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	 Consultations with EPA and Health Service Executive and Department of Health Northern Ireland (at monitoring evaluation.
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	• Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Water	W1: Classification of Overall Status (comprised of ecological and chemical status) under the Water Framework Directive	W1: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ²⁸	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland and Northern Ireland (multi-annual).
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland and Northern Ireland (multi-annual).
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood</i> <i>Risk Management Guidelines for Planning</i> <i>Authorities</i>	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Material Assets	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 ²⁹ which present a potential danger to human health as a result of implementing the Plan	 EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual). EPA Remedial Action List (every quarter). Drinking Water Quality Northern Ireland (annual)
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	 EPA National Waste Reports EPA Ireland's Environment Reports
Air and Climatic Factors	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	• CSO Population Data (every c. 5 years).

²⁹ Corresponding guidance from Northern Ireland legislation: Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (as amended)

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context these entries within the surrounding landscape where relevant- protected from adverse effects resulting from development which is granted permissions under the Plan	CH1: Protect entries to the Record of Monuments and Places, the Northern Ireland Sites and Monuments Record and the context of these entries within the surrounding landscape where relevant – protected from adverse effects resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Department of Communities Northern Ireland (at monitoring evaluation.
	CH2: Percentage of entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures, Architectural Conservation Areas, listed buildings and conservation areas (Northern Ireland) and their context from significant adverse effects arising from new development granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and Department of Communities Northern Ireland (at monitoring evaluation).
Landscape	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).