

SEA ENVIRONMENTAL REPORT

FOR

RELEVANT PROPOSED MATERIAL ALTERATIONS

TO THE

**DRAFT CAVAN
COUNTY DEVELOPMENT PLAN 2022-2028**

**INCORPORATING THE DRAFT CAVAN TOWN
LOCAL AREA PLAN 2022-2028**

for: Cavan County Council

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List of Abbreviations

AA	Appropriate Assessment
ACA	Architectural Conservation Area
CAFE	Cleaner Air for Europe
CFRAM	Catchment Flood Risk Assessment and Management
CORINE	Co-ORDinated INformation on the Environment
CSO	Central Statistics Office
DAFM	Department of Agriculture, Food and Marine
DCCA	Department of Communication, Climate Action and Environment
DCHG	Department of Culture, Heritage and the Gaeltacht
DECC	Department of Environment, Climate and Communications
DEHLG	Department of the Environment, Heritage and Local Government
DHLGH	Department of Housing, Local Government and Heritage
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EQS	Environmental Quality Standard
EU	European Union
FPO	Flora Protection Order
GSI	Geological Survey of Ireland
NHA	Natural Heritage Area
NI	Northern Ireland
NIAH	National Inventory of Architectural Heritage
NTA	National Transport Authority
OPW	Office of Public Works
pNHA	proposed Natural Heritage Area
PAS	Priority Action Substance
POPs	Persistent Organic Pollutants
PWS	Public Water Supply
RAL	Remedial Action List
RBD	River Basin District
RMP	Record of Monuments and Places
RPA	Register of Protected Areas
RSES	Regional Spatial and Economic Strategy
RWSS	Regional Water Supply Scheme
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SI No.	Statutory Instrument Number
SPA	Special Protection Area
THMs	Trihalomethanes
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WHO	World Health Organisation
WFD	Water Framework Directive
WWTP	Wastewater Treatment Plant

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 (such as a plan or programme) 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, coming 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.

In the context of Article 6 of the Habitats Directive, mitigation measures are clearly distinguished from compensatory measures. Compensatory measures are intended to offset the negative effects of the plan or project so that the overall ecological coherence of the Natura 2000 Network is maintained.

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) and associated Regulations (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 Department of Culture, Heritage and the Gaeltacht 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 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 Draft Plan, the Proposed Material Alterations 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 Benefits

1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Environmental Report for Proposed Material Alterations to the Draft Cavan County Development Plan 2022-2028, incorporating the Draft Cavan Town Local Area Plan 2022-2028, hereafter referred to as the "Draft Plan". It has been undertaken by CAAS Ltd. on behalf of Cavan 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 Proposed Material Alterations.

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 ensure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

The SEA is being undertaken in order to comply with Section 12 of the Planning and Development Act, as amended.

1.2 Implications for the Planning Authority

The Proposed Material Alterations were screened for the need to undertake SEA. Certain Proposed Material Alterations were determined as requiring full SEA. The SEA Screening Determination accompanies this SEA Environmental Report and the Proposed Material Alterations document. Appendix IV to this SEA Environmental Report comprises the SEA Screening Report that was prepared to inform the SEA Screening Determination.

This SEA Environmental Report provides the findings of the assessment and will be placed on public display alongside the Proposed Material Alterations. The Elected Members will be required to take account of this document, the Proposed Material Alterations and any submissions received on these after public display.

1.3 Why SEA? The Benefits

SEA is the planning authority's and the public's guide to what are generally the best areas for development in the County.

SEA enables the planning authority to direct development towards robust, well-serviced and connected areas in the County – thereby facilitating the general avoidance of incompatible areas in the most sensitive, least well-serviced and least well-connected areas.

SEA provides greater certainty to the public and to developers. Plans are more likely to be adopted without delays or challenges and planning applications are more likely to be granted permission. Environmental mitigation is more likely to cost less.

An overlay of environmental sensitivities in County Cavan are shown on Figure 1.1. Further detail on the weighting applied to different sensitivities is provided under Section 4.6.1.

The overlay mapping shows that environmental sensitivities are not evenly distributed throughout the County. Most of the County is identified as having low to moderate levels of sensitivity.

The most sensitive areas in the County include:

- Lakes throughout the County, including the Lough Oughter and Associated Loughs SAC around Cavan Town – on account of ecological and landscape designations, water status and flood risk;
- Upland areas, such as the Cuilcagh - Anierin Uplands in the north west of the County – on account of landscape designations, landslide susceptibility, ecological designations and groundwater vulnerability; and

- Certain locations and areas within the existing built-up footprint of the County's settlements, on account of cultural heritage designations, including entries to the Record of Monuments and Places, Entries to the Record of Protected Structures and Architectural Conservation Areas; and
- Extensive areas of extreme and high groundwater vulnerability throughout the County.

The Draft Plan to which the Proposed Material Alterations relate directs incompatible development away from the most sensitive areas in the County and focuses on directing: compact, sustainable development within and adjacent to the existing built-up footprints of the County's towns and villages; and sustainable development elsewhere, including in rural areas. Development of these generally more robust, well-serviced and well-connected areas of the County will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

Compact development can be accompanied by placemaking initiatives to enable the County's towns and villages to become more desirable places to live – so that they maintain and improve services to existing and future communities.

Compatible sustainable development in the County's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

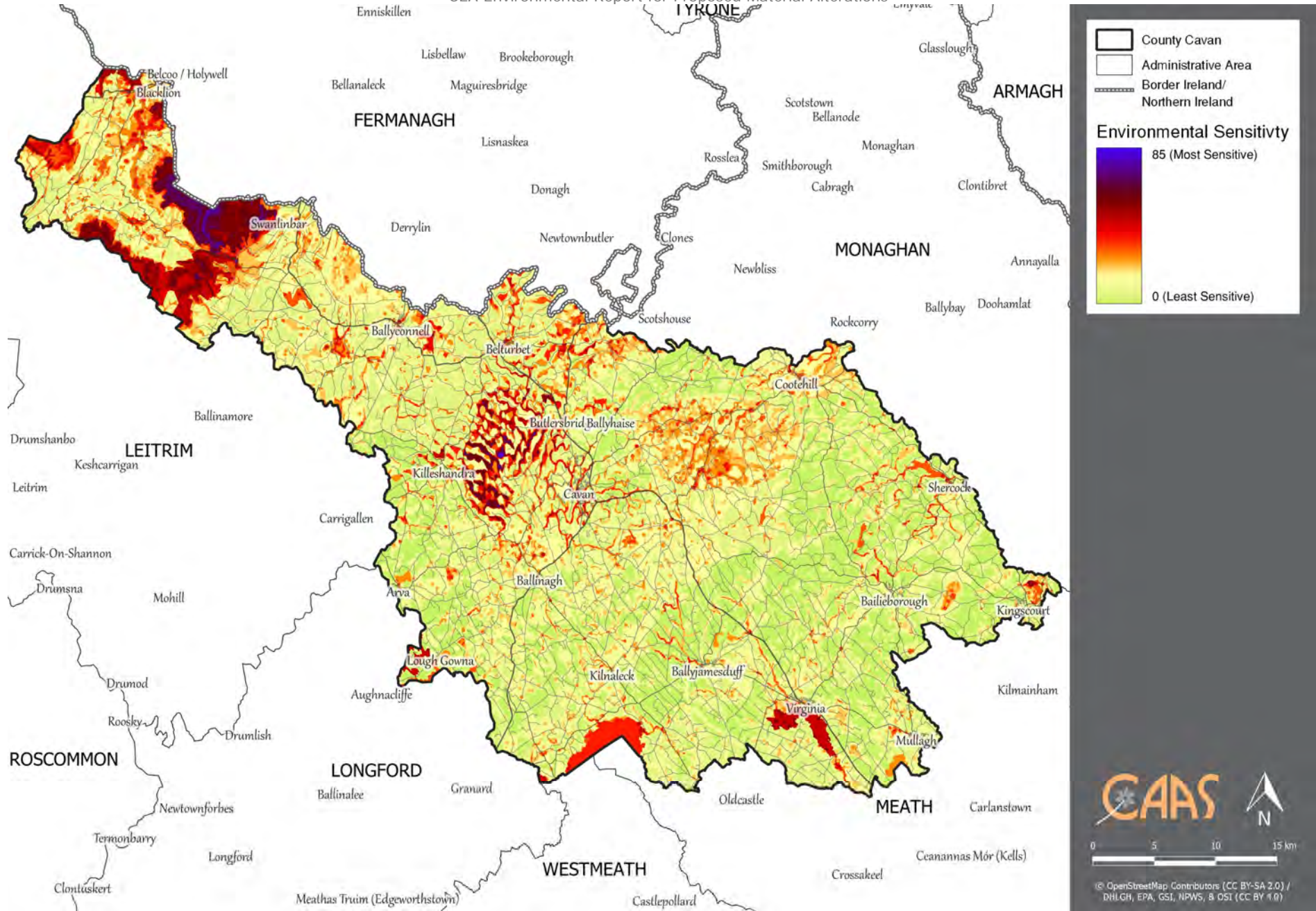


Figure 1.1 Overlay of Environmental Sensitivities in County Cavan

CAAS for Cavan County Council

Section 2 The Draft Plan and associated Proposed Material Alterations

2.1 Introduction

The Cavan County Development Plan is a land use plan and overall strategy for the proper planning and sustainable development of the functional area of County Cavan over the six-year period 2022-2028.

2.2 Content of the Plan

The Plan sets out the Councils proposed policies and objectives for the development of the County over the Plan period. The draft Plan comprises of the following documents:

- Volume 1 – Written Statement
- Volume 2- Book of Maps
- Volume 3- Appendices

Volume 1 is divided into an Introduction and 14 Chapters as follow:

- Chapter 1 - Core Strategy
- Chapter 2 - Settlement Strategy
- Chapter 3 - Housing
- Chapter 4 - Sustainable Communities
- Chapter 5 - Climate Change
- Chapter 6 - Economic
- Chapter 7 - Transportation and Infrastructure
- Chapter 8 - Environment, Water and Drainage
- Chapter 9 - Tourism
- Chapter 10 - Natural Heritage
- Chapter 11 - Built and Cultural Heritage
- Chapter 12 - Rural
- Chapter 13 - Development Management
- Chapter 14 - Land Use

The Settlement Strategy in the Plan incorporates the Draft Cavan Town Local Area Plan 2022-2028 and includes land use zoning for various settlements.

2.3 Strategic Vision for County Cavan

It is the Mission in the Corporate Plan of Cavan County Council 2019-2024 to be:

‘A Council that leads and collaborates with all to drive and shape a better future for our County’

along with a vision of:

‘A progressive, vibrant county which is smart, connected, innovative, inclusive and sustainable’.

The Plan provides a positive vision for Cavan which will enable the county to continue to make Cavan a place where people can have a good quality of life; a better place to live, work and enjoy contribution to national economic growth by promoting sustainable development and facilitating stable economic growth thus delivering long term benefits for the citizens of the County.

2.4 Strategic Aims

The Strategic Aims which guide the advancement of the Development Plan are set out hereunder:

- I. To guide the future development of County Cavan in line with national and regional objectives set out in the NPF and RSES and other national guidelines and policies
- II. To promote and facilitate the development of the County in accordance with the provisions of the Core Strategy, including directing development in line with the settlement hierarchy and promoting development at an appropriate scale that is reflective of the terms of the Core Strategy Table and zoning maps.
- III. To apply the Settlement Hierarchy to determine the scale, rate and location of proposed developments and apply appropriate development management measures to ensure compliance with the Settlement Hierarchy including the population targets for the County.
- IV. To promote the delivery of at least 30% of all new homes that are targeted in settlements within their existing built-up footprints
- V. To promote the delivery at least 20% of all new housing in rural areas on brownfield sites.

2.5 Proposed Material Alterations

The Proposed Material Alterations are outlined in detail in the accompanying Proposed Material Alteration document. The Alteration Numbers provided in this report can be used to locate this

detail in the accompanying Proposed Material Alteration document.

Alterations proposed include those relating to maps, including land use zoning, and text.

The Proposed Material Alterations were screened for the need to undertake SEA and the alterations below were determined as requiring full SEA. The SEA Screening Determination accompanies this SEA Environmental Report and the Proposed Material Alterations document. Appendix IV to this SEA Environmental Report comprises the SEA Screening Report that was prepared to inform the Determination. Proposed Material Alterations requiring SEA and consideration in this SEA Environmental Report are as follows¹:

Alteration No.	
11	125
13	126
20	128
73	129
76	132
86	136
90	137
98	154
100	165
102	168
106	177
110	184
122	185
123	204
124	212

2.6 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 on public display, Cavan County Council undertook

¹ For detail, please refer to Proposed Material Alterations document.

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

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;
- Sustainable Communities;
- Climate Action;
- Economic Development;
- Transportation;
- Infrastructure;
- Environment;
- Water and Drainage;
- Tourism; and
- Rural Development.

The undertaking of this SEA process and the associated AA and SFRA processes contributed towards the integration of environmental considerations into individual Plan provisions as detailed in Section 9 of this report.

2.7 Relationship with other relevant Plans and Programmes

It is acknowledged that many of the major issues affecting the County's development are contingent on national policy and government funding.

The Draft Plan, to which the Proposed Material Alterations relate, sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and will, in turn, guide lower-level strategic actions. These documents include plans and programmes such as those detailed in Appendix I² (see also, Section 4 "Environmental Baseline", Section 5 "Strategic

Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Environmental Objectives”, Section 6 “Description of Alternatives” and Section 9 “Mitigation Measures”). These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland’s planning policy direction for the years 2018-2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the Northern and Western Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the County Development Plan.

As required by the Planning and Development Act 2000, as amended, the Draft County Development Plan is consistent with and conforms with national and regional policies, plans and programmes, including the NPF and the RSES for the Northern and Western Region. The County Development Plan will, in turn, guide lower-level strategic actions, such as Local Area Plans that will be subject to their own lower-tier environmental assessments.

In order to be realised, projects included in the County Development Plan (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework.

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

The preparation of the Draft Plan, Proposed Material Alterations, SEA, AA and SFRA have taken place concurrently and the findings of the SEA, AA and SFRA have informed the Plan.

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.2.1 Appropriate Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA are being undertaken alongside the preparation of the Plan, including the Proposed Material Alterations. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The emerging conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects³. The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA. The Proposed Material Alterations are accompanied by an AA Natura Impact Report, which has informed this SEA Environmental Report.

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 the undertaking of the 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.
- Reference to a zone of influence is provided at Section 4.

Baseline

- Biodiversity data sources relevant for this local 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.

Alternatives

- Impacts upon biodiversity are considered under each of the alternatives and potential conflicts can be mitigated.

Impact assessment

- Effects on biodiversity are identified and assessed and the AA considers 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 SEA for monitoring European Sites.

Reporting

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

Communication and consultation

- Submissions received have been taken on board.
- The preparation of the Plan, SEA and AA have taken place concurrently and the findings of the AA have informed the SEA.

3.3 Strategic Flood Risk Assessment

Strategic Flood Risk Assessment (SFRA) is being undertaken to inform the preparation of the Draft Plan and the Proposed Material Alterations. The SFRA process has informed this report.

3.4 Scoping

The scope of environmental issues to be dealt with by the SEA of the Plan together with the

³ 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.

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 components that 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 (as part of the SEA scoping process at pre-Draft Plan stage) 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 the Environmental Protection Agency, Meath County Council and Monaghan County Council influenced the scope of the assessment undertaken, the findings of which are included in this report.

3.5 Alternatives

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment. In accordance with this requirement, alternatives for the Plan are identified and assessed in Sections 6 and 7.

3.6 Environmental Report

This SEA Environmental Report predicts and evaluates the likely significant effects of the Proposed Material Alterations. The Environmental Report provides Cavan County Council, stakeholders and the public with a clear understanding of the likely environmental consequences of implementing the Proposed Material Alterations.

Mitigation measures to prevent or reduce significant adverse effects posed by the Draft

Plan are identified in Section 9 – these have been integrated into the Plan.

This Environmental Report has been informed by recommendations contained in submissions to date. The SEA Environmental Report prepared for the Draft Plan will be finalised in advance of adoption of the Plan taking into account, among other things, the content of this SEA Environmental Report.

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

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

There is a data gap relating to WFD surface water status data. There are a number of waterbodies within the Plan area with overall status currently not assigned to them and the term “unassigned status” applies in respect of these waterbodies. The SEA ensured that the Plan contains measures that will contribute towards the maintenance and improvement of status of all water bodies within the zone of influence.

3.7 SEA Statement

On finalisation of the Plan, an SEA Statement will be prepared that will include information on:

- How environmental considerations have been integrated into the Plan, highlighting the main changes to the Plan that resulted from the SEA process;
- How the SEA Environmental Report and consultations have been taken into account, summarising the key issues raised in consultations and in the Environmental Report 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 of the Plan.

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 Culture, Heritage, and the

Gaeltacht; Department of Communications, Climate Action and Environment; Department of Housing, Planning and Local Government; Environmental Protection Agency; Monaghan County Council; Meath County Council; Westmeath County Council; Longford County Council; and Leitrim County Council.

Table 3.1 Checklist of Information included in this Environmental Report

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 and Appendices II and III
(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 3, 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Appendix V 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 described 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 description includes information that is relevant to lower tier planning, environmental assessments and decision-making⁶.

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

4.2 National Reporting on the Environment

The EPA's *"Ireland's Environment – An Assessment 2020"* report provides an integrated assessment of the overall quality of Ireland's environment, the pressures being placed on it and the societal responses to current and emerging environmental issues. This report has informed various parts of the environmental baseline provided below. The key environmental challenges or messages identified by the report are:

Environmental Policy Position

A national policy position for Ireland's Environment.

Full implementation

Full implementation of existing environmental legislation and a review of the governance around the coordination on environmental protection across public bodies.

Health and Wellbeing

Protecting the Environment is an Investment in Our Health and Wellbeing.

Climate

Systemic change is required for Ireland to become the climate-neutral and climate resilient society and economy that it aspires to be.

Air Quality

Adoption of measures to meet the World Health Organization air quality guideline values should be the target to aim for in the Clean Air Strategy.

Nature

Safeguard nature and wild places as a national priority and to leave a legacy for future generations.

Water Quality

Improve the water environment and tackle water pollution locally at a water catchment level.

Marine

Reduce the human-induced pressures on the marine environment.

Clean Energy

Ireland needs to move rapidly away from the extensive use of fossil fuels to the use of clean energy systems.

Environmentally Sustainable Agriculture

An agriculture and food sector that demonstrates validated performance around producing food with a low environmental footprint.

Water Services

Drinking water and wastewater infrastructure must meet the needs of our society.

Circular Economy

Move to a less wasteful and circular economy where the priority is waste prevention, reuse, repair and recycling.

Land Use

Promote integrated land-mapping approaches to support decision-making on sustainable land use.

The report highlights that high-quality green and blue spaces are not just for nature but are for peoples' health and wellbeing, particularly in the context of an increasingly urban society and increasing settlement densities.

⁶ 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.

4.3 Sustainable Development Goals

Implementation of the Plan will contribute towards efforts to achieve a number of the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development, which were adopted by world leaders in 2015 at a United Nations Summit and came into force in 2016. These Goals include:

- Goal 3. Ensure healthy lives and promote well-being for all at all ages.
- Goal 6. Ensure availability and sustainable management of water and sanitation for all.
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- Goal 12. Ensure sustainable consumption and production patterns.
- Goal 13. Take urgent action to combat climate change and its impacts.
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

4.4 Likely Evolution of the Environment in the Absence of a new Plan and associated Material Alterations

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

The 2014 County Development Plan has contributed towards environmental protection within County Cavan. If the 2014 Plan was to expire and not be replaced by the 2022-2028 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.

As a result, there would be a decreased likelihood in the extent, magnitude and frequency of positive/neutral effects occurring, including:

- Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere.
- Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.
- Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.
- 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.
- Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.
- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere.
- Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere.
- Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.
- Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby

- helping to avoid the need to develop more sensitive, less well-served lands elsewhere.
- Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.
- Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere.
- Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.
- Contribution towards flood risk management and appropriate drainage.
- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere.
- Contribution towards compliance with national and regional water services and waste management policies.
- Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.
- Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.
- Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency.
- Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere.
- In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to:
 - Sustainable compact growth;
 - Sustainable mobility, including walking, cycling and public transport;
 - Drainage, flood risk management and resilience;
 - Sectors including agriculture, forestry, energy and buildings; and
 - Sustainable design, energy efficiency and green infrastructure.
- Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within existing settlements.

- Contributes towards protection of cultural heritage within existing settlements by facilitating brownfield development and regeneration.
- Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements.

As a result, there would be an increased likelihood in the extent, magnitude and frequency of adverse effects on all environmental components occurring, including:

- Arising from both construction and operation of development and associated infrastructure:
 - Loss of/damage to biodiversity in designated sites (including European Sites, Wildlife Sites and Areas of Special Scientific Interest) 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 - such as birds and bats - and including: effects on Northern Ireland Priority Species and their habitats; and barriers to Northern Ireland Priority Species movement, including migratory fish species.
- Potential interactions if effects arising from environmental vectors.
- Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.
- Potential for riverbank erosion.
- Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.
- Increase in flood risk and associated effects associated with flood events.
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Increases in waste levels.
- Potential impacts upon public assets and infrastructure.
- Interactions between agriculture and soil, water, biodiversity and human health – including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter.

- Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.
- Potential conflicts between transport emissions, including those from cars, and air quality.
- Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors.
- Potential conflicts with climate adaptation measures including those relating to flood risk management.
- Potential effects on protected and unknown archaeology⁷ and protected architecture⁸ arising from construction and operation activities.
- Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

4.5 Natural Capital and Ecosystem Services

County Cavan's **natural capital** comprises its renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of ecosystem services that provide benefits to people. These benefits can include clean air and water, a stable climate, protection from floods, food, resources for fuel, building materials, clothes and medicines, recreation. Managing natural capital so that it can continue to deliver the ecosystem services that give us these benefits is important in order to ensure sustainable development. Unmanaged natural capital risks the continued degradation and depletion of these assets, and in turn, of their capacity to provide the economy and society with the ecosystem benefits that they depend on. These services also regulate climate, regulate water flows (e.g. through wetlands and forests), sequester and store carbon in peatlands and improve soil quality for crops.

Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing. There are four main types; provisioning, regulating,

supporting and cultural services. Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fibre, genetic resources and medicines. Regulating services are defined as the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination or pest control. Support services highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of gene-pools. Cultural services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values⁹.

In preparing the Draft Plan and developing policy objectives, the Council have followed these ecosystem services approach principles:

- a) Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function (including at Plan Chapter 10);
- b) Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation (including at Plan Chapters 8, 10, 13 and 14), resources for food, fibre or fuel (including at Plan Chapter 12), or for recreation, culture and quality of life (including at Plan Chapters 4, 9, 10 and 11);
- c) Involving people - those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them. Public consultation has informed the preparation of the Draft Plan which will be further refined before adoption, taking into account submissions/observations made on the Draft Plan during public display.

The following natural capital and ecosystem services issues are relevant to this SEA and have been taken into account in the provisions of the Draft Plan:

- Air quality;
- Noise pollution;
- Light pollution;
- Water quality and river basin management including interactions with soil;
- Soil and vegetation carbon, which helps to regulate greenhouse gas emissions;

⁷ Archaeological heritage encompasses designated and unknown archaeological heritage including entries to the Record of Monuments and Places, underwater archaeology, entries to the Northern Ireland Sites and Monuments Record and Northern Ireland Areas of Significant Archaeological Interest and Archaeological Potential. Also encompassed are intervisibility and interrelationships between archaeological heritage within the wider landscape, including cross-border intervisibility and interrelationships.

⁸ Architectural heritage encompasses that which is designated or included within the National Inventory of Architectural Heritage (NIAH), NIAH Historic Gardens and Designed Landscapes, Records of Protected Structures and Northern Ireland's Listed Buildings and Northern Ireland's Historic Parks, Gardens and Demesnes. Also encompassed are intervisibility and interrelationships between architectural heritage within the wider landscape, including cross-border intervisibility and interrelationships.

⁹ <https://biodiversity.europa.eu/topics/ecosystem-services>

- Soil/geological storage of water, contributing towards flood control;
- Land supporting food production; and
- Natural resources supporting energy production and recreation.

County Cavan shares a border with Northern Ireland and the potential for likely significant transboundary environmental effects is considered by the SEA. For this purpose, environmental baseline information at and across the border in Northern Ireland relating to each of the environmental components detailed below have been considered.

4.6 Biodiversity and Flora and Fauna

4.6.1 Introduction

Information on biodiversity and flora and fauna that is relevant to project planning and development and associated environmental assessment and administrative consent of projects includes that on designated ecological sites and protected species, ecological connectivity (including stepping stones and corridors) and non-designated habitats.

4.6.2 Overview of High Value Biodiversity and Designations

The most ecologically sensitive, heavily designated and protected areas within County Cavan include extensive network of wetlands comprising: lakes; ponds; rivers; streams; drumlins; peatlands; watercourses; reservoirs; floodplains; marshes; swamps; and wet woodlands. These habitats support a variety of

species and ecosystems that contribute to the biodiversity of the County. Rural and agricultural areas (including marginal land such as hedgerows and rough grassland) that may include ecological sensitivities occur throughout the County.

A network of green spaces, including gardens, parks, graveyards, amenity walks, railway lines and patches of woodland and scrub, provide habitats and ecological connectivity within the County and beyond.

Ecological designations in County Cavan include:

- Special Protection Areas¹⁰;
- Special Areas of Conservation¹¹;
- Natural Heritage Areas¹² and Proposed Natural Heritage Areas¹³;
- Certain entries to the Water Framework Directive Register of Protected Areas¹⁴;
- Wildfowl Sanctuaries (provided for by S.I. No. 192 of 1979)¹⁵;
- RAMSAR sites¹⁶;
- UNESCO Global Geopark¹⁷;
- Freshwater Pearl Mussel catchments¹⁸; and
- Flora Protection Order site¹⁹.

Relevant ecological designations in Northern Ireland include:

- European sites²⁰;
- Areas of Special Scientific Interest (ASSIs)²¹;
- Nature Reserves²²; and
- Ramsar Sites²³.

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 15 km of the County boundary and all downstream areas of catchments which drain the County.

¹⁰ For more detail refer to Section 4.6.3.

¹¹ For more detail refer to Section 4.6.3.

¹² For more details refer to Section 4.6.4.

¹³ For more detail refer to Section 4.6.4.

¹⁴ For more detail refer to Sections 4.6.6 and 4.9.7.

¹⁵ Areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. **There are three Wildfowl Sanctuaries within or partially within the County: Lough Oughter Group (WFS-01); Lough Ramor (WFS-03); and Dartrey/Fairfield (WFS-04).**

¹⁶ For more detail refer to Section 4.6.7.

¹⁷ For more detail refer to 4.8.2.

¹⁸ For more detail refer to Section 4.6.7.

¹⁹ The Flora (Protection) Order, 2015 (S.I. No. 356 of 2015) gives legal protection to 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). **There is one location within the County protected by the Order: Cuilcagh (*Hamatocaulis vernicosus*).**

²⁰ For more details refer to Section 4.6.3.

²¹ 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. **The relevant ASSIs (shown on Figure 4.3.) include: Cuilcagh Mountain (ASSI069); Marlbank (ASSI375); Gortalughany (ASSI366); Cladagh (Swanlinbar) River (ASSI200); Upper Lough Erne – Crom (ASSI071); and Upper Lough Erne – Galloon (ASSI090).**

²² 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.

²³ For more detail refer to Section 4.6.7.

4.6.3 European Sites

European sites within the County occur in the greatest concentrations along the main waterways and wetlands. European sites comprise:

- Special Areas of Conservation²⁴ (SACs); and
- Special Protection Areas²⁵ (SPAs).

The SEA uses the same general zone of influence cited in the AA, a 15 km buffer around the County. There are 24 European sites (18 SACs and six SPAs) in Ireland and 12 European sites (10 SACs and two SPAs) in Northern Ireland designated within this zone (mapped on Figure 4.1), out of which 10 European sites (six SACs and four SPAs) are designated within or partially within County Cavan.

All relevant European sites²⁶ shown on Figure 4.1 and Figure 4.2 and their sensitive features are listed in the Appendix II of this report. European sites partially within or adjacent to Cavan Town and Environs are mapped on Map 1 in Appendix III. For more detail on European sites please refer to the AA Natura Impact Report that accompanies the Proposed Material Alterations and this SEA Environmental Report.

4.6.4 Natural Heritage Areas and Proposed Natural Heritage Areas

Natural Heritage Areas (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 (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated.

There are two NHAs and 20 pNHAs designated within, partially within or adjacent to the County. These sites are mapped²⁷ on Figure 4.3 and listed in Appendix II of this report. Relevant pNHAs located partially within or adjacent to Cavan Town and Environs are also mapped on Map 2 in Appendix III.

4.6.5 Land Cover Mapping

CORINE²⁸ land cover mapping for the County is shown on Figure 4.4. The most dominant land cover types are pastures and agricultural lands. Concentrations of peat bogs occur mainly in the north-west of the County. CORINE land cover for Cavan Town and Environs is also mapped on Map 3 in Appendix III.

Categories from CORINE mapping that may indicate areas with the potential for Annex I habitats within the County (mapped on Figure 4.7) and Cavan Town and Environs (mapped on Map 4 in Appendix III) include:

- Non-irrigated arable land;
- Pastures;
- Complex cultivation patterns;
- Land principally occupied by agriculture with significant areas of natural vegetation;
- Broad-leaved forest;

²⁴ 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) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

²⁵ 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 - due

to their conservation value for birds of importance in the EU.

²⁶ Including sites in Ireland and Northern Ireland within 15 km buffer around the County, sites connected to the County via hydrological links and sites relevant to Cavan Town and Environs.

²⁷ Sites in neighboring counties are also shown on Figure 4.3.

²⁸ The CORINE (Coordinated Information on the Environment) land cover data series was devised as a means of compiling geo-spatial environmental information in a standardised and comparable manner. CORINE has become a key data source for informing environmental and planning policy on a national and European level. The main land cover type in Ireland is agricultural land including forestry, which accounts for two-thirds of the national landmass. Most of this is permanent grassland pastures. Peatlands and wetlands are the second most widespread land cover type, covering almost one-fifth of the country. While forested areas cover about one-tenth of the country. Despite rapid development in the past two decades, Ireland's landscape is predominantly rural and agricultural.

- Coniferous forest;
- Mixed forest;
- Natural grasslands;
- Moors and heathland;
- Transitional woodland-shrub;
- Inland marshes;
- Peat bogs;
- Water courses; and
- Water bodies.

- Erne - Claddagh or Swanlibar (Catchments of other extant populations);
- Erne – Annalee – Larah (Previous record *Margaritifera*, current status unknown); and
- Erne – Annalee (Catchments of other extant populations).

4.6.6 Register of Protected Areas

In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies that 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).

These designations (mapped on Figure 4.5) include WFD Ground Water Bodies intersecting with Designated Shellfish Zones under S.I. No. 55/2009 European Communities (Quality of Shellfish Waters) (Amendment) Regulations 2009.

RPAs relating to Nutrient Sensitive Waters and water bodies used for Drinking Water are addressed under Section 4.9 "Water". There are a number of water dependent habitats in the County which have been listed on the Register – these relate to designated SACs and SPAs (see Section 4.6.3). RPAs relating to Cavan Town and Environs are addressed under 4.9.7.

4.6.7 Other Designations

Other designations within County Cavan include *Margaritifera* Sensitive Areas (mapped on Figure 4.6) and Ramsar sites (mapped on Figure 4.7).

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. There are two species of freshwater pearl mussel in Ireland (*Margaritifera margaritifera* and *Margaritifera durrovensis*) and both are protected under Annex II and Annex V of the EU Habitats Directive. In County Cavan, the *Margaritifera* Sensitive Areas are found within the following river catchments (mapped on Figure 4.6):

Ramsar sites are wetlands designated to be of international importance under the Convention of Wetlands of International Importance (especially as Water Fowl Habitat), 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. There is one Ramsar site designated within County Cavan: Lough Oughter (Site No: 853). Relevant Ramsar sites in Northern Ireland include: Upper Lough Erne (Site No: UK12024) and Cuilcagh Mountain (Site No: UK12005).

Other relevant designations in Northern Ireland mapped on Figure 4.7 include five Nature Reserves: Hanging Rock and Rossaa Forest; Crossmurrin; Killykeeghan; Marble Arch and Reilly; and Gole Woods.

4.6.8 Other Sites of Ecological Importance

Within and surrounding the County (including Cavan Town and Environs) ecological networks are made up of components including lakes, wetlands, woodlands, trees and hedgerows. These components provide habitats for flora and fauna and facilitate linkages to the surrounding countryside for flora and fauna.

Hedgerows are valuable resource in the countryside, benefiting agriculture, wildlife, the environment, tourism, and the general community. The network of hedges across the country provides links between surviving fragments of other wildlife habitats, thereby allowing the movement and dispersal of species through otherwise hostile agricultural landscapes.

County Cavan has a broad range of wetlands with a diversity of species and habitats. The wetland survey, which was carried out in 2008 to determine the location and approximate extent of wetlands in the County, is currently under review. Wetland areas, including areas designated for nature conservation and undesignated sites, are likely to support habitats and species of conservation importance and should be given consideration in future development plans adopted by the County.

Peatlands are unique systems comprising of peat soil providing as significant carbon stores and supporting a range of unique species. Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive. Peatland areas within County Cavan occur mainly along the upland areas of the Cuilcagh Mountain range and include a Slieve Rushen Bog - a site of considerable conservation significance and one of the most intact blanket bogs in County Cavan. Cutover bog is a variable habitat, or complex of habitats, that can include mosaics of bare peat and re-vegetated areas with woodland, scrub, heath, fen and flush or grassland communities. It occurs where part or all of the original peat has been removed through turf cutting, by the traditional hand method or mechanically, for either domestic or commercial purposes. This habitat is widespread in Ireland surrounding industrially and traditionally cutover raised bogs, including Killyconny Bog in County Cavan.

4.6.9 Existing Problems

Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (DCHG, 2019) identifies various Irish, EU-protected habitats and species to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. Categories for pressures and threats on Ireland's habitats and species identified by the report comprise:

- Agriculture;
- Forestry;
- Extraction of resources (minerals, peat, non-renewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems;
- Development, construction and use of residential, commercial, industrial and recreational infrastructure and areas;

- Extraction and cultivation of biological living resources (other than agriculture and forestry);
- Military action, public safety measures, and other human intrusions;
- Alien and problematic species;
- Mixed source pollution;
- Human-induced changes in water regimes;
- Natural processes (excluding catastrophes and processes induced by human activity or climate change);
- Geological events, natural catastrophes;
- Climate change; and
- Unknown pressures, no pressures and pressures from outside the Member State.

Ireland's Article 12 Birds Directive Reports and the 6th National Report under the Convention of Biological Diversity identify similar issues.

The Plan includes measures to contribute towards the protection of biodiversity and flora and fauna and associated ecosystem services.

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna however, legislative objectives governing biodiversity and fauna were not identified as being conflicted with.

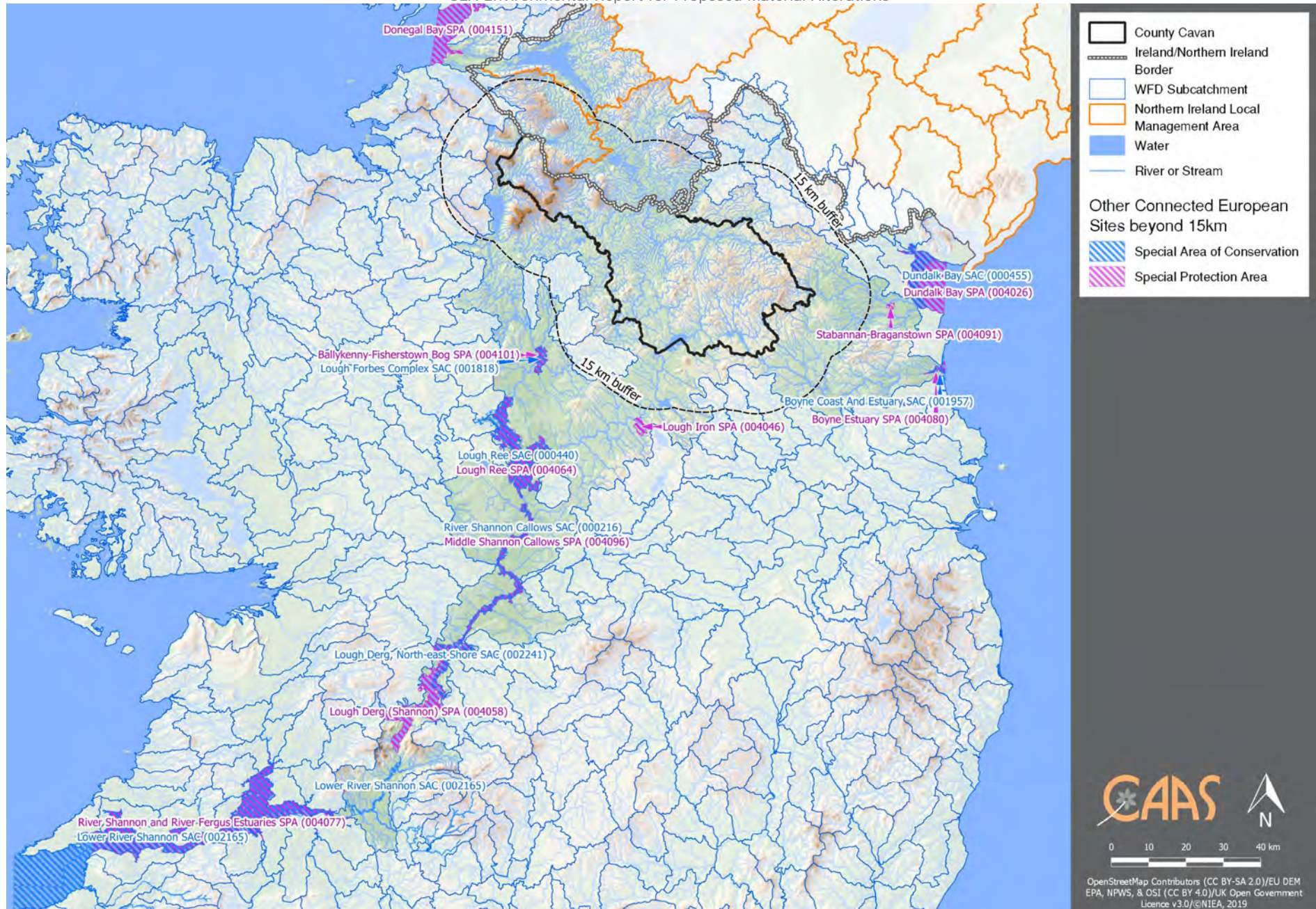


Figure 4.2 European sites connected to the County but beyond 15 km of the County

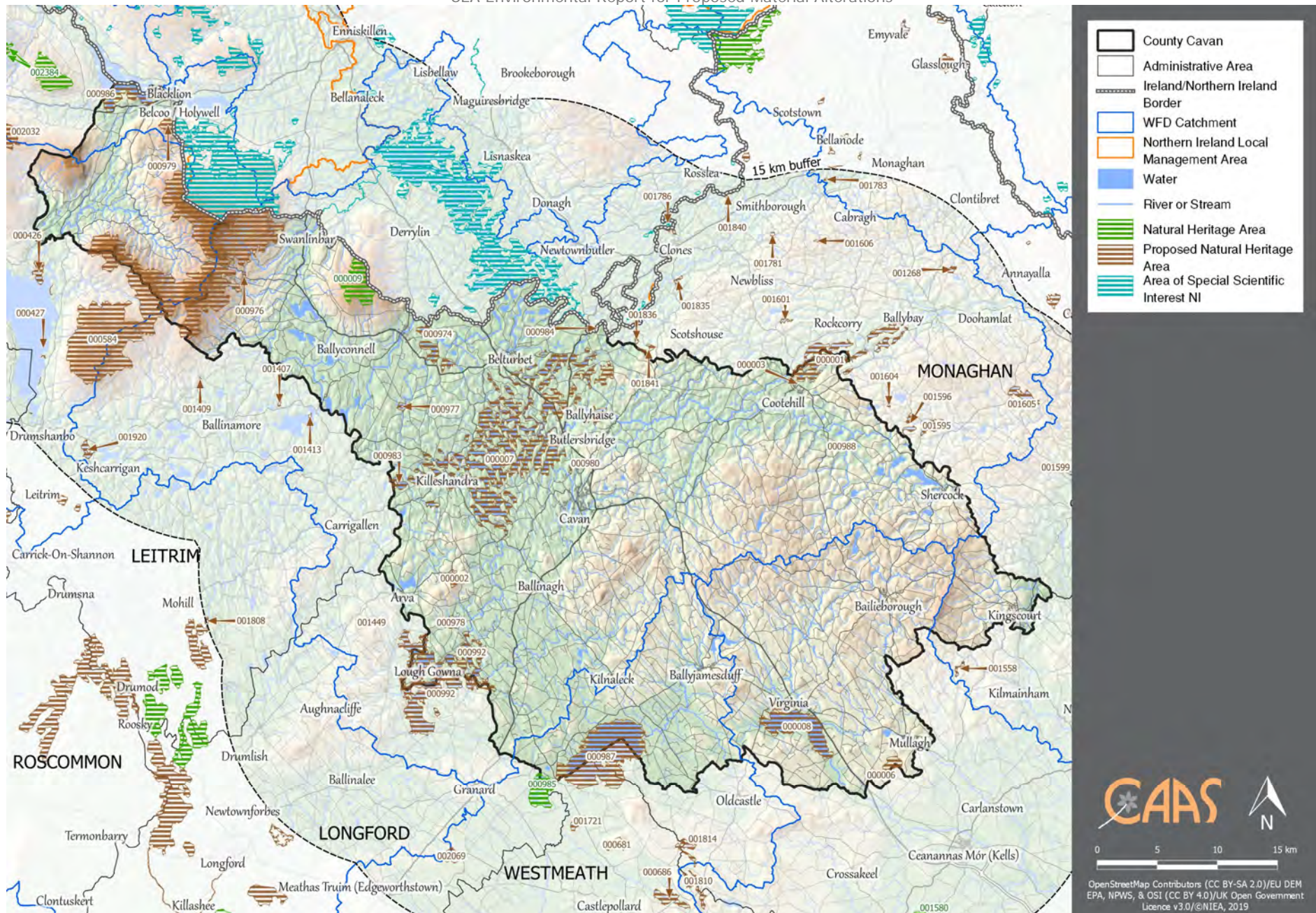


Figure 4.3 Natural Heritage Areas, Proposed Natural Heritage Areas and NI Areas of Special Scientific Interest

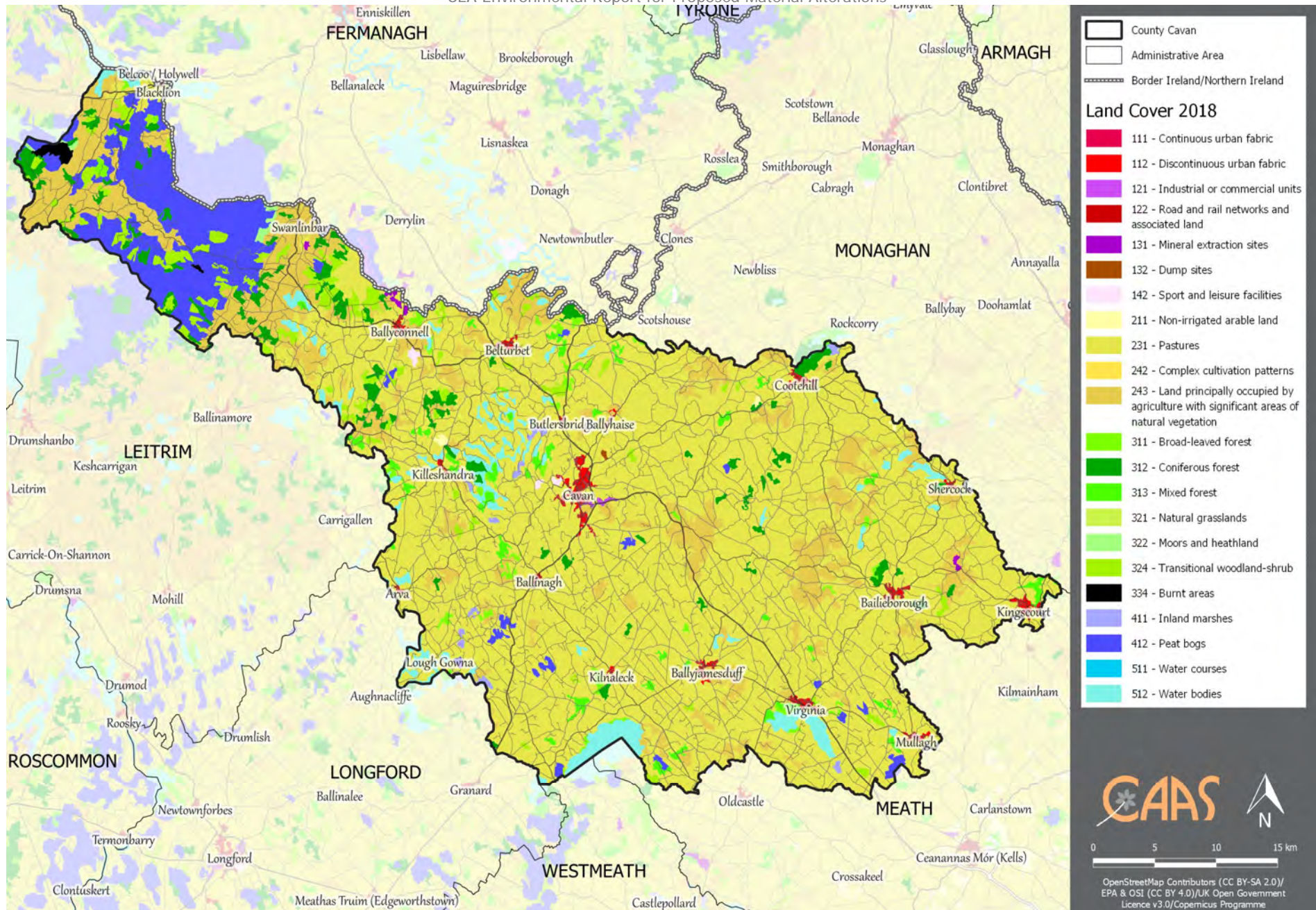


Figure 4.4 CORINE Land Cover 2018

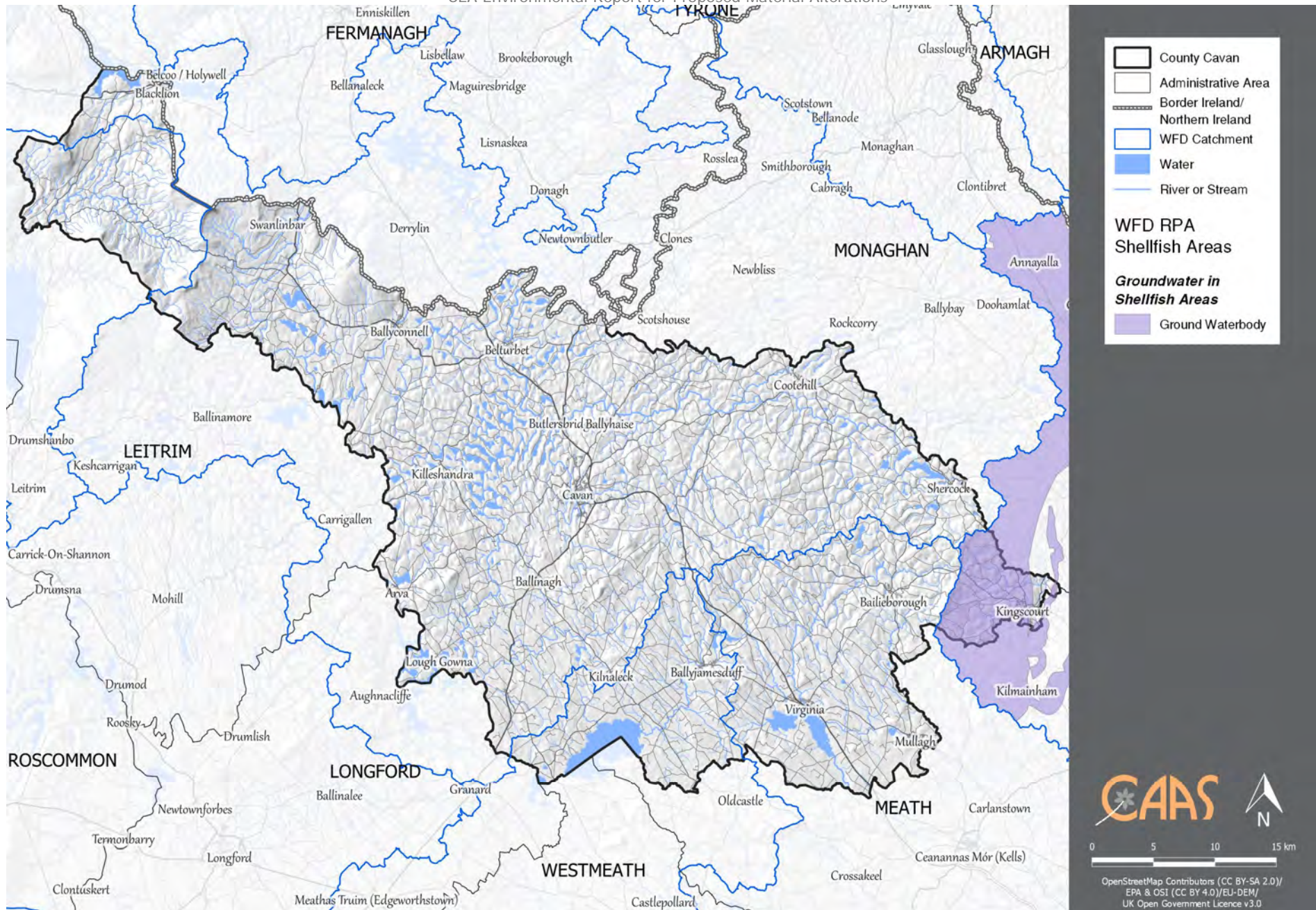


Figure 4.5 WFD Register of Protected Areas Shellfish Areas

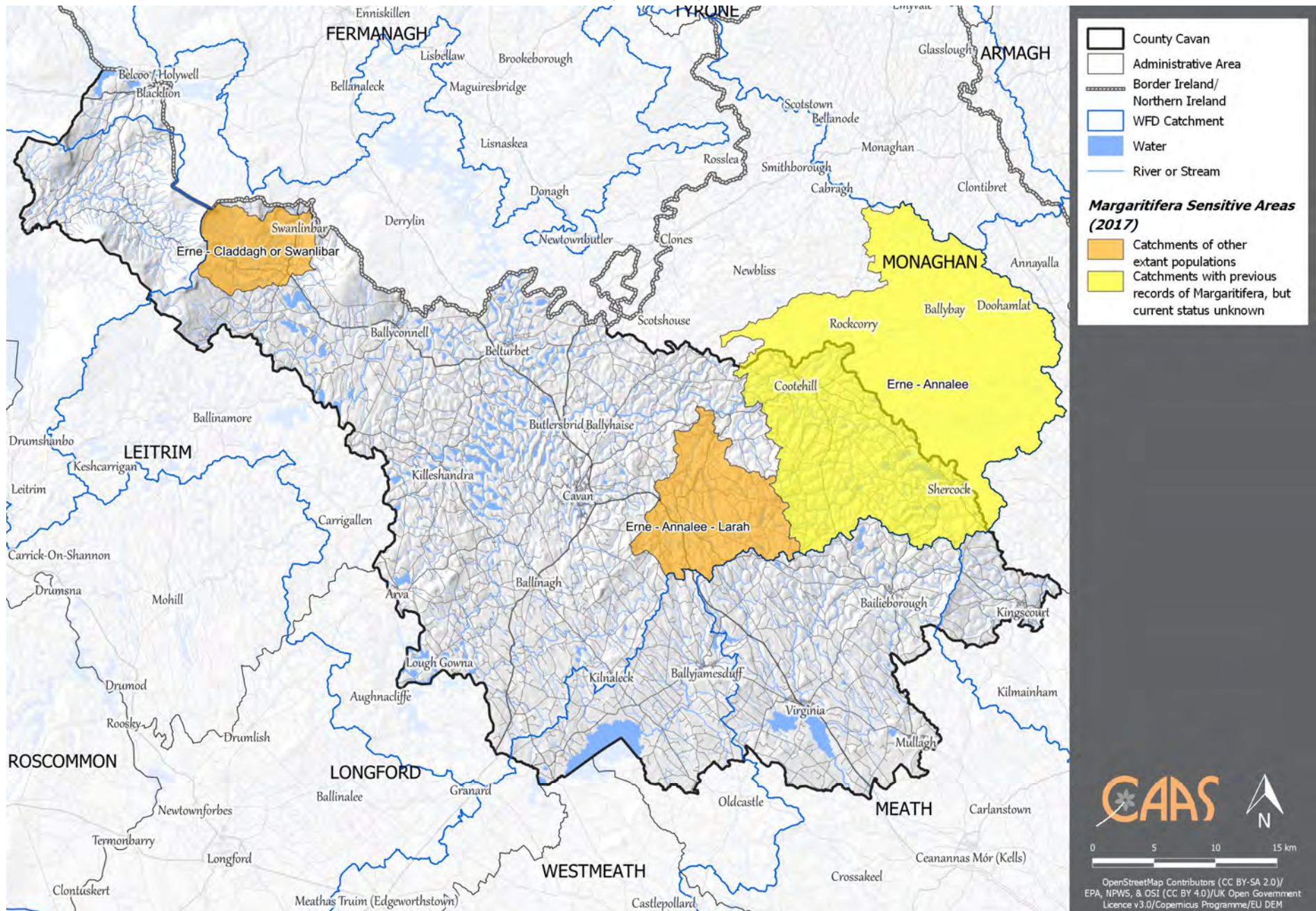


Figure 4.6 Margaritifera Sensitive Areas

- Potential effects on water quality.

4.7 Population and Human Health

4.7.1 Population

In the 2016 Census the total population of County Cavan was identified as being 76,176 persons, showing an increase in total population of 3.9 % (2,993 persons) since the previous Census. The population of County Cavan is projected to increase further, up to 85,900 persons by 2028²⁹.

The Draft Plan includes a hierarchy of the County's settlements as follows:

- Key towns (Cavan Town);
- Self-sustaining growth towns (Virginia);
- Self-sustaining towns (Ballyjamesduff, Baileborough, Kingscote, Cootehill);
- Medium Towns (Belturbet, Mullagh, Ballyconnell);
- Small Towns (Ballinagh, Ballyhaise, Shercock, Killeshandra, Arva and Kilnaleck);
- Village Category 1 (Swanlinbar, Butlersbridge, Blacklion, Lough Gowna); and
- Villages Category 2, Rural Community Nodes and Rural remainder (Bawnboy, Crossdoney, Crosskeys, Dowra, Kilcogy, Mounnugent, Redhills and Stradone).

In the 2016 Census the total population of Cavan Town was identified as being 10,914 persons (6.9% increase since the previous Census). Cavan Town is identified as 'Key Town' by the Northern and Western RSES 2020-2032. Cavan Town is a key population and employment centre for the surrounding hinterland (largest town within the Cavan/Monaghan/Leitrim sub-region) and provides important inter-regional links to the north and east.

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

- Increase in demand for wastewater treatment at the municipal level;
- Recreational and development pressure on habitats and landscapes;
- Increase in demand for water supply and associated potential impact of water abstraction from the rivers;
- Potential interactions in flood-sensitive areas; and

There are a number of settlements located along and near the County border with Northern Ireland, including: Blacklion; Swanlinbar; Ballyconnell; and Belturbet.

4.7.2 Human Health

Human health has the potential to be impacted upon by environmental vectors (i.e. 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.

4.7.3 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 4.9.8).

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 for long periods or at high concentrations can lead to lung cancer. The number of homes within the County with radon levels above the reference level is within the normal range experienced in other locations across the country³⁰.

Information on the status of groundwaters and surface waters is provided under Section 4.9 while compliance issues in relation to water services are detailed under Section 4.11.10.

²⁹ Draft Plan Core Strategy Chapter

³⁰ Mapping available at <http://www.epa.ie/radiation/radonmap>

4.8 Soil

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 a 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 and 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. Although a proposal for a Soil Framework Directive was withdrawn in 2014, the importance of sustainable soil management was recognised in the Seventh Environment Action Programme.

Surface water gleys³¹ and brown earths³² are the two most dominant soil types across the County (as shown on Figure 4.8). Soil types within Cavan Town and Environs are also mapped on Map 5 in Appendix III.

Peat soils occur in the upland locations in the north-west and in other areas throughout the rest of the County. Peatlands are unique systems comprising of peat soil providing as significant carbon stores and supporting a range of unique species. Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive. Ombrotrophic (rain-fed) and minerotrophic (groundwater fed) peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues. Many of these peat areas are also subject to ecological designations (see Figure 4.1). Other

soil types identified within the County (mapped on Figure 4.8) include:

- Luvisols³³ (mainly throughout the centre and south-east parts of the County);
- Alluvial soils³⁴ (in the flood plains of rivers and streams);
- Podzol³⁵ (mainly in the south-east area of the County).

The GSI (Geological Survey of Ireland) have a suite of data sources available that would be useful in planning and assessing individual projects with regard to the environmental topic(s) of soil and/or material assets. These include:

- Aggregate Potential Mapping;
- Bedrock mapping;
- Quaternary and Physiographic mapping;
- National Aquifer and Recharge mapping;
- Geochemistry datasets; and
- Physiographic mapping.

4.8.1 Geological Sites

Geological Survey of Ireland coordinates the Irish Geological Heritage Programme, which seeks to identify and select sites of geological interest within each county across the country. The audit of County Geological Sites in County Cavan (completed in 2013) identified 28 County Geological Sites (as mapped on Figure 4.11)³⁶. County Geological Sites within County Cavan and neighbouring counties³⁷ are shown on Figure 4.9 and listed on Table 4.1 below.

Table 4.1 County Geological Sites

County Geological Sites	
Site Code	Site Name
CN001	Blackwater Valley
CN002	Bruse Hill
CN003	Bruse Hill Quarry
CN004	Carrickallen Quarry
CN005	Cormeen Quarry
CN006	Crossdoney Granite Quarry
CN007	Cuilcagh Meltwater Channels
CN008	Cuilcagh Mountain
CN009	Drumcarban
CN010	Dromod Spa Well
CN011	Kill
CN012	Lough Kinale - Lough Sheelin Deltas
CN013	Mid-Cavan Drumlinised Ribbed Moraines
CN014	Moneycass Glebe
CN015	Pollprughlisk
CN016	Redhills
CN017	Rockcorry - Cootehill Ribbed Moraines

³¹ Wetland soils with slowly permeable horizons resulting in seasonal waterlogging.

³² Well drained mineral soils, associated with high levels of natural fertility.

³³ Generally fertile, widely used for agriculture and associated with significant accumulation of clay.

³⁴ These are associated with alluvial (clay, silt or sand) river deposits.

³⁵ Infertile acidic soils with an ash-like subsurface layer associated with acid leaching typically formed under coniferous forest.

³⁶ Individual audited site reports for County Cavan are available from the GSI (www.gsi.ie).

³⁷ County Geological Sites in the neighbouring counties, which straddle County Cavan boundaries have been also considered by the assessment.

County Geological Sites	
CN018	Scotshouse - Redhills Cross-Cutting Ribbed Moraines
CN019	Swanlinbar River
CN020	Tullydermot Falls
CN021	Burren Forest
CN022	Corratirrim
CN023	Garvagh Lough
CN024	Legeelan Quarry
CN025	Pollnaowen
CN026	Shannon Pot
CN027	White Father's Caves
CN028	Western Cuilcagh

4.8.2 UNESCO Global Geopark

United Nations Educational, Scientific and Cultural Organisation (UNESCO) Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance, managed with a holistic concept of protection, education and sustainable development. They strive to raise awareness of geodiversity and promote protection, education and tourism best practices.

The Marble Arch Caves UNESCO Global Geopark³⁸ (mapped on Figure 4.10) is partially located within County Cavan and County Fermanagh in Northern Ireland. The Marble Arch Caves UNESCO Global Geopark consists of a system of caves, cliffs, rocky outcrops, upland blanket bogs, rolling drumlins and flooded hollows, which are joined together by the lake systems of Erne, MacNea and Oughter.

Whilst Global Geopark is not a legislative designation, the key heritage sites within a Geopark must be protected under local, regional and national legislation as appropriate.

4.8.3 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 areas across the country, there is potential for contamination at

sites within County Cavan (including Cavan Town and Environs), especially where land uses occurred in the past in the absence of environmental protection legislation. Such contamination has the potential to affect water quality, biodiversity and flora and fauna and human health. Where brownfield redevelopment is proposed, adequate and appropriate investigations are required to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work.

4.8.4 Source Protection Areas

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.

Public Supply Source Protection Areas are managed by Irish Water to supply Public Water Supply Schemes across Ireland. Source Protection Areas provide protection by placing tighter controls on activities within all or part of the zone of contribution of the source.

Groundwater bodies are important water supply sources for private wells, group schemes and local authority supplies and for use in a range of commercial activities. This is particularly the case in rural areas that are not served by public or group water schemes, with private bored wells being the only source of supply.

There are a number of Source Protection Areas in County Cavan, including:

- Public Supply Source Protection Areas
 - Ballyconnell Lough PWS Cuillaghan BHS
 - Ballymachugh PWS
 - Bawnboy PWSS
 - Kingscourt Mullantra PWS
- Group Scheme Preliminary Source Protection Areas
 - Kildallan
 - Templeport

Public Supply Source Protection Areas (including Inner and Outer Protection Areas³⁹)

³⁸ There are currently two other UNESCO Global Geoparks on the island of Ireland: Copper Coast in County Waterford and Burren and Cliffs of Moher in Counties Clare and Galway.

³⁹ The Zone of Contribution is the land area that contributes water to the well or spring. The Inner Protection Area (SI) is designed to protect against the effects of human activities that might have an immediate effect on the source and, in

and Group Scheme Preliminary Source Protection Areas⁴⁰ are shown on Figure 4.11.

4.8.5 Landslides

The term "landslide" describes a wide variety of processes that result in the downward and outward movement of materials such as rock, debris, earth, mud and peat under the force of gravity. Issues such as existing ground conditions, slope stability and storage of excavated material have the potential to influence susceptibility to landslides/bog bursts. The potential impacts of landslides include loss of human life/injury, flooding, pollution of watercourses and impacts upon aquatic biodiversity.

The County has several locations with a history of landslide events⁴¹ (shown on Figure 4.12). Many of these events are associated with the upland peatland areas in the Cuilcagh Mountains.

The GSI have identified that most of the County has relatively low levels of landslide susceptibility, with moderate and high susceptibility found mainly in the upland locations in the County (as shown on Figure 4.12).

4.8.6 Existing Problems

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

particular, against microbial pollution. The Outer Protection Area (SO) is encompassing the remainder of the zone of contribution to the groundwater abstraction point (e.g. borehole or spring).

⁴⁰ The Group Scheme Preliminary Source Protection Areas comprises Zones of Contribution to groundwater abstraction points that supply Group Water Schemes across Ireland that are affiliated to the National Federation of

Group Water Schemes and that supply more than 15 people.

⁴¹ Over 2,500 landslide events are recorded in the National Landslides Database available from GSI (www.gsi.ie). This dataset also includes Landslide Susceptibility Mapping to assist in the identification of areas that are likely to experience land sliding.

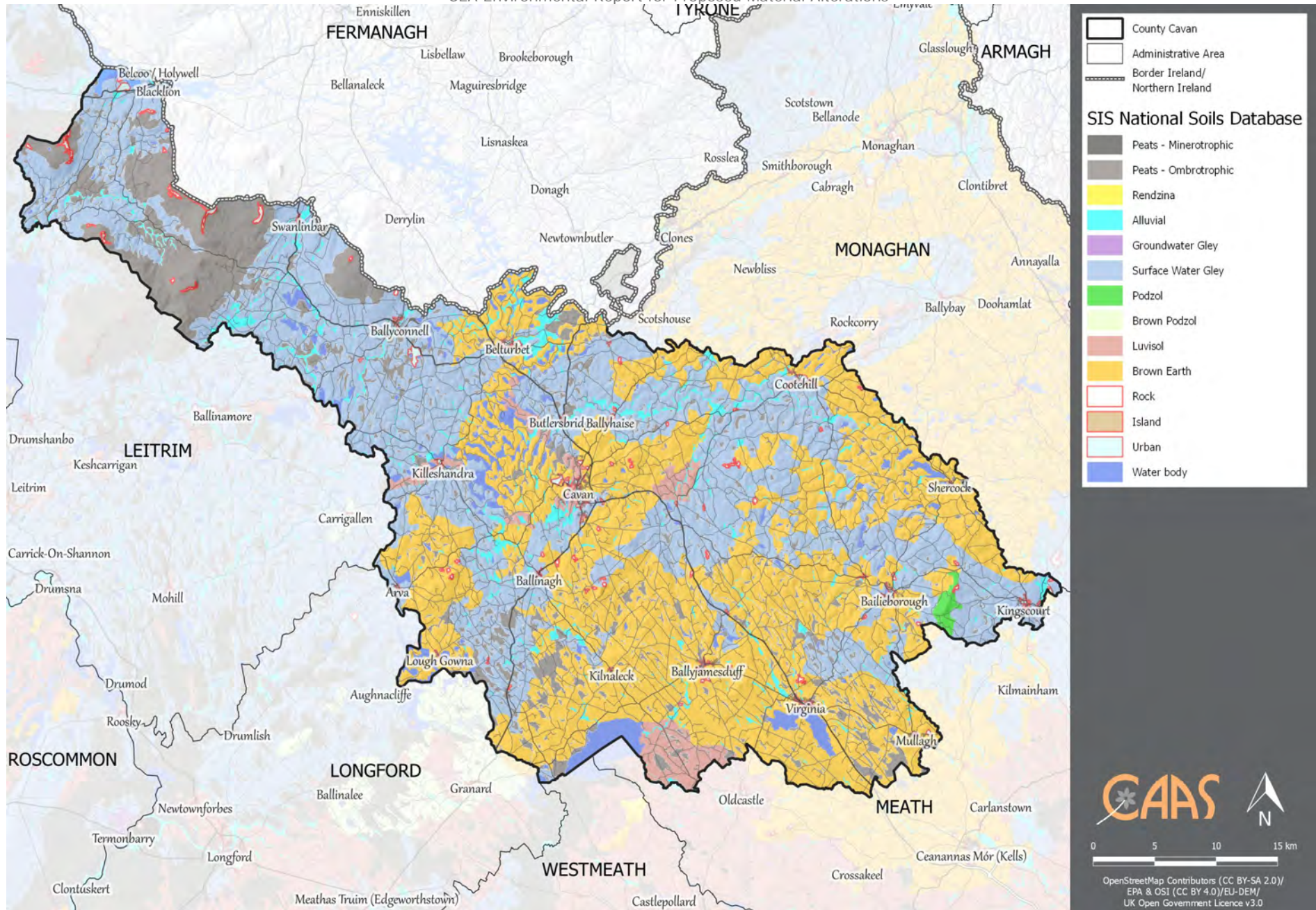


Figure 4.8 Soil Type
CAAS for Cavan County Council

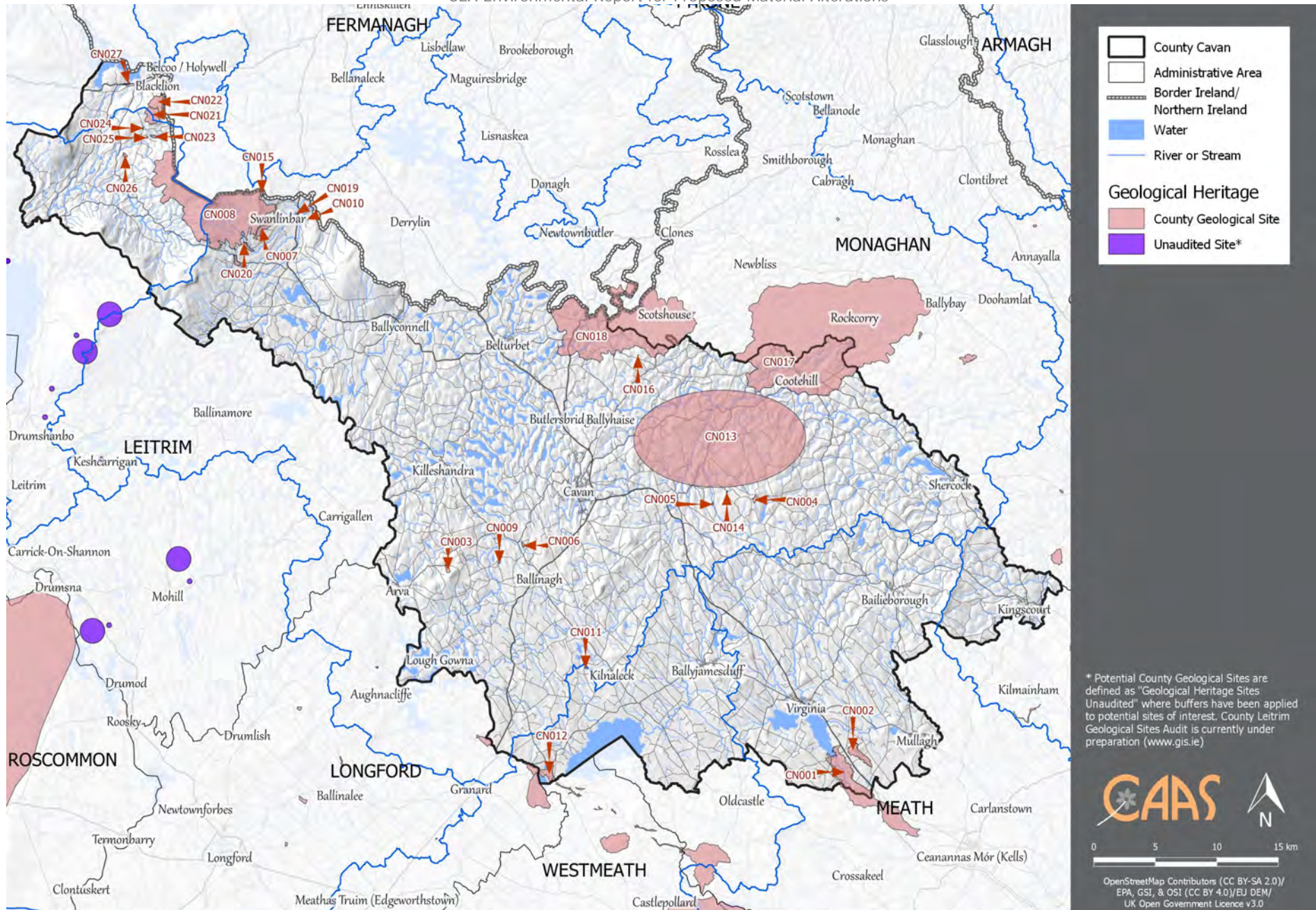
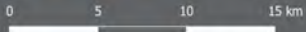


Figure 4.9 County Geological Sites

CAAS for Cavan County Council

* Potential County Geological Sites are defined as "Geological Heritage Sites Unaudited" where buffers have been applied to potential sites of interest. County Leitrim Geological Sites Audit is currently under preparation (www.gis.ie)



OpenStreetMap Contributors (CC BY-SA 2.0) /
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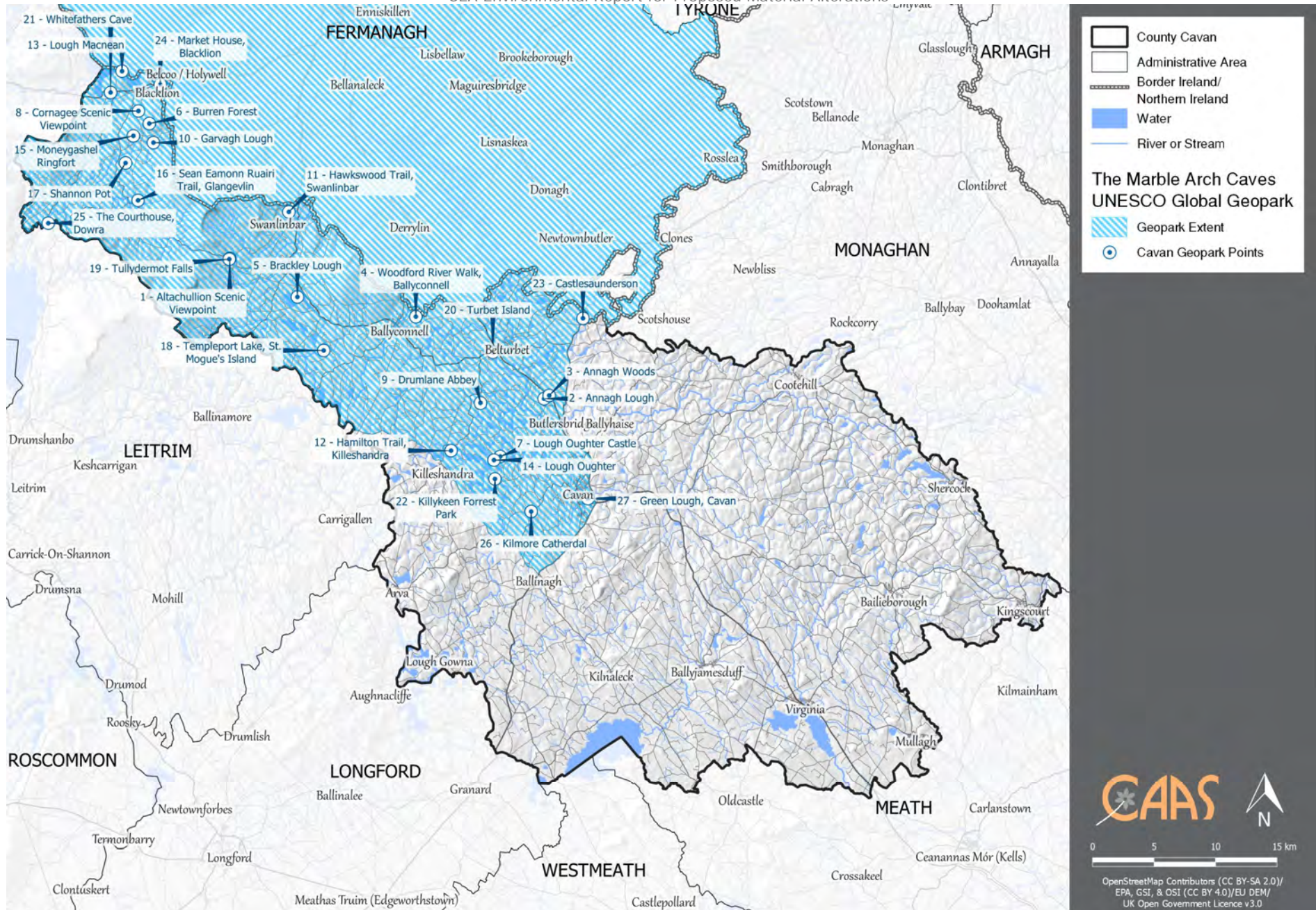


Figure 4.10 UNESCO Global Geopark

CAAS for Cavan County Council

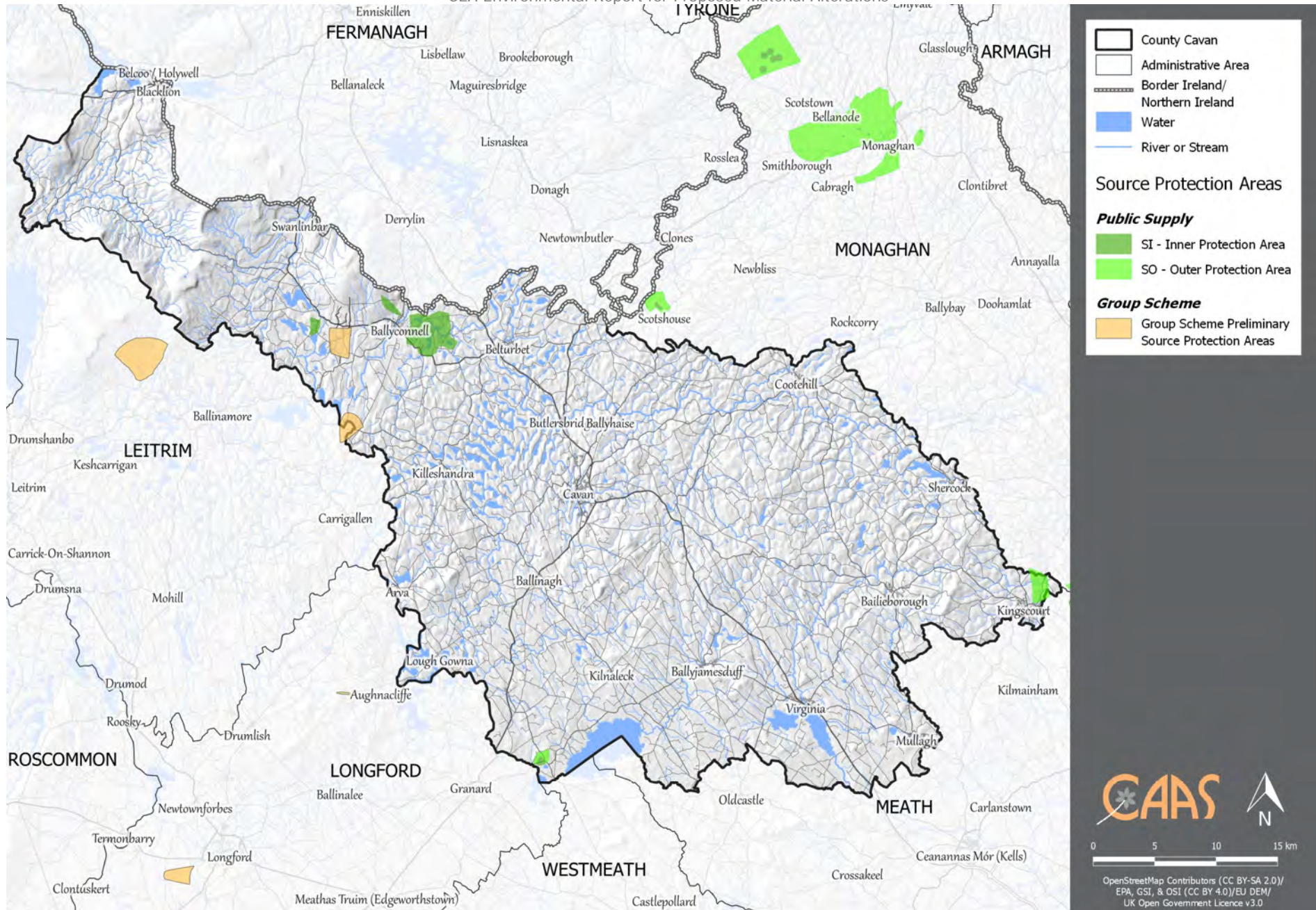


Figure 4.11 Source Protection Areas

CAAS for Cavan County Council

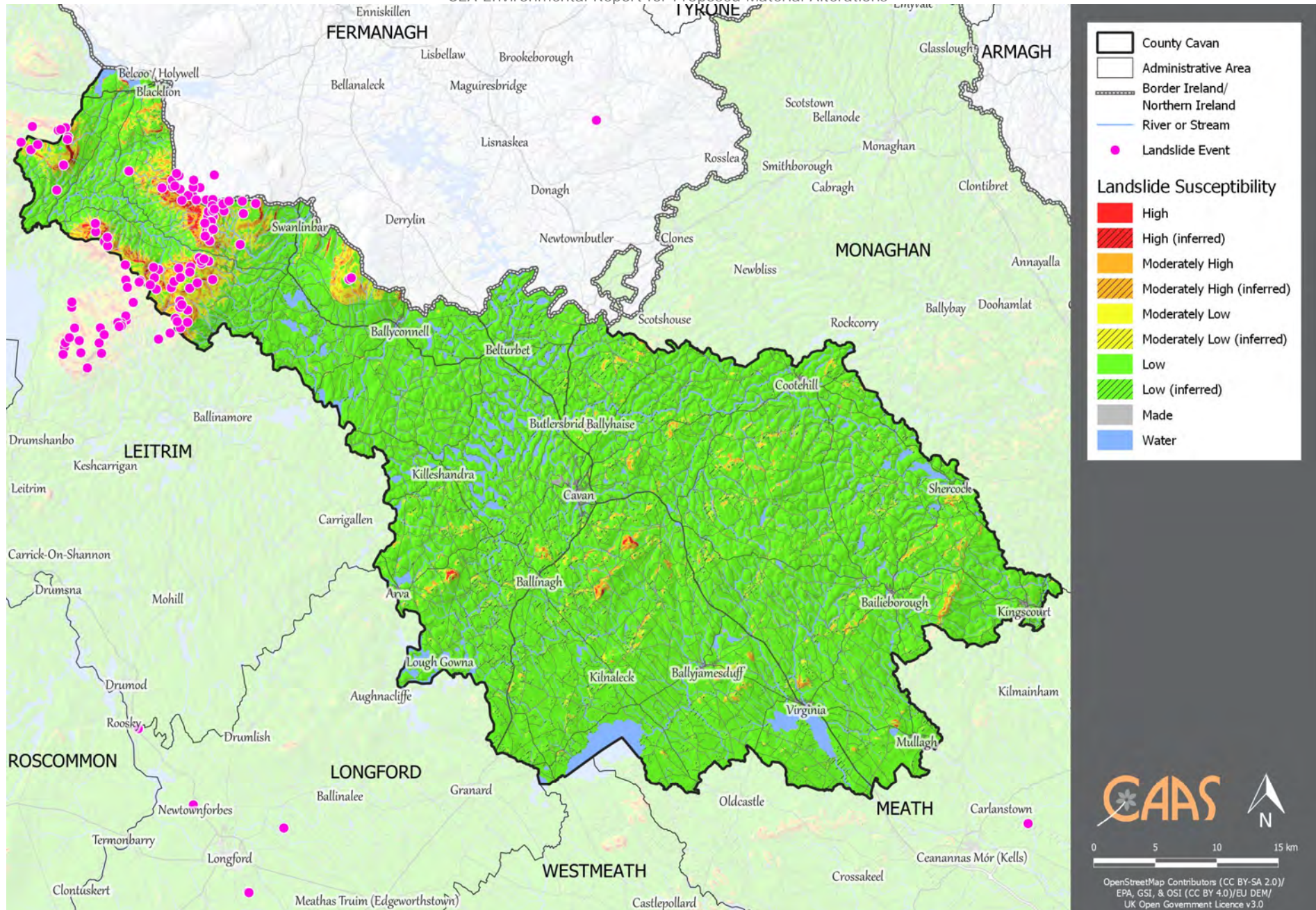


Figure 4.12 Landslide Susceptibility and Previous Landslide Events

CAAS for Cavan County Council

4.9 Water

4.9.1 The Water Framework Directive

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.

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.

The EU's Common Implementation Strategy Guidance Documents No. 20 and 36 provide guidance on exemptions to the environmental objectives of the WFD.

For the purpose of assessment, reporting and management, water is divided into groundwater, rivers, lakes, estuarine waters and coastal waters that are in turn divided into specific, clearly defined water bodies.

The Department of Agriculture, Environment and Rural Affairs (Northern Ireland) publish an annual "Northern Ireland Environmental Statistics Report", which includes information on the status of waterbodies⁴². The 2019⁴³ report identified that:

- In 2018, 31.3% of NI river waterbodies were classified as "high" or "good" quality;

- In 2018, five of the 21 lake waterbodies in Northern Ireland were classified as having a "good" status; and
- In 2018, ten of the 25 marine water bodies around Northern Ireland's shores are classified as 'high' or 'good'.

4.9.2 Zone of Influence

The zone of influence of the Plan beyond the County boundary, with respect to impacts upon waters can be estimated to be all bodies of groundwater and all surface waters downstream areas of catchments which drain the County.

4.9.3 Surface Water Drainage

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.

Most of the County is situated within the Erne catchment (an area drained by the River Erne and all streams entering tidal water between Aughrus Point and Kildoney Point). The County is also partially drained by the catchments: Upper Shannon; Newry/Fane/Glyde/Dee; and Boyne. The main waterbodies in the County include Lough Oughter and the rivers: Upper Boyne; Erne; Shannon; and Dromore/Annalee in the middle of the County.

4.9.4 Surface Water Status

The WFD defines 'overall 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. Thus, in order 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

⁴² WFD data included is not updated each year due to the timescales of the monitoring. <https://www.daera-ni.gov.uk/articles/water-framework-directive-statistics>

⁴³ The 2018 NI WFD statistics report provides the most recent WFD assessment for all water bodies. The Lake Quality update 2020 is provided for lake water bodies only: <https://www.daera-ni.gov.uk>.

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.

The WFD surface water status (2013-2018), for rivers and lakes within and surrounding the County is shown on Figure 4.13 and on Table 4.2. The WFD surface water status (2013-2018) of rivers and lakes within Cavan Town and Environs (mapped on Map 6 in Appendix III) ranges from *good* (including River Annalee) to *moderate* (including Farnharn Lake) and *poor* (including River Cavan).

The WFD status of river waterbodies in the County is classified as *moderate*, *good* and *high*, however, sections⁴⁴ of rivers (including: Templeport Lake Stream; Rag; Pound; Madreegeel Lough Stream; Mullagh Lough Stream; Moynalty; Mounnugent; Laheen Stream; Inny; Finn; Erne; Dromore; Cullies; Blackwater; and Avaghon) are identified as *poor* due to unsatisfactory ecological/biological and/or physio-chemical status.

The WFD status of lake waterbodies in the County is classified as *moderate* and *good*, however, lake waterbodies (including: Lower Lough Macnean and Corglass) are identified as *bad* and lake waterbodies (including: Tacker; Skeagh Upper; Sillan; Ramo; Oughter South; Macnean Upper; Gowna North; Glasshouse; Erne Upper; Drumkeery; Derrycassan Mid; and Acurry) are identified as *poor* due to unsatisfactory ecological/biological and/or physio-chemical status.

The WFD status of river waterbodies in Northern Ireland⁴⁵ along the border with County Cavan is shown on Figure 4.13 and it ranges from *high* to *good* and *moderate*, however some waterbodies, including Finn River (Wattle Bridge) and Starraghen Tributary, are identified as being *poor*. The WFD status of

relevant lake waterbodies in Northern Ireland, along the border with County Cavan ranges from *bad* (including Lough Macnean Lower) to *poor* (including Lough Macnean Upper). In addition, Upper Lough Erne is identified as being of *Poor Ecological Potential*.

Significant pressures, those pressures which need to be addressed in order to improve water quality, have been identified for waterbodies that are 'At Risk' of not meeting their water quality objectives under the WFD. Significant pressures⁴⁶ for surface water bodies within or adjacent to County Cavan are identified on Table 4.2. There are various types of pressures identified, such as:

- **Agricultural pressures** - can include issues related to farming including loss of excess nutrients and sediment loss to surface waters from diffuse sources such as spreading of fertilisers and manures. Excess phosphorous and sediment are typically issues for rivers and lakes, and too much nitrogen is the main issue for estuaries and coastal waters.
- **Urban run-off pressures** - can include leaking sewers and run-off from paved and unpaved areas and misconnections where private foul connections are connected to storm sewers instead of the foul sewer network.
- **Urban wastewater pressures** - can include direct discharge of nutrients from urban wastewater treatment plants and discharge from combined storm overflows or storm water overflows. Discharges of elevated concentrations of phosphorus, ammonium and nitrogen impact on the ecology of surface waters.
- **Hydromorphological and anthropogenic pressures** are identified together in many instances. Hydromorphological pressures can include: modifications to the physical habitat conditions or the natural functioning of a waterbody which can impact on ecology, caused by dredging and straightening of rivers (chanellisation), land drainage or hard infrastructure such as dams, weirs, culverts or other obstructions. Anthropogenic pressures can include: water abstractions; invasive species; agriculture; use of fertilizers, manures and pesticides; animal husbandry activities; inefficient irrigation practices; deforestation of woods; aquaculture; pollution due to industrial effluents and domestic sewage; mining; and recreational activities.
- **Industrial pressures** - can include discharges and emissions from industrial and commercial facilities.
- **Extractive industry related pressures** - can include different activities that lead to the extraction of raw materials from the earth, such as oil, metals, mineral and aggregates. Impacts from extractive sites include sediment/siltation pollution and alteration to the physical environment.

⁴⁴ As per EPA classification system (gis.epa.ie/EPAMaps)

⁴⁵ Mapping available at: <https://gis.daera-ni.gov.uk>

⁴⁶ EPA (2019): Report on Water Quality in Ireland 2013-2018

- **Forestry pressures** - can include poorly managed and inappropriately sited forest operations, negatively impact on water quality and aquatic habitats and species. The most common water quality problems arising from forestry relate to the release of sediment and nutrients and the impacts from acidification. Forestry may also give rise to changes in stream flow regimes caused by associated land drainage.
- **Domestic wastewater pressures** – can include septic-tank systems associated with one-off housing and small unlicensed private urban waste-water treatment plants. If not correctly installed and well maintained, these systems can result in leakage of untreated effluent to waters.
- **Invasive species pressures** - can include those relating to non-native species introduced outside their natural range that threaten ecosystems, habitats and native species with environmental or socio-economic harm. Currently 37 species have been identified across the EU as a high priority for management, and nine of these occur in Ireland. The potential impacts of IAS include the alteration of eco-systems (by causing bank erosion, for example), inhibition of access to water bodies, hindrance of land development and, in some cases, potential human health impacts.

4.9.5 Ground Water

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.

For groundwater bodies, the approach to classification is different from 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 WFD status (2013-2018) of groundwater underlying the entire County (including Cavan Town and Environs) is identified as being of *good* status (as shown on Figure 4.14).

The “Northern Ireland Water Framework Directive Groundwater Status Update 2020

Statistics” report contains summary information on the status of groundwater for the three River Basin Districts in Northern Ireland based on 2015-2019 data. The report identifies that out of 75 Northern Ireland groundwater bodies 63 are of *good* and 12 of *poor* status.⁴⁷

4.9.6 Aquifer Vulnerability and Productivity

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

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The vulnerability of aquifers underlying the County are mapped on Figure 4.15 (and on Map 7 in Appendix III for Cavan Town and Environs) and is generally classified as being of:

- *Extreme, high, moderate and low vulnerability*, in most of the County (including Cavan Town and Environs); and
- *Extreme (rock at or near surface or karst)*, in other locations, throughout the County (including Cavan Town and Environs).

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 and is mapped on. Productivity (mapped on Figure 4.16) within the County (including Cavan Town and Environs) is generally classified as being:

- *Poor aquifer bedrock which is generally unproductive except for local zones;*
- *Locally important aquifer bedrock which is moderately productive only in local zones;*
- *Regionally important aquifer karstified (conduit);*
- *Locally important aquifer bedrock which is generally moderately productive;*
- *Regionally important aquifer fissured bedrock;*
- *Poor aquifer bedrock which is generally unproductive; and*
- *Regionally important aquifer karstified (diffuse).*

The Geological Survey of Northern Ireland (GSNI) provides regional groundwater aquifer and vulnerability classification for Northern Ireland. More detail on groundwater vulnerability (Figure 4.15) and groundwater resources (Figure 4.16) for Northern Ireland are available from the Geological Survey of Northern Ireland’s (GSNI) GeoIndex.⁴⁸

⁴⁷ <https://www.daera-ni.gov.uk>

⁴⁸ https://mapapps2.bgs.ac.uk/GSNI_Geoindex/home.html

Table 4.2 WFD River and Lake Waterbodies Status⁴⁹

Waterbody Name (EPA Identification Code) ⁵⁰	Waterbody Type	WFD Surface Waterbody Status (2013 -2018) ⁵¹
Lower Lough Macnean	Lake	Bad - due to poor ecological/biological status. This waterbody is also identified as being under pressure from urban wastewater sources.
Corglass	Lake	Bad - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Templeport Lake Stream_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Rag (Cavan)_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Pound (Mountnugent)_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and industrial sources.
Nadreegeel Lough Stream_020	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and domestic wastewater sources.
Mullagh Lough Stream_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from urban wastewater sources.
Moynalty_040	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural, industrial and urban wastewater sources.
Moynalty_030	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and industrial sources.
Moynalty_020	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Mountnugent_020	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and urban wastewater sources.
Laheen Stream_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from forestry and hydromorphological/anthropogenic sources.
Inny_040	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Finn (Monaghan)_050	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and urban wastewater sources.
Erne_030	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Dromore_070	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and urban wastewater sources.
Dromore_060	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Cullies_050	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from industrial and urban wastewater sources.
Cullies_040	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Cullies_030	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Cavan_020	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Cavan_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Blackwater (Kells)_050	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Blackwater (Kells)_030	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Blackwater (Kells)_020	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Avaghon Lake Stream_010	River	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from hydromorphological/anthropogenic sources.
Tacker	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Skeagh Upper	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and domestic wastewater sources.
Sillan	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural, industrial, invasive species and urban wastewater sources.
Ramor	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural, industrial, invasive species and urban wastewater sources.

⁴⁹ Source: <https://gis.epa.ie/EPAMaps/> and <https://gis.epa.ie/EPAMaps/Water>

⁵⁰ The number at the end of each river water body name indicates where the waterbody is located along the main river channel. For example, the waterbody at the source is coded '_010', the next waterbody downstream is coded '_020' and the final waterbody before the river becomes transitional is '_180'.

⁵¹ There is a data gap relating to WFD surface water status data. There are a number of waterbodies within the County with overall status currently not assigned to them and the term '*unassigned status*' applies in respect of these waterbodies. These are not included on Table 4.2.

SEA Environmental Report for Proposed Material Alterations

Waterbody Name (EPA Identification Code) ⁵⁰	Waterbody Type	WFD Surface Waterbody Status (2013 -2018) ⁵¹
Oughter South	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Macnean Upper	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and forestry sources.
Gowna North	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Glasshouse	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and forestry sources.
Erne Upper	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Drumkeery	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and domestic wastewater sources.
Derrycassan Mid	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural sources.
Acurry	Lake	Poor - due to poor ecological/biological status. This waterbody is also identified as being under pressure from agricultural and domestic wastewater sources.
Yellow (Ballinamore)_010	River	Moderate. This waterbody is also identified as being under pressure from forestry sources.
Roo_010	River	Moderate. This waterbody is identified as being under pressure from agricultural and domestic wastewater sources.
Owennayle_020	River	Moderate. No pressures identified.
Owennayle_010	River	Moderate. This waterbody is also identified as being under pressure from forestry sources.
Madabawn Stream_010	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Laragh_010	River	Moderate. No pressures identified.
Kilmainham (Dee)_020	River	Moderate. This waterbody is identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Kilmainham (Dee)_010	River	Moderate. No pressures identified.
Inny_050	River	Moderate. This waterbody is identified as being under pressure from extractive industry sources.
Inny_030	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Erne_090	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Erne_080	River	Moderate. No pressures identified. This waterbody is identified as being under pressure from agricultural sources.
Erne_070	River	Moderate. This waterbody is identified as being under pressure from agricultural and urban wastewater sources.
Erne_040	River	Moderate. This waterbody is identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Erne_020	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Erne_010	River	Moderate. This waterbody is identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Dee_020	River	Moderate. This waterbody is identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Cross Water_010	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Bunnoe_040	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Bunnoe_030	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Blackwater (Newtowngore)_010	River	Moderate. No pressures identified.
Blackwater (Kells)_080	River	Moderate. This waterbody is identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Blackwater (Kells)_070	River	Moderate. This waterbody is identified as being under pressure from hydromorphological/anthropogenic sources.
Blackwater (Kells)_060	River	Moderate. No pressures identified.
Blackwater (Kells)_040	River	Moderate. This waterbody is identified as being under pressure from agricultural and domestic wastewater sources.
Annalee_100	River	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Annalee_020	River	Moderate. This waterbody is identified as being under pressure from agricultural, industrial and urban wastewater sources.
Annalee_010	River	Moderate. No pressures identified.
Nadreegeal	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Mushlin	Lake	Moderate. No pressures identified.
Mill CN	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Kinale	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Gowna South	Lake	Moderate. This waterbody is identified as being under pressure from agricultural and invasive species sources.
Garty	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Farnharn	Lake	Moderate. This waterbody is identified as being under pressure from agricultural and hydromorphological/anthropogenic sources.
Drumore	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.

SEA Environmental Report for Proposed Material Alterations

Waterbody Name (EPA Identification Code) ⁵⁰	Waterbody Type	WFD Surface Waterbody Status (2013 -2018) ⁵¹
Derrybrick	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Cullinaghan	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Bunerky	Lake	Moderate. This waterbody is identified as being under pressure from agricultural and invasive species sources.
Bawn CN	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Atrain	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Ardan	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Annagh	Lake	Moderate. This waterbody is identified as being under pressure from agricultural sources.
Swanlinbar_020	River	Good. No pressures identified.
Stradone_020	River	Good. No pressures identified.
Stradone_010	River	Good. No pressures identified.
Shannon (Upper)_020	River	Good. No pressures identified.
Shannon (Upper)_010	River	Good. No pressures identified.
Rag (Cavan)_020	River	Good. No pressures identified.
Owensallagh_010	River	Good. No pressures identified.
Owenmore (Glangevlin)_010	River	Good. No pressures identified.
Nadreegeel Lough Stream_010	River	Good. No pressures identified.
Moynalty_010	River	Good. No pressures identified.
Mountnugent_040	River	Good. This waterbody is identified as being under pressure from agricultural sources.
Lislea_010	River	Good. No pressures identified.
Laragh_030	River	Good. No pressures identified.
Laragh_020	River	Good. No pressures identified.
Knappagh_040	River	Good. No pressures identified.
Glyde_030	River	Good. No pressures identified.
Glyde_020	River	Good. No pressures identified.
Glyde_010	River	Good. No pressures identified.
Erne_060	River	Good. This waterbody is identified as being under pressure from agricultural sources.
Erne_050	River	Good. No pressures identified.
Dromore_080	River	Good. No pressures identified.
Derradda Stream_010	River	Good. No pressures identified.
Dee_010	River	Good. No pressures identified.
Cullies_020	River	Good. No pressures identified.
Cullies_010	River	Good. This waterbody is identified as being under pressure from agricultural and domestic wastewater sources.
Chapel Lake Stream_010	River	Good. No pressures identified.
Blackwater (Newtowngore)_020	River	Good. No pressures identified.
Blackwater (Kells)_090	River	Good. This waterbody is identified as being under pressure from hydromorphological/anthropogenic sources.
Blackwater (Kells)_010	River	Good. No pressures identified.
Bawnboy_010	River	Good. No pressures identified.
Annalee_090	River	Good. No pressures identified.
Annalee_080	River	Good. No pressures identified.
Annalee_070	River	Good. No pressures identified.
Annalee_060	River	Good. No pressures identified.
Annalee_050	River	Good. No pressures identified.
Annalee_040	River	Good. No pressures identified.
Annalee_030	River	Good. No pressures identified.
Sheelin	Lake	Good. No pressures identified.
Woodford (Cavan)_020	River	High. No pressures identified.
Swanlinbar_010	River	High. No pressures identified.
Bellavally Stream_010	River	High. No pressures identified.

4.9.7 WFD Registers of Protected Areas

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species, for example: Salmonid areas; Special Areas of Conservation (SACs); and Special Protection Areas (SPAs).

Entries to the RPAs within and adjacent to the County include:

- Nutrient Sensitive Areas (shown on Figure 4.17);
- Surface Water and Groundwater⁵² in Nutrient Sensitive Areas (shown on Figure 4.17);
- Groundwater across the entire County is included on the RPA for Groundwater Drinking Water (see Figure 4.18); and
- A number of rivers and lakes in the County are included on the RPA for Drinking Water Rivers and Drinking Water Lakes (see Figure 4.18).

The Cavan River flowing through Cavan Town and Environs is included on the RPA for Nutrient Sensitive Areas as an Urban Waste Water Treatment Directive Sensitive Area (shown on Map 8 in Appendix III).

There are also a number of water dependent habitats in the County which have been listed on RPAs – these relate to designated SACs and SPAs (see Section 4.6.3).

4.9.8 Flooding

Certain areas across the County are at risk of flooding from sources including groundwater,

pluvial⁵³ and fluvial⁵⁴. There are various historic and predictive indicators of flood risk in the County, such as those along the Rivers Dromore, Annalee, Cavan, Fohera and Cloone. Predictive OPW Preliminary Flood Risk Assessment mapping for the County is shown on Figure 4.19⁵⁵, indicating areas likely to be at most risk of flooding.

Two locations in the County were identified by the OPW in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment): Ballyconnell; and Cavan. Predictive OPW Preliminary Flood Risk Assessment mapping for Cavan Town and Environs is shown on Map 9 in Appendix III, indicating areas likely to be at most risk of flooding. Detailed predictive flood risk mapping is now available for these areas.

A Strategic Flood Risk Assessment (SFRA), as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG and OPW, 2009), is being undertaken alongside the preparation of the SEA and the preparation of the Plan. This assessment considers available and emerging information on flood risk indicators.

Flood risk mapping for Northern Ireland is available from Northern Ireland's Department of Infrastructure.

4.9.9 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD, based on available water data, certain surface and groundwater bodies will need improvement in order to comply with the objectives of the WFD.

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

There is historic and predictive evidence of elevated levels of flood risk from fluvial sources at various locations across the County.

⁵² Groundwater bodies that intersect with areas designated as sensitive.

⁵³ Resulting from high intensity rainfall events where run-off volume exceeds capacity of surface water network.

⁵⁴ Watercourse capacity is exceeded or the channel is blocked and excess water spills from the channel onto adjacent floodplains.

⁵⁵ This mapping shows the likelihood of flooding from a number of sources, defined as the percentage probability of a flood occurring in any given year. For example, a 1% Annual Exceedance Probability (AEP) indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 (1%) chance of occurring in any one year.

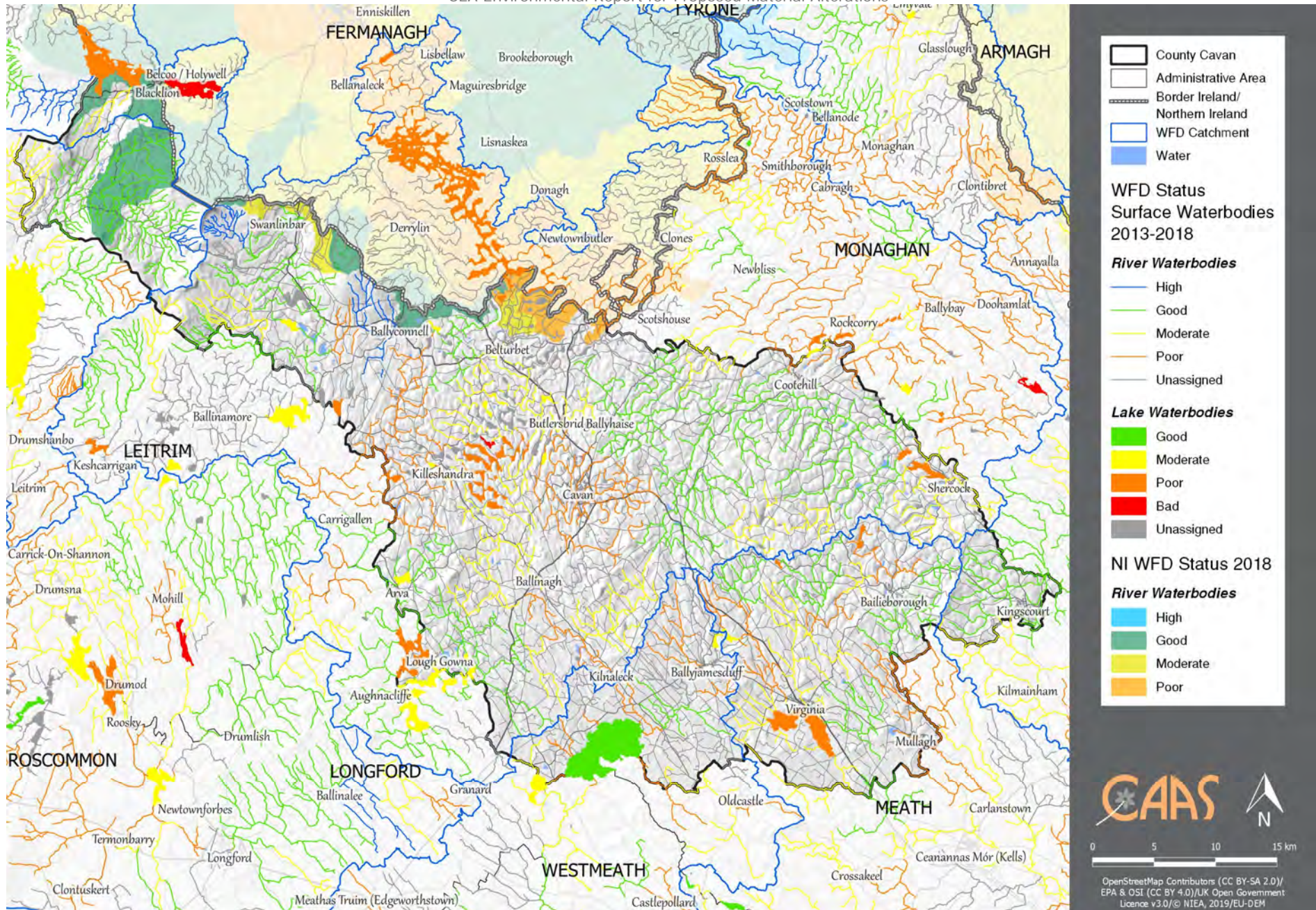


Figure 4.13 WFD Surface Water Status (2013-2018)

CAAS for Cavan County Council

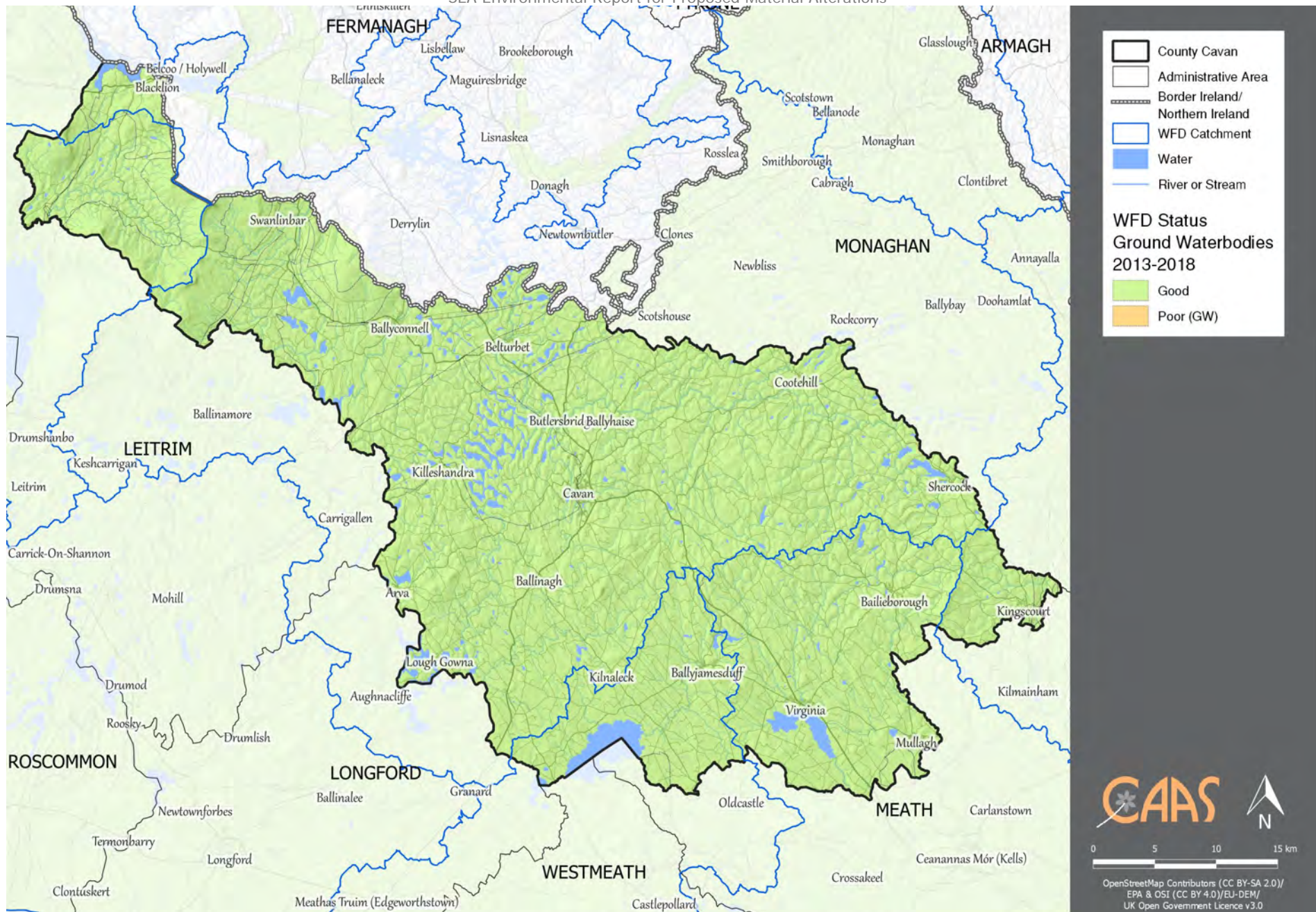


Figure 4.14 WFD Groundwater Status (2013-2018)

CAAS for Cavan County Council

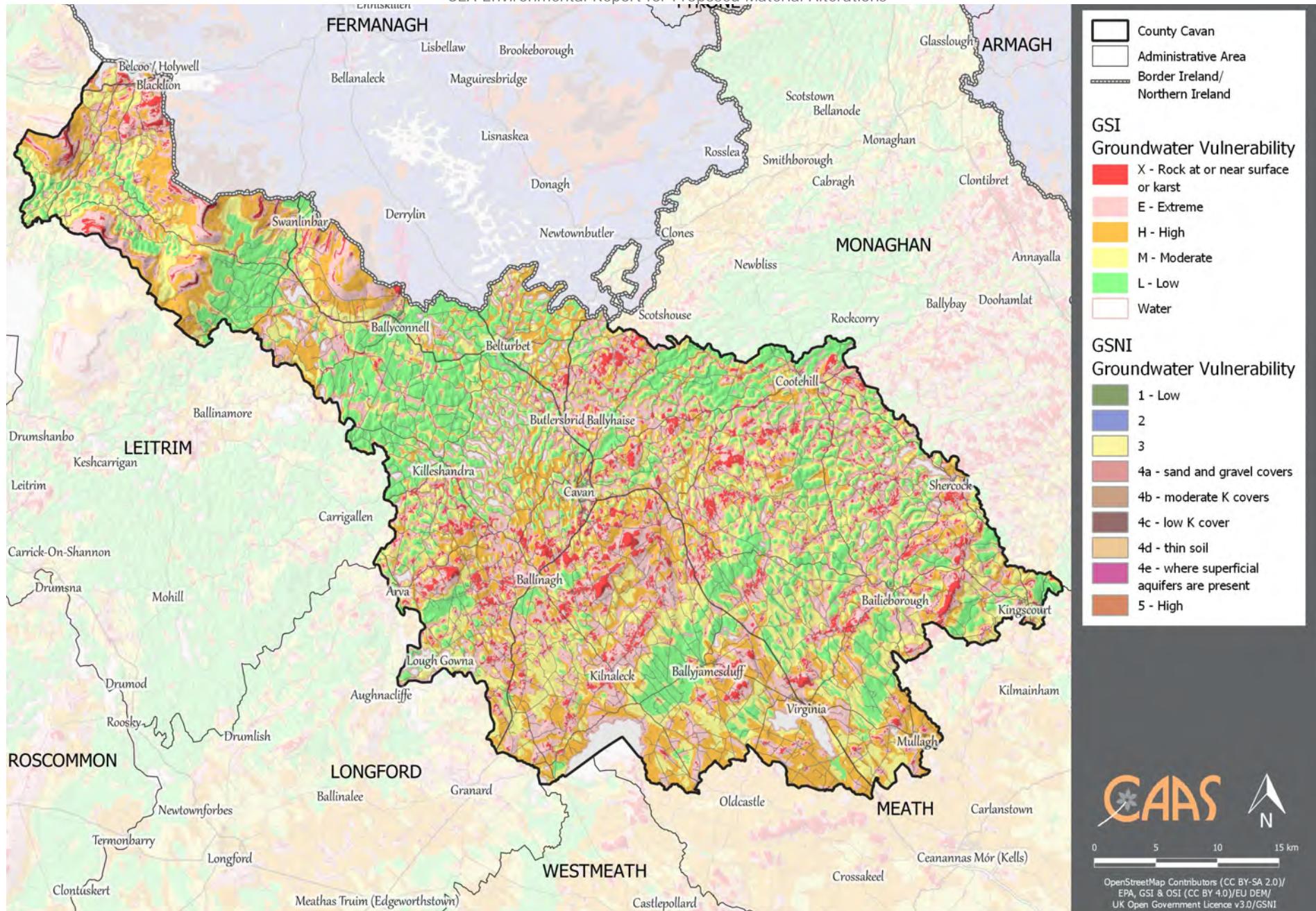


Figure 4.15 Groundwater Vulnerability

CAAS for Cavan County Council

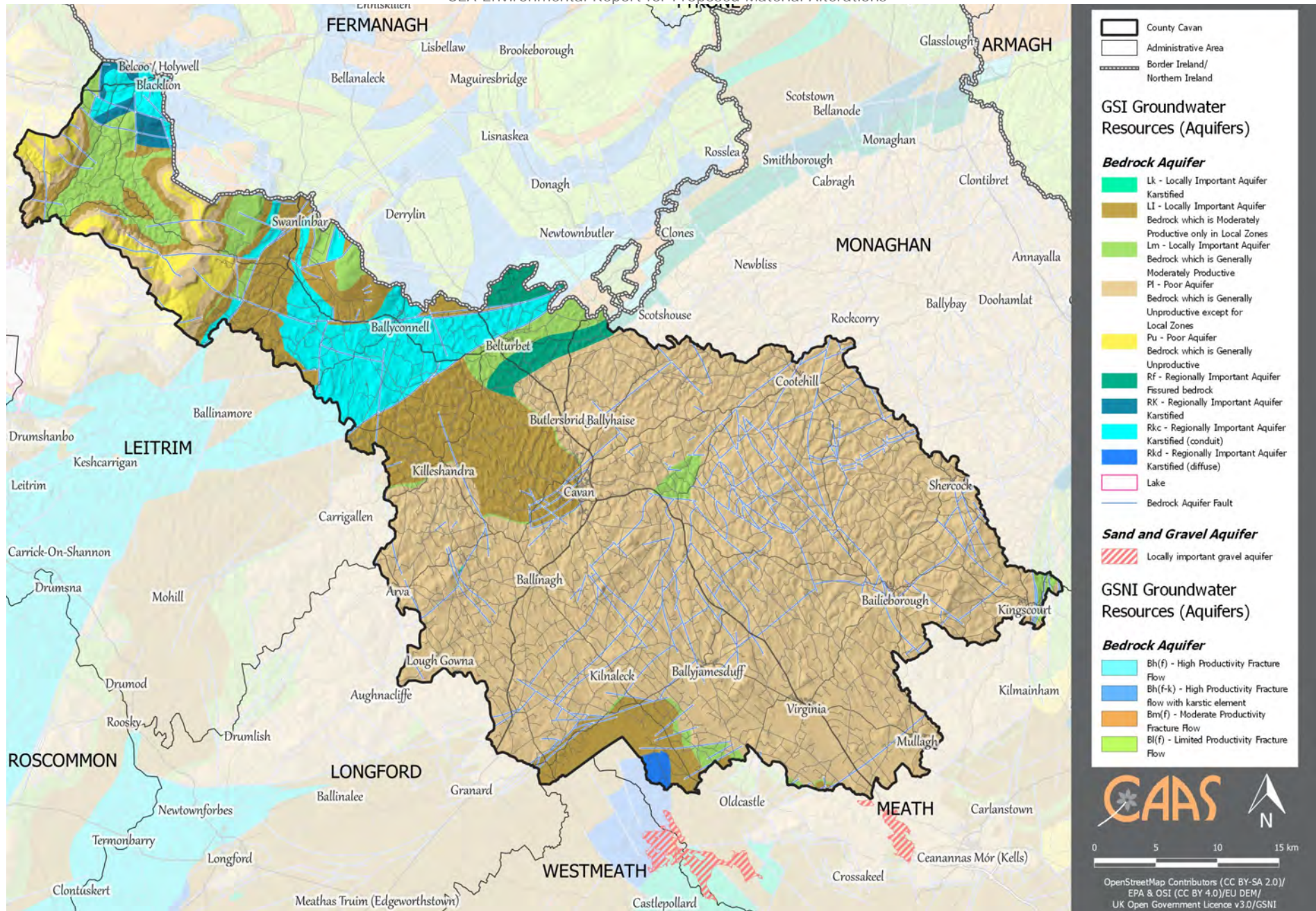


Figure 4.16 Groundwater Productivity

CAAS for Cavan County Council

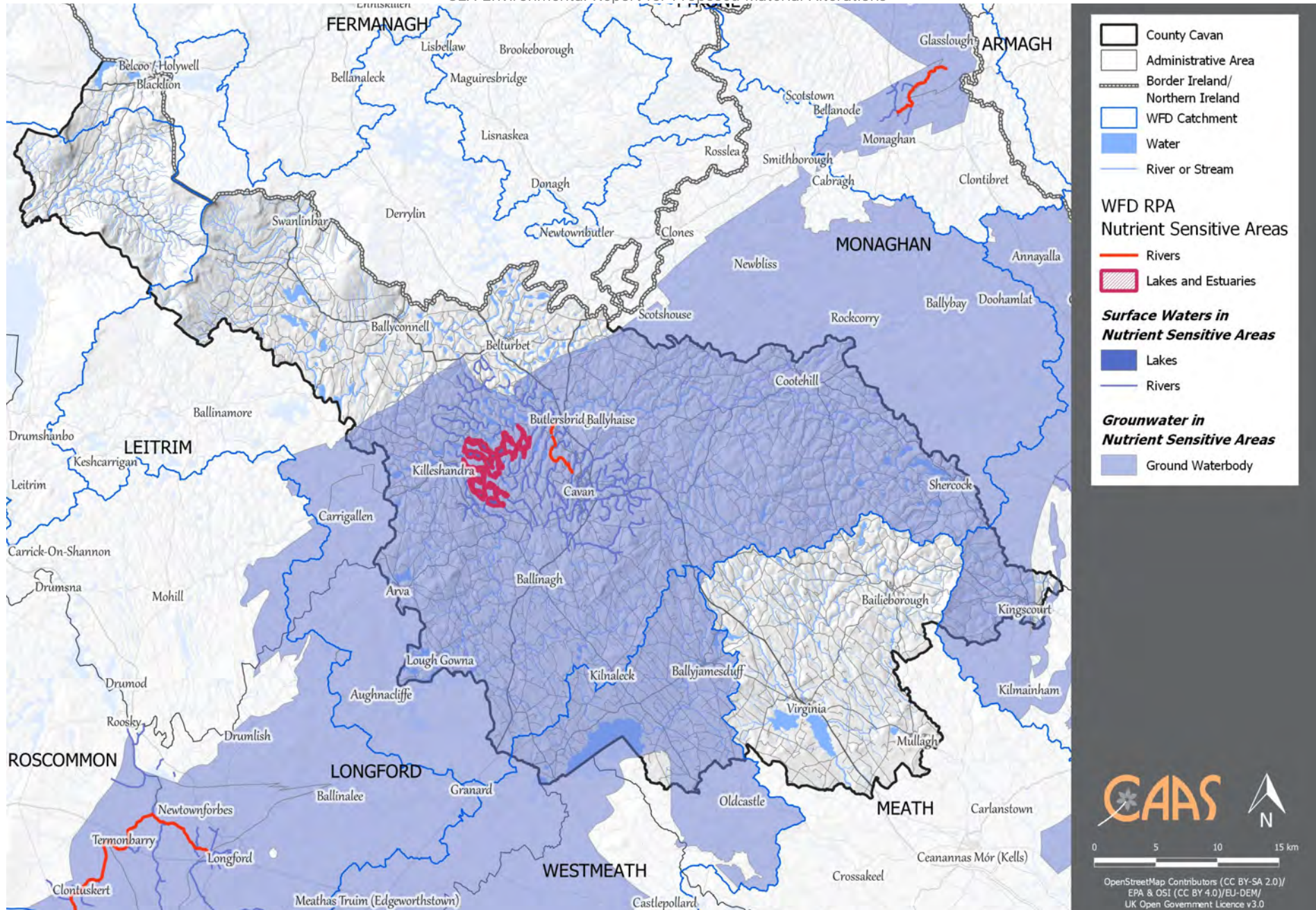


Figure 4.17 WFD Register of Protected Areas Nutrient Sensitive Areas
 CAAS for Cavan County Council

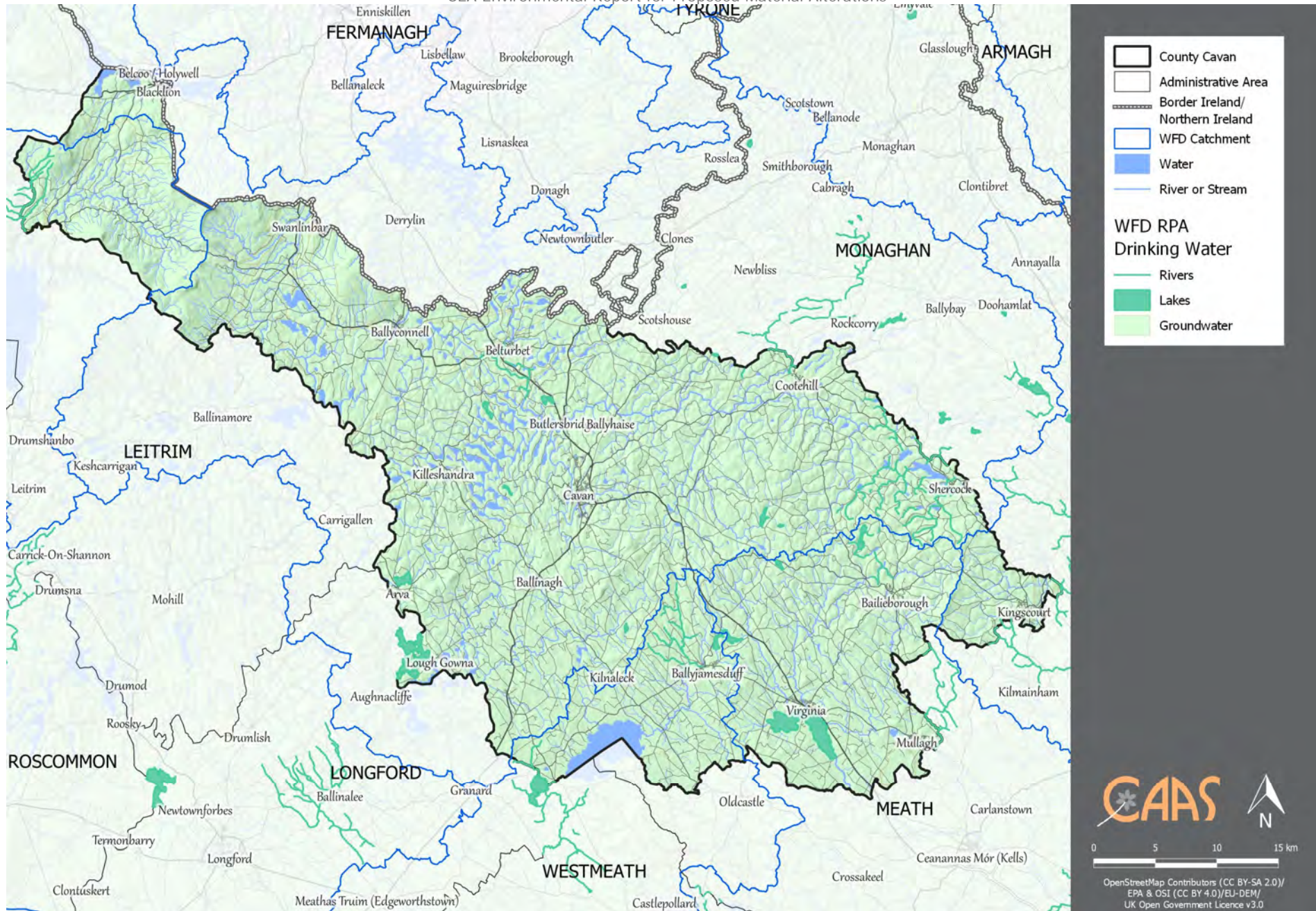


Figure 4.18 WFD Register of Protected Areas Drinking Water

CAAS for Cavan County Council

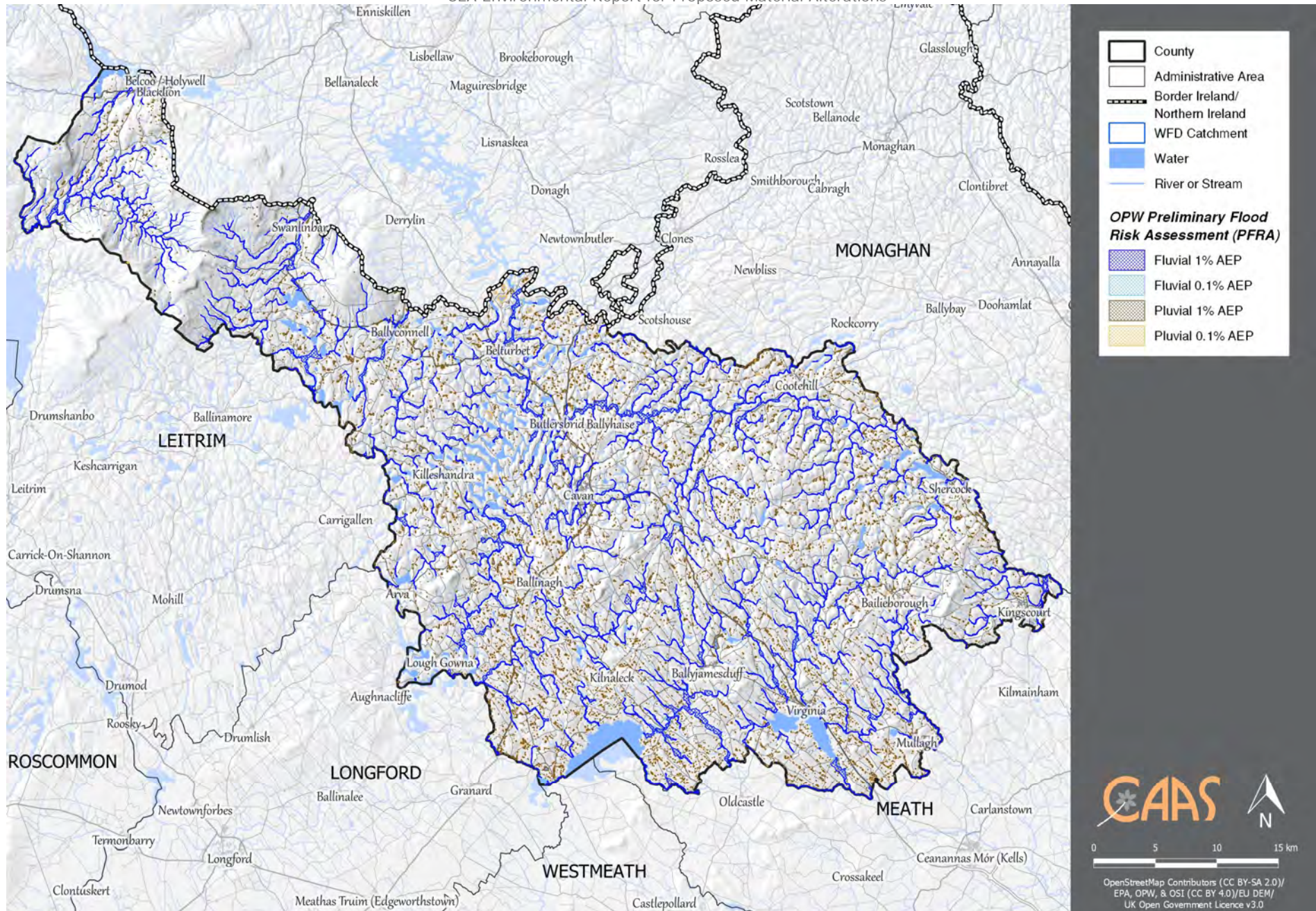


Figure 4.19 OPW Preliminary Flood Risk Assessment (PFRA) Mapping
 CAAS for Cavan County Council

4.10 Air and Climatic Factors

4.10.1 Introduction

Total emissions of greenhouse gases by humans come from various sectors including transport, agriculture, energy industries, manufacturing combustion, industrial processes, residential developments, commercial services developments, waste management processes and fluorinated gases equipment (such as refrigeration and fire protection systems).

Ireland's Provisional Greenhouse Gas Emissions 1990-2017 (EPA, 2018) details provisional estimates of greenhouse gas emissions for the period 1990-2017. For 2017, total national greenhouse gas emissions are estimated to be 60.75 million tonnes carbon dioxide equivalent (Mt CO₂eq). This is 0.9% lower (0.53 Mt CO₂eq) than emissions in 2016.

The report on *Ireland's Final Greenhouse Gas Emissions 1990-2017* (EPA, 2019) identifies that:

- For 2017, the total national GHG emissions are estimated to be 60.74 million tonnes carbon dioxide equivalent (Mt CO₂eq), 0.9% lower than 2016.
- In the last 3 years, national total emissions have increased by 6.4%. In the same period, emissions in the ETS⁵⁶ sector have increased by 5.9%.
- Agriculture emissions increased by 2.9% in 2017 (driven by higher dairy cow numbers and increases in milk production).
- GHG emissions from the Transport sector decreased by 2.4% in 2017. This is the first year of decreased emissions after four successive years of increases in transport emissions.
- Agriculture and Transport accounted for 73.5% of total ESD emissions in 2017.
- Emissions in the Energy Industries sector show a decrease of 6.9% which is attributable to a 5.9% decrease in fossil fuel consumption and an increase of 21.1% and 1.6% in electricity generated from wind and hydro, respectively, in 2017. Renewables now account for 30.1% of electricity generated in 2017, an increase of 3.3% from 2016 figures. Ireland continued to be a net exporter of electricity in 2017. However, exported electricity saw a 4.7% reduction in 2017 to previous 2016 figures.

- Emissions from the Manufacturing Combustion⁵⁷ sector increased by 3.1% in 2017.
- The Industrial Processes sector emissions increased by 4.1%, mainly from increased cement production. Cement process emissions increased by 2.6% in 2017.
- GHG emissions from the Residential sector decreased by 5.0%. This can be attributed to a milder winter.
- Emissions from the Waste sector decreased by 2.5% in 2017.

The EPA 2019 publication *Ireland's Greenhouse Gas Emission Projections 2018-2040* provides an assessment of Ireland's total projected greenhouse gas emissions out to 2040 which includes an assessment of progress towards achieving its emission reduction targets out to 2020 and 2030 set under the EU Effort Sharing Decision and Effort Sharing Regulation (Regulation (EU) 2018/842). 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. Ireland's 2030 target under the Effort Sharing Regulation is a 30% reduction of emissions compared to 2005 levels by 2030. There will be binding annual limits over the 2021-2030 period to meet that target. Key Insights identified as part of the report's package of documents are that:

- There is a long-term projected decrease in greenhouse gas emissions as a result of inclusion of new climate mitigation policies and measures that formed part of the 2018-2027 National Development Plan, which was published in 2018. This is evident in the With Additional Measures scenario which assumes full implementation of the programmes, policies and measures included in the National Development Plan.
- Fossil fuels such as coal, peat and gas continue to be key contributors to emissions from the power generation sector. However, a significant reduction in emissions over the longer term is projected as a result of the expansion of renewables (e.g. wind), assumed to reach 41-54% by 2030, with a move away from coal and peat.
- A growth in emissions from the transport sector continues to be projected which is largely attributed to fuel consumption from diesel cars and diesel freight. A decrease in emissions over the longer term, most notably in the With Additional Measures scenario, is largely attributed to assumed accelerated deployment of

⁵⁶ 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.

⁵⁷ Manufacturing Combustion; includes combustion of fuels in Industry and Construction, both in ETS and non-ETS

500,000 electric vehicles and the impact of greater biofuel uptake.

Agriculture emissions are projected to continue to grow steadily over the period which is mainly a result of an increase in animal numbers particularly for the dairy herd.

- The implementation of additional energy efficiency measures included in the National Development Plan will see a significant reduction in emissions in the residential, commercial/public services and manufacturing sectors over the projected period.

4.10.2 Climate Action

The National Climate Action Plan 2021 is an all of Government plan to tackle climate change and bring about a step change in Ireland's climate ambition over the coming years. The plan sets out an ambitious course of action over the coming years to address the diverse and wide-ranging impacts climate disruption is having on Ireland's environment, society, economic and natural resources. The Climate Action Plan sets out clear 2030 targets for each sector with the ultimate objective of achieving a transition to a competitive, low-carbon, climate-resilient, and environmentally sustainable society and economy by 2050. The Action Plan deals with both mitigation and adaptation.

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.

The use of alternative fuels, including electricity, forms a significant part of government policy to reduce emissions, including from transport. Greater use of alternative fuels, including renewable energy, has the potential to further contribute towards energy security.

The 2019 emission projections do not consider the impact of new policies and measures that are included in the Government Climate Plan. It is anticipated that future emission projections will include the additional impact of the Government Climate Plan.

The Climate Change Advisory Council's Annual Review 2020 identifies that the most recent projections demonstrate that, under different assumptions, Ireland will not meet its emissions reduction targets, even with the additional policies and measures included in the 2018-

2027 National Development Plan (superseded in 2021). The projections also show that progress on reducing emissions is sensitive to the future path of fuel prices. A significant and sustained rate of emissions reduction of approximately -2.5% per year is required to meet our objectives for 2050. It is noted that additional measures within the recent Climate Action Plan are not included.

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.

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.

The Cavan County Council Climate Change Adaptation Strategy 2019-2024 seeks to:

- Ensure a proper comprehension of the key risks and vulnerabilities of climate change;
- Bring forward the implementation of climate resilient actions in a planned and proactive manner; and
- Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of the local authority.

4.10.3 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 EPA's (2020) Air Quality in Ireland 2019 identifies that:

- Air quality in Ireland is generally good however there are localised issues;
- Nitrogen dioxide (NO₂) from transport emissions is polluting urban areas; and
- Ireland was above World Health Organization air quality guideline value levels at 33 monitoring sites – mostly due to the burning of solid fuel within settlements across the country.

Problem pollutants identified by the EPA include particulate matter from burning of solid fuel and nitrogen dioxide from transport emissions in urban areas. Indications that Ireland will exceed EU limit values for nitrogen dioxide in the near future.

With regard to solutions, the report identifies that:

- To tackle the problem of particulate matter, clean ways of heating homes and improve energy efficiency of homes can be progressed; and
- To reduce the impact of nitrogen dioxide, transport options in the Government's Climate Action Plan can be implemented and transport choices can be considered by individuals.

In order to comply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of atmospheric pollutants at locations across the country. The current⁵⁸ air quality within the County is identified by the EPA as being *good*.

4.10.4 Noise

Cavan County Council has prepared a Noise Action Plan 2019-2022 in accordance with the requirements of the Environmental Noise Regulations 2006. The purpose of the Noise Action Plan is to avoid, prevent and reduce, on a prioritised basis the harmful effects, including annoyance due to the long-term exposure to environmental noise.

4.10.5 Existing Problems

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

4.11 Material Assets

Other material assets, in addition to those detailed below, covered by the SEA include archaeological and architectural heritage (see Section 4.12) natural resources of economic value, such as water and air (see Sections 4.9 and 4.10).

4.11.1 Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the Plan, if unmitigated, include; settlements; resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.); forestry; and natural resources that are covered under other topics such as water and soil.

4.11.2 Green Infrastructure

Parks and open space promote health and well-being, provide recreational facilities and range of habitats for various species. Green infrastructure is also a crucial component in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality.

4.11.3 Land

The Plan seeks to assist with the reuse and regeneration of brownfield sites thereby contributing towards sustainable mobility and reducing the need to develop greenfield lands and associated potential adverse environmental effects. Brownfield lands are generally located within urban/suburban areas.

⁵⁸ 17/03/2021 (<http://www.epa.ie/air/quality/>)

4.11.4 Agriculture

Much of the land throughout the County is used for agriculture, as indicated by the agricultural related land cover types shown on Figure 4.4. Agriculture is a strong employer and a significant source of economic activity in the County. It contributes to exports and provides the raw materials for the food processing industry.

4.11.5 Forestry

Various extents and types of forestry exist across the County, as indicated on Figure 4.4. Forests and woodlands are a natural resource which can provide recreational opportunities in addition to their heritage and economic benefits.

4.11.6 Peatlands

Peatlands are a distinctive feature of the Cavan landscape. There are significant peatland areas throughout the County, as indicated on Figure 4.4. These provide a valuable natural and archaeological resource. Peatlands are also important controllers of water levels in river catchments, providing a source of water in dry conditions and soaking up excess water during wetter periods; they actively capture and hold carbon and are an important natural resource in combatting climate change. Cutaway bogs have the potential to facilitate landuses such as employment, renewable energy generation, waste management, industrial, and tourism and recreation. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues; various peatland areas are subject to ecological designations (see Section 4.6).

4.11.7 Renewable Energy Potential

Under EU Directive 2001/77/EC Renewable Energy, renewable energy sources are defined as renewable non-fossil energy sources such as, but not limited to wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas, bio-gases and bio-char (i.e. the thermal treatment of natural organic materials in an oxygen-limited environment). There is potential for renewable energy development in the County and the Plan

seeks to facilitate such development in a sustainable manner.

4.11.8 Minerals and Aggregates

Minerals such as iron and copper and aggregates such as sand and gravel can occur throughout the country. Minerals and aggregates are essential to manufacturing and construction.

Minerals localities within Cavan are shown on Figure 4.20. The GSI have a suite of data sources available that would be useful in planning and assessing individual projects with regard to the environmental topic(s) of soil and/or material assets. These include:

- Aggregate Potential Mapping;
- Bedrock mapping;
- Quaternary and Physiographic mapping; and
- National Aquifer and Recharge mapping.

4.11.9 Transport

Transport infrastructure in the County has the potential to support reductions in energy demand from the transport sector, including through electrification of modes.

County Cavan and its main urban centres are well served by a hierarchy of roads including sections of motorways, national roads, regional roads and local roads. The N3, N16, N54, N55, and N87 national primary routes traverse the County providing important linkages and networks within, into and out of the County. Bus Éireann operate and other private bus services operate on number of routes to the County several times daily.

County Cavan shares the international land border with Northern Ireland and is seen as a 'Gateway' to the Northern and Eastern Regions, providing fundamental connections with other urban centres in these regions. Both regional and local roads provide vital links between the towns and villages to retail, service and employment centres throughout the County and to adjoining counties.

4.11.10 Water Services

4.11.10.1 Wastewater

From January 2014, Irish Water became responsible for all public water services, involving the supply of drinking water and the

collection, treatment and disposal of wastewater. Irish Water is also responsible for the treatment and disposal of the sludge that is generated from both its water and wastewater treatment plants. The Council is an agent of Irish Water for operations and remains the designated Water Authority for the assessment and approval of on-site wastewater treatment systems and is responsible for surface water drainage in the County.

The provision of well-maintained quality wastewater treatment infrastructure is essential to facilitate sustainable development of the County in line with the Settlement and Core Strategy while also protecting the environment and public health. Irish Water is now responsible for the collection, treatment and disposal of wastewater where public wastewater facilities exist in towns and villages. In unserviced areas and outside the main towns and villages, the main method of sewage disposal is by means of individual septic tanks and proprietary wastewater treatment systems.

The EPA's 2020 report '*Urban Waste Water Treatment in 2019*' identified that:

- Wastewater treatment at 19 towns and cities (including Baileborough and Virginia) did not meet European standards for the treatment of urban wastewater in 2019;
- Raw sewage is released into the environment from 35 urban areas;
- Wastewater from 48 areas (including Baileborough, Blacklion and Mullagh) is the main significant pressure on waters at risk of pollution;
- Wastewater contributed to poor quality bathing waters at three beaches in 2019;
- Discharges from 13 areas must improve to protect freshwater pearl mussels;
- Irish Water must complete assessments of the impacts of waste water discharges on 26 shellfish waters to inform the need for any improvements;
- Seven waste water collection systems have been found non-compliant with European Union requirements; and
- There are four urban areas in County Cavan that are listed as Priority Areas (Baileborough, Blacklion, Mullagh and Virginia) where improvements are required to resolve urgent environmental issues with respect to wastewater treatment.

The County is served by 26 Wastewater Treatment Plants (WWTPs) out of which 16⁵⁹ are subject to Wastewater Discharge Licences and 10⁶⁰ are subject to Certificates of Authorisation, issued by The Environmental Protection Agency. Cavan Town and Environs is served by the Cavan Town WWTP, which has a designed capacity of 30,000 PE.

In unserviced areas and outside the main settlements, the main method of sewage disposal is by individual septic tanks and proprietary wastewater treatment systems.

Table 4.3 provides information on wastewater treatment plant performance sourced from the EPA's 2019 Annual Environmental Reports (AERs). These 16 Wastewater Agglomerations are subject to Wastewater Discharge Licences issued by The Environmental Protection Agency. WWTPs non-compliant with the Emission Limit Values (ELVs) set in the Discharge Licences include:

- Cootehill WWTP (D0082-01);
- Cavan Town WWTP (D0020-01);
- Belturbet WWTP (D0084-01);
- Bailieborough WWTP (D0085-01);
- Ballyconnell WWTP (D0253-01);
- Mullagh WWTP (D0252-01);
- Virginia WWTP (D0255-01);
- Blacklion WWTP (D0498-01);
- Ballinagh WWTP (D0501-01);
- Ballyhaise WWTP (D0496-01); and
- Arvagh WWTP (D0497-01).

Irish Water has provided information on wastewater treatment capacity, constraints and projects planned within the County to improve the existing network, to assist the Council in the preparation of the new County Development Plan (shown on Table 4.4). This information indicates where there may be wastewater treatment capacity available to accommodate growth ("headroom") in terms of population equivalent⁶¹ (PE) in areas serviced by a public wastewater treatment plant. Spare treatment capacity is identified as being available in all of these settlements except for Ballyjamesduff and Kingscourt. The highest levels of headroom

⁵⁹ Including: Cavan Town; Cootehill; Kingscourt; Belturbet; Bailieborough; Mullagh; Ballyconnell; Virginia; Ballyjamesduff; Shercock; Ballyhaise; Arvagh; Blacklion; Killeshandra; kilnaleck; and Ballinagh.

⁶⁰ Buttersbridge; Bawnboy; Crosskeys; Dowra; Gowna; Mountnugent; Redhills; Swanlinbar; Stradone; and Kilcogy.

⁶¹ WWTPs are described in terms of their designed treatment capacity, which is generally expressed as

population equivalent (PE). This is a measurement of total organic biodegradable load, including industrial, institutional, commercial and domestic organic load, on a wastewater treatment plant, converted to the equivalent number of PEs. One person is considered to generate 60g of five-day Biochemical Oxygen Demand (BOD) per day. 1 PE is defined as being equivalent to 60g of BOD per day.

(PE) are available at Cavan Town (12,620 PE), Cootehill (2,284 PE) and Belturbet (2, 170 PE).

Cavan County Council will work alongside and facilitate the delivery of Irish Water's Water Capital Investment Plan. This programme includes the following WWTPs in County Cavan: Bailieborough; Ballyjamesduff; Kingscourt; Cootehill; and Virginia. Proposed upgrades include: increase the capacity of the Virginia WWTP to 6,075 PE and an increase of the capacity of the Ballyjamesduff WWTP to 6,600 PE. It is envisaged that similar preliminary design exercises will commence for Cootehill, Bailieborough and Kingscourt throughout 2021.⁶²

Irish Water is responsible for the treatment and disposal of the sludge that is generated from both its water and wastewater treatment plants. Irish Water has prepared a National Wastewater Sludge Management Plan 2016-2021 that outlines Irish Water's strategy to ensure a nationwide standardised approach for managing wastewater sludge over a 25-year period. A separate plan will be prepared in relation to sludge produced at drinking water plants.

4.11.10.2 Water Supply

Irish Water is responsible for providing and maintaining adequate public water supply infrastructure throughout the County.

Public drinking water in County Cavan is supplied through of 16 Public Water Supply (PWS) Schemes supplying drinking water to towns, villages, a number of small rural settlements and rural areas. These include eight Service Level Agreements with Irish Water, one water services contract and seven Group Water Schemes.⁶³ Cavan Town and Environs is supplied by the Cavan Regional Water Supply Scheme (RWSS) with water sourced from the Lough Acanon.

Table 4.5 provides general information on available water supply capacity and constraints in the County. Adequate capacity is available in most of the treatment plants, with no major network constraints identified in the County.

Under Section 58 of the Environmental Protection Agency 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 EPA publishes their results in annual reports that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The most recent available RAL (Q4 of 2020 published in January 2021) identifies four County Cavan drinking water supplies:

- **The Bailieborough Water Supply** is listed on the most recent EPA RAL due to treatment and management issues. This Water Supply Scheme has a supply volume of 2580 m³/day, serving a population of 7785 people. The proposed plan of action to remedy this issue is to upgrade the Water Treatment Plant to be completed by December 2021;
- **The Belturbet Water Supply** is listed on the most recent RAL due to elevated levels of pesticides above the standard in the drinking water regulations. This Water Supply Scheme has a supply volume of 492 m³/day, serving a population of 1926. The proposed plan of action to remedy this issue is to complete catchment-focussed engagement actions involving Irish Water and the relevant stakeholders (as set out in Irish Water's response to EPA Direction) to achieve compliance with the limits for pesticides by December 2020;
- **The Shercock Water Supply** is listed on the most recent EPA RAL due to excessive levels of aluminium in the treated water. This Water Supply Scheme has a supply volume of 217 m³/day, serving a population of 712 people. The proposed plan of action and date of completion to remedy this issue are to be confirmed; and
- **The Dowra Public Water Supply** is listed on the most recent EPA RAL due excessive levels of aluminium in the treated water. This Water Supply Scheme has a supply volume of 28 m³/day, serving a population of 92 people. The proposed plan of action and date of completion to remedy this issue are to be confirmed.

Currently, Irish Water is developing the National Water Resource Plan outlining how to move to a sustainable, secure and reliable public drinking water supply over a 25-year period while safeguarding the environment. It will outline how Irish Water intends to maintain a balance between supply from water sources around the country and demand for drinking water over the short, medium and long term. This will facilitate future planning and ensure provision of sufficient, safe, clean drinking water to facilitate the social and economic growth of the County.

⁶² Information taken from the Draft Plan

⁶³ Information taken from the Draft Plan

It is the policy of the Council to work in conjunction with Irish Water to protect existing water infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new wastewater services infrastructure to facilitate future growth.

4.11.10.3 Surface Water Drainage

Sustainable urban Drainage systems (SuDS) can minimise the quantity and increase the quality of surface water runoff as well as mitigating adverse impacts of climate change. SuDS can also provide amenity and biodiversity benefits. The Council seeks to ensure the sustainable management of surface water discharges in urban areas through the use of SuDS.

4.11.11 Waste Management

The Connacht-Ulster Waste Region comprises nine local authority areas of: Mayo; Galway County; Galway City; Roscommon; Sligo; Leitrim; Donegal; Cavan; and Monaghan.

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. It is underpinned by National and European waste legislation and the work carried out will ensure the continued management of waste in a safe and sustainable manner. The Plan includes three strategic targets:

- 1% reduction per annum in the quantity of household waste generated per capita over the period of the Plan;
- Achieve a recycling rate of 50% of managed Municipal waste by 2020; and
- Reduce to 0% 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.

The Connacht-Ulster Waste Management Plan states that the future role of local authorities in waste management will be focused on education, prevention, and resource efficiency activities as well as regulating householders, businesses and waste operators and enforcing waste legislation. Waste infrastructure provided by local authorities will mainly include bring banks and civic amenities include bring banks and civic amenities.

4.11.12 Existing Problems

There are a number of challenges with respect to the provision of water services infrastructure that are described under Section 4.11 above.

The Water Services Section of Cavan County Council will co-operate with Irish Water in providing and maintaining adequate public water supply and wastewater collection and treatment infrastructure throughout the county for the period of the plan and beyond. In conjunction with Irish Water, the Water Services Section of Cavan County Council will endeavour to ensure the continued investment in and delivery of improvements to water infrastructure over the Plan period through the implementation of the Capital Investment Plan.

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

Table 4.3 Wastewater Treatment Plant Performance

Plant name and Reference	Treatment Provided	Overall Compliance (Pass/Fail)	Parameter Failed	Cause of Exceedances and Significance of Results (Water Quality)	Organic Capacities (PE)		
					As Constructed	Collected Load (peak week)	Remaining
Cootehill D0082-01	Tertiary	Fail	Ammonia-Total (as N) mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in Ammonia, Ortho-Phosphate, concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are unknown. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 	2756	2516	240
Cavan Town D0020-01	Secondary	Fail	Ammonia-Total (as N) mg/l BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in Ammonia, Total N, Total P, concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP 	30000	17380	12620
Kingscourt D0083-01	Tertiary	Pass	N/A	The WWTP is compliant with the Emission Limit Values set in the Wastewater Discharge Licence	2335	2947	0
Belturbet D0084-01	Tertiary	Fail	Ammonia-Total (as N) mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in Ammonia and ortho-phosphate, concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: OSWWTS and agriculture. High dilution in receiving water body. D/s annual means for Ammonia and Ortho-Phosphate higher than u/s annual means however difficult to say whether this is due to the WWTP or not. D/s monitoring location is distance downstream of WWTP. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 	4000	1830	2170
Baillieborough D0085-01	Tertiary	Fail	Ammonia-Total (as N) mg/l BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l ortho-Phosphate (as P) - unspecified mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in Ammonia and ortho-phosphate, concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: OSWWTS and agriculture. High dilution in receiving water body. D/s annual means for Ammonia and Ortho-Phosphate higher than u/s annual means however difficult to say whether this is due to the WWTP or not. D/s monitoring location is distance downstream of WWTP. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 	2500	785	1715

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Plant name and Reference	Treatment Provided	Overall Compliance (Pass/Fail)	Parameter Failed	Cause of Exceedances and Significance of Results (Water Quality)	Organic Capacities (PE)		
					As Constructed	Collected Load (peak week)	Remaining
Ballyconnell D0253-01	Tertiary	Fail	ortho-Phosphate (as P) - unspecified mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. The discharge from the wastewater treatment plant does not have an observable impact on the water quality. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: Agriculture and town effects are likely to be the most significant pressures for this waterbody. Downstream monitoring point is a considerable distance downstream of the WWTP discharge. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 	3000	1693	1307
Mullagh D0252-01	Tertiary	Fail	Suspended Solids mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in Ammonia and ortho-phosphate , concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: unknown pressures. The WWTP discharges into the Mullagh Lough Stream and the upstream monitoring point is on this water body. The Mullagh Lough Stream is a tributary of the Moynalty river and the downstream monitoring location is on the Moynalty river downstream of the confluence. D/s annual means for Ammonia and Ortho-Phosphate were higher than the upstream means however it is difficult to attribute this to the WWTP discharge. The discharge from the wastewater treatment plant does have an observable negative impact on the Water Framework Directive status 	3000	1642	1358
Virginia D0255-01	Tertiary	Fail	BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l Suspended Solids mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in Ammonia and Total Phosphorus , concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: town effects, sewerage network issues, agriculture, licensed facilities and OSWWTS. The receiving water body is a lake (Lough Ramor) making assessment of upstream and downstream monitoring difficult. The discharge from the wastewater treatment plant does have an observable negative impact on the Water Framework Directive status. 	3800	3503	297
Blacklion D0498-01	Tertiary	fail	Ammonia-Total (as N) mg/l Suspended Solids mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. The discharge from the wastewater treatment plant does not have an observable impact on the water quality. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: The receiving water body is a lake (Lower Lough Macnean) making assessment of upstream and downstream monitoring difficult. Other potential 	1025	500	525

SEA Environmental Report for Proposed Material Alterations

Plant name and Reference	Treatment Provided	Overall Compliance (Pass/Fail)	Parameter Failed	Cause of Exceedances and Significance of Results (Water Quality)	Organic Capacities (PE)		
					As Constructed	Collected Load (peak week)	Remaining
				causes of deterioration in water quality may include village effects, agriculture and unknown cross border impacts. <ul style="list-style-type: none"> The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 			
Ballinagh D0501-01	Tertiary	Fail	Ammonia-Total (as N) mg/l BOD, 5 days with Inhibition (Carbonaceous BOD) mg/l COD-Cr mg/l ortho-Phosphate (as P) - unspecified mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in BOD, Ammonia, Ortho-Phosphate, concentrations downstream of the effluent discharge is noted. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: Other pressures for this water body include agriculture. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 	1800	1044	756
Ballyjamesduff D0256-01	Tertiary	Pass	N/A	The WWTP is compliant with the Emission Limit Values set in the Wastewater Discharge Licence.	2200	3265	0
Shercock D0495-01	Tertiary	Pass	N/A	The WWTP is compliant with the Emission Limit Values set in the Wastewater Discharge Licence.	1000	648	352
Ballyhaise D0496-01	Tertiary	Fail	Ammonia-Total (as N) mg/l COD-Cr mg/l Suspended Solids mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. The discharge from the wastewater treatment plant does not have an observable impact on the water quality. A deterioration in water quality has been identified, however it is not known if it or is not caused by the WWTP. Other causes of deterioration in water quality in the area are: High dilution in receiving water body. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status. 	905	734	171
Arvagh D0497-01	Tertiary	Fail	COD-Cr mg/l Suspended Solids mg/l	<ul style="list-style-type: none"> The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence. The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009. Based on ambient monitoring results a deterioration in BOD, Ammonia, Ortho-Phosphate, concentrations downstream of the effluent discharge is noted. The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status 	1200	402	798
Killashandra D0499-01	Tertiary	Pass	N/A	The WWTP is compliant with the Emission Limit Values set in the Wastewater Discharge Licence.	1000	516	484
Kilnaleck D0500-01	Tertiary	Pass	N/A	The WWTP is compliant with the Emission Limit Values set in the Wastewater Discharge Licence.	10000	375	625

Table 4.4 Wastewater Treatment Plant Capacity, Loads and Headroom (Irish Water, March 2020)

Region	County	Settlement	Census pop. (2016)	Wastewater Treatment Plant (WWTP)	Reg #	Serves other areas?	WWTP Capacity (PE)		Load (PE) 2019	Headroom (PE)		Current project completion year
							Today	Upon works completion		WWDL ELV Capability	UWW Standards Capability (not WWDL ELVs)	
NW	Cavan	Cavan	10,914	Cavan WWTP	D0020	No	30,000	=	17,380	12,620		
NW	Cavan	Bailieborough	2,683	Bailieborough WWTP	D0085	No	2,500	5,200	2,707	0	2,493	2022
NW	Cavan	Ballyjamesduff	2,661	Ballyjamesduff WWTP	D0256	No	2,200	6,600	3,265			2024
NW	Cavan	Virginia	2,648	Virginia WWTP	D0255	No	3,800	6,000	3,503	0	297	2024
NW	Cavan	Kingscourt	2,499	Kingscourt WWTP	D0083	No	2,335	5,300	2,947			2024
NW	Cavan	Cootehill	1,853	Cootehill WWTP	D0082	No	2,756	4,800	2,516	2,284		2022
NW	Cavan	Belturbet	1,369	Belturbet WWTP	D0084	No	4,000	=	1,830	2,170		
NW	Cavan	Mullagh	1,348	Mullagh WWTP	D0252	No	3,000	=	1,642	0	1,358	
NW	Cavan	Ballyconnell	1,105	Ballyconnell WWTP	D0253	No	3,000	=	1,693	0	1,307	
NW	Cavan	Ballinagh	936	Ballinagh WWTP	D0501	No	1,800	=	1,044	0	756	
NW	Cavan	Ballyhaise	711	Ballyhaise WWTP	D0496	No	905	=	734	0	171	
NW	Cavan	Shercock	588	Shercock WWTP	D0495	No	1,000	=	648	352		
NW	Cavan	Arva	411	Arvagh WWTP	D0497	No	1,200	=	402	798		
NW	Cavan	Kilnaleck	393	Kilnaleck WWTP	D0500	No	1,000	=	375	0	625	
NW	Cavan	Killeshandra	388	Killeshandra WWTP	D0499	No	1,000	=	516	484		
NW	Cavan	Blacklion	194	Blacklion WWTP	D0498	No	1,025	=	500	0	525	
CoA Headroom (PE)												
NW	Cavan	Bawnboy	Unavailable	Bawnboy WWTP	A0297	No	204	=	196	8		
NW	Cavan	Butlersbridge	276	Butlersbridge WWTP	A0296	No	452	=	257	195		
NW	Cavan	Crosskeys	Unavailable	Crosskeys WWTP	A0298	No	275	=	18	257		
NW	Cavan	Dowra	Unavailable	Dowra WWTP	A0299	No	176	=	75	101		
NW	Cavan	Gowna	Unavailable	Gowna WWTP	A0300	No	450	=	193	257		
NW	Cavan	Kilcogy	Unavailable	Kilcogy WWTP	A0536	No	300	=	68	232		
NW	Cavan	Mountnugent	Unavailable	Mountnugent WWTP	A0301	No	350	=	49	301		
NW	Cavan	Redhills	Unavailable	Redhills WWTP	A0302	No	300	=	100	200		
NW	Cavan	Stradone	Unavailable	Stradone WWTP	A0304	No	400	=	34	366		
NW	Cavan	Swanlinbar	207	Swanlinbar WWTP	A0303	No	350	=	202	148		

Notes: 64,65,66,67,68,69,70

⁶⁴ Wastewater Discharge Licences (WWDL) and Certificates of Authorisation (CoA)

⁶⁵ WWTP Capacity (PE) Today = Overall design capacity of the wastewater treatment plant (WWTP) in population equivalents (PE) today (the date at the top of this table).

⁶⁶ WWTP Capacity (PE) Upon works completion = Overall design capacity of the WWTP in population equivalents (PE) upon completion of a relevant project delivering additional capacity. Note that 'WWDL' or 'UWW' following the capacity value indicates that the upgraded WWTP will have capability to achieve the full Wastewater Discharge Licence (WWDL) emission limit values (ELVs) in the former case, or at least the Urban Wastewater (UWW) Treatment Directive parametric values in the latter case.

⁶⁷ Load (PE) 2019 = Wastewater load arising from the settlement(s) being served entering the WWTP in 2019.

⁶⁸ Headroom (PE) = Headroom available at the WWTP in 2019 in terms of population equivalents based on available capacity now or by completion of a project by 2022 (where relevant). Green = spare capacity available. Amber = potential spare capacity. WWTP currently not compliant with Wastewater Discharge Licence emission limit values but is capable of achieving at least UWW standards. Potential availability of capacity in this case would be dependent on any additional load not resulting in a significant breach of the combined approach as set out in Regulation 43 of the Wastewater Discharge (Authorisation) Regulations 2007. Red = no spare capacity available

⁶⁹ Current project completion year = This is the current forecasted completion year as of date of this table and is subject to change. 'Post 2024' indicates that the project is proposed to be completed within the next investment period (2025-2029), subject to the planning and approval of the next capital investment plan. Note, there is no guarantee that this capacity will be delivered if the current Investment Plan is amended due to emerging needs or changes due to exchequer funding.

⁷⁰ General notes (i) The headroom figure stated is based on available information on the date of issue of this table and is subject to change. (ii) The indication of spare treatment capacity has been determined based on a standardised national review of the available information. (iii) A Pre-Connection Enquiry should be submitted to Irish Water to determine the feasibility of connecting any particular site to the Irish Water network, feasibility should not be inferred from this register

Table 4.5 Drinking Water Supply and Water Network Information (Irish Water, 06/04/2020)

Settlement	Water Supply	Water Network
Cavan Town	Knockataggert WTP (Cavan RWSS). It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Ballyjamesduff	Lismeen WTP, (Ballyjamesduff RWSS). It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Baileboro	Baileborough WTP, (Baileborough RWSS). It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Kingscourt	Lisnisky WTP, (Kingscourt). It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Virginia	Supplied by Baileborough RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Cootehill	Killawaun WTP (Cootehill PWS). It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Belturbet	Belturbet WTP, (Belturbet PWS). It is envisaged that there is adequate capacity available to meet anticipated demand. Minor improvements at WTP ongoing.	No known major constraints.
Mullagh	Supplied by Baileborough RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Ballyconnell	Cuillaghan WTP, Ballyconnell PWS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Ballinagh	Supplied by Ballyjamesduff RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Ballyhaise	Public supply Supplied from Annagh Group Water Scheme (GWS). Contact GWS for information on available capacity.	No known major constraints.
Shercock	Public supply, supplied privately from Dhuish GWS. Contact GWS for information on available capacity.	No known major constraints.
Killeshandra	Public supply, supplied privately from Erne Valley GWS. Contact GWS for information on available capacity.	No known major constraints.
Arva	Public supply, supplied privately from Erne Valley GWS. Contact GWS for information on available capacity.	No known major constraints.
Kilnaleck	Supplied by Ballyjamesduff RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Swanlinbar	Swanlinbar WTP, Swanlinbar PWS. It is envisaged that there is adequate capacity available to meet anticipated demand. Process improvements Ongoing to resolve recent water quality issues.	No known major constraints.
Butlersbridge	Supplied by Cavan Regional RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Blacklion	Public supply, supplied privately from Gowlan GWS. Contact GWS for information on available capacity.	No known major constraints.
Lough Gowna	Public supply, supplied privately from Erne Valley GWS. Contact GWS for information on available capacity.	No known major constraints.
Mountnugent	Supplied by Ballyjamesduff RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Stradone	Supplied by Cavan Regional RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Crosskeys	Private (Crosserlough GWS)	N/A
Crossdoney	Supplied by Ballyjamesduff RWSS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Bawnboy	Bawnboy WTP (Kilsob Borehole), Bawnboy PWS. It is envisaged that there is adequate capacity available to meet anticipated demand.	No known major constraints.
Redhills	Private (Annagh GWS)	N/A
Kilcogy	Private	N/A
Dowra	Public Supply, supplied privately from Doobally GWS. Contact GWS for information on available capacity.	No known major constraints.

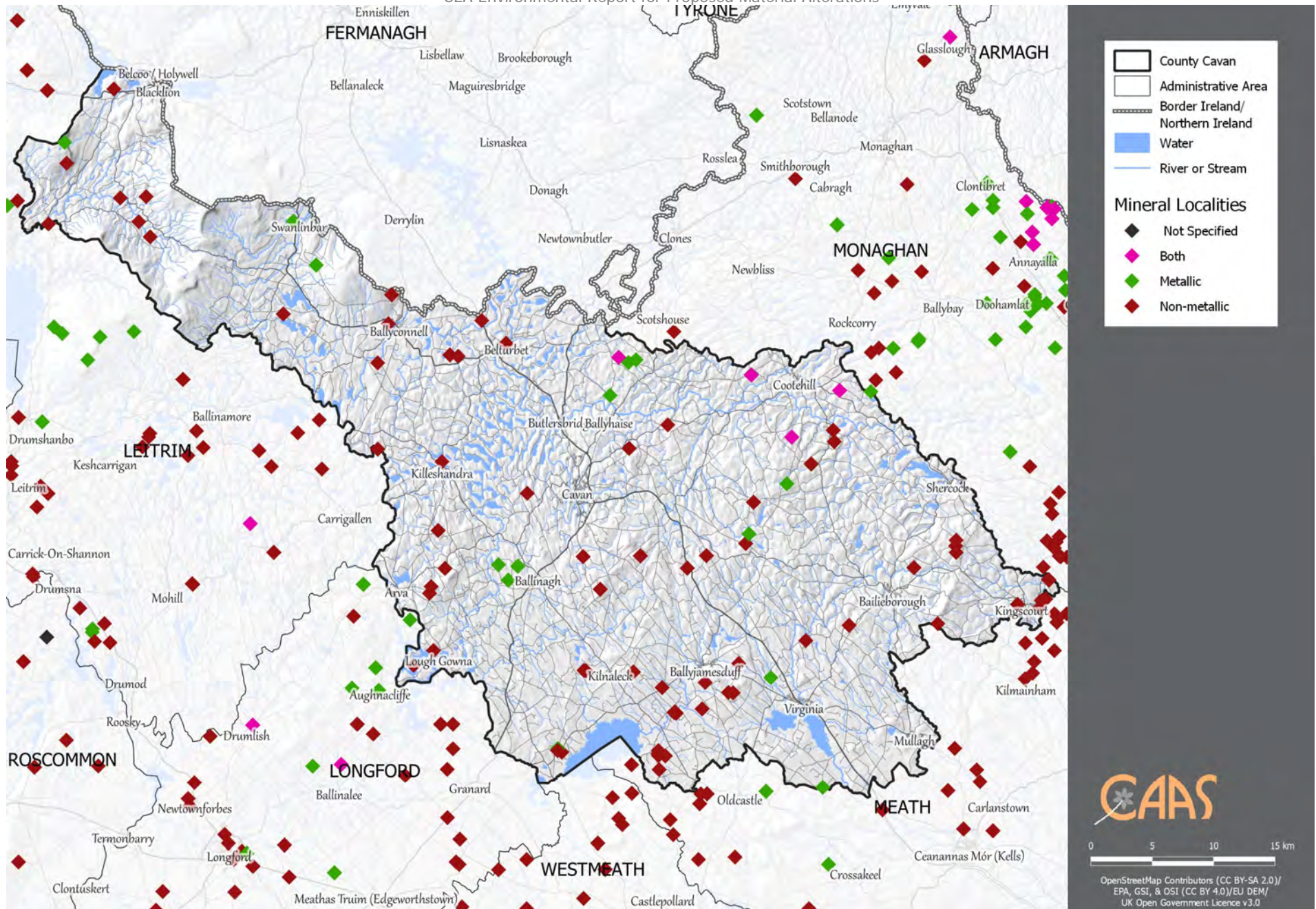


Figure 4.20 Minerals Localities

CAAS for Cavan County Council

4.12 Cultural Heritage

4.12.1 Archaeological Heritage

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features.

There are many sites of significant archaeological interest in County Cavan, including: Clough Oughter Castle (from the medieval period, situated on an island on the Lough Oughter); and Kilmore Church (from the 6th century).

Archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts.

The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at archaeology.ie.

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. All monuments in existence before 1700 A.D. are automatically considered to be historic monuments within the meaning of the Acts. Monuments of architectural and historical interest also come within the scope of the Acts. Monuments include: any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections; any

cave, stone or other natural product, whether or not forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position; any, or any part of any, prehistoric or ancient tomb, grave or burial deposit, or, ritual, industrial or habitation site; and any place comprising the remains or traces of any such building, structure or erection, any such cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site, situated on land or in the territorial waters of the State', but excludes 'any building or part of any building, that is habitually used for ecclesiastical purposes' (National Monuments Acts 1930-2004).

A recorded monument is a monument included in the list and marked on the map, which comprises the RMP 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 Notification within which requirements for notifications of proposed works apply.

A Sites and Monuments Record (SMR)⁷¹ is a manual containing a numbered list of all certain and possible monuments accompanied. An Urban Archaeology Survey was completed in 1995 and contained reports on historic towns dating to before 1700 A.D. with a view to delineating zones of archaeological potential (SMR Zones of Notification). The SMR formed the basis for issuing the RMP.

Figure 4.21⁷² shows the spatial distribution of recorded monuments. There are hundreds of Recorded Monuments within the County including: round towers; high crosses; burial sites; ringforts; tower houses; fulacht fia; raths; court tombs; portal tombs; wedge tombs; cairns; earthworks; abbeys; and souterrains.

Archaeological heritage within Cavan Town and Environs, including Recorded Monuments, RMP and SMR Zones of Notification, are mapped on Map 10 in Appendix III.

⁷¹ The RMP was issued for each county between 1995 and 1998 in a similar format to the existing SMR. However, the RMP differs from the earlier lists in that, as defined in the Act, only monuments with known locations or places where there are believed to be monuments are included. The large archive and supporting database are managed by the National Monuments Service and the records are continually updated and supplemented as additional monuments are

discovered. (<https://data.gov.ie/dataset/national-monuments-service-archaeological-survey-of-ireland>).

⁷² Interlinked/associated archaeological features in the neighbouring counties, have been also considered by the assessment.

Clusters of archaeological heritage are concentrated within and adjacent to the existing built-up footprint of the County's settlements and in the rural areas.

There are seven Monuments in State Care (three in State Guardianship and four in State Ownership)⁷³ within County Cavan (as shown on Figure 4.21) including:

- Cabragh Ringfort;
- Cohaw Court Tomb;
- Drumlane;
- Errigal Ringfort;
- Gartnanoul Court Tomb;
- Clogh Oughter Castle; and
- Lisnagowan Ringfort.

County Cavan has significant industrial heritage with many industrial archaeological sites documented by the National Monuments Service, including mills, forges, road and railway bridges and structures along waterways. An Industrial Heritage Survey was carried out for the County in 2007 and identified 74 sites of important heritage value.

The Underwater Archaeology Unit was established within the National Monuments Service to manage and protect Ireland's underwater cultural heritage, including the quantification of the underwater resource and assessing development impacts in order to manage and protect this aspect of Ireland's heritage. The Shipwreck Inventory is principally a desktop survey with information gathered from a broad range of cartographic, archaeological and historical sources, both documentary and pictorial. Wrecks over 100 years old and archaeological objects found underwater are protected under the National Monuments (Amendment) Acts 1987 and 1994. Significant wrecks less than 100 years old can be designated by Underwater Heritage Order on account of their historical, archaeological or artistic importance. Such Orders can also be used to designate areas of seabed or land covered by water to more clearly define and protect wreck sites and archaeological objects. Under the legislation all diving on known protected wreck sites or with the intention of searching for underwater cultural heritage is subject to licensing requirements.

Rivers, canals and lakes within the County may contain many features and finds associated with riverine heritage such as shipwrecks, piers, quay walls, fords, stepping stones and associated archaeological objects and features.

Relevant archaeological heritage designations in Northern Ireland (also mapped on Figure 4.21), include⁷⁴: Scheduled Historic Monuments; entries to the Northern Ireland Sites and Monuments Record; Areas of Significant Archaeological Interest and Areas of Significant Archaeological Potential.

4.12.2 Architectural Heritage

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.

Records of Protected Structures are legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 as amended. Protected structures are defined in the Planning and Development Act 2000 as amended as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

There are hundreds of entries to the Record of Protected Structures within the County. Similar to the general spatial spread of archaeological heritage, clusters of architectural heritage are indicated within and adjacent to the existing built-up footprint of the County's settlements and in rural areas, as shown on Figure 4.22⁷⁵.

Architectural designations within Cavan Town and Environs mapped on Map 11 in Appendix III include entries to the RPS, NIAH and ACAs.

⁷³ This list of National Monuments in State care includes those which are in the ownership and guardianship of the Minister for the Environment, Heritage and Local Government.

⁷⁴ More detail available at: <https://dfcgis.maps.arcgis.com>

⁷⁵ Interlinked/associated architectural features in the neighbouring counties, have been also considered by the assessment.

In relation to a protected structure or proposed protected structure, the following are encompassed:

- The interior of the structure;
- The land lying within the curtilage⁷⁶ of the structure;
- Any other structures lying within that curtilage and their interiors; and,
- All fixtures and features that form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

There are many traditional buildings in the County with architectural heritage value including industrial structures such as mills, forges, roads and railway bridges, vernacular buildings such as thatched cottages, farmhouses and old school houses, country estates and the country houses associated with these estates, such as Ballyhaise House, Bellamont Forest and Cabra Castle.

In addition to Protected Structures, the Planning and Development Act, 2000 provides the legislative basis for the protection of Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA that might alter the character of the structure or the ACA. There are 16 ACAs designated within the County, as shown on Figure 4.22, including:

- Farnham Street ACA (Cavan Town);
- Bridge Street ACA (Cavan Town);
- Lurgan Quarter (Virginia) ACA;
- Lower Market Street, Cootehill ACA;
- Kingscourt ACA;
- Mullagh ACA;
- Redhills ACA;
- The Diamond (Belturbet) ACA;
- Bawnboy ACA;
- The Lawn (Belturbet) ACA;
- Dowra ACA;
- Blacklion ACA;
- Kilnaleck ACA;

- Mounty Nugent ACA;
- Bailieborough ACA; and
- Butlersbridge ACA.

The National Inventory of Architectural Heritage (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 of Culture, Heritage and the Gaeltacht to the local authorities for the inclusion of particular structures in their Record of Protected Structures. The NIAH includes historic gardens and designed landscapes. A survey of Historic Gardens and Designed Landscapes was carried out which identified 159 Demesnes or Designed Landscapes within the County. Figure 4.22 shows entries to the NIAH in County Cavan.

Relevant architectural heritage designations in Northern Ireland (mapped on Figure 4.22) include⁷⁷: Listed Buildings and Industrial Heritage Record.

4.12.3 Existing Problems

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

⁷⁶ Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge

of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

⁷⁷ Mapping available at: <https://dfcgis.maps.arcgis.com>.

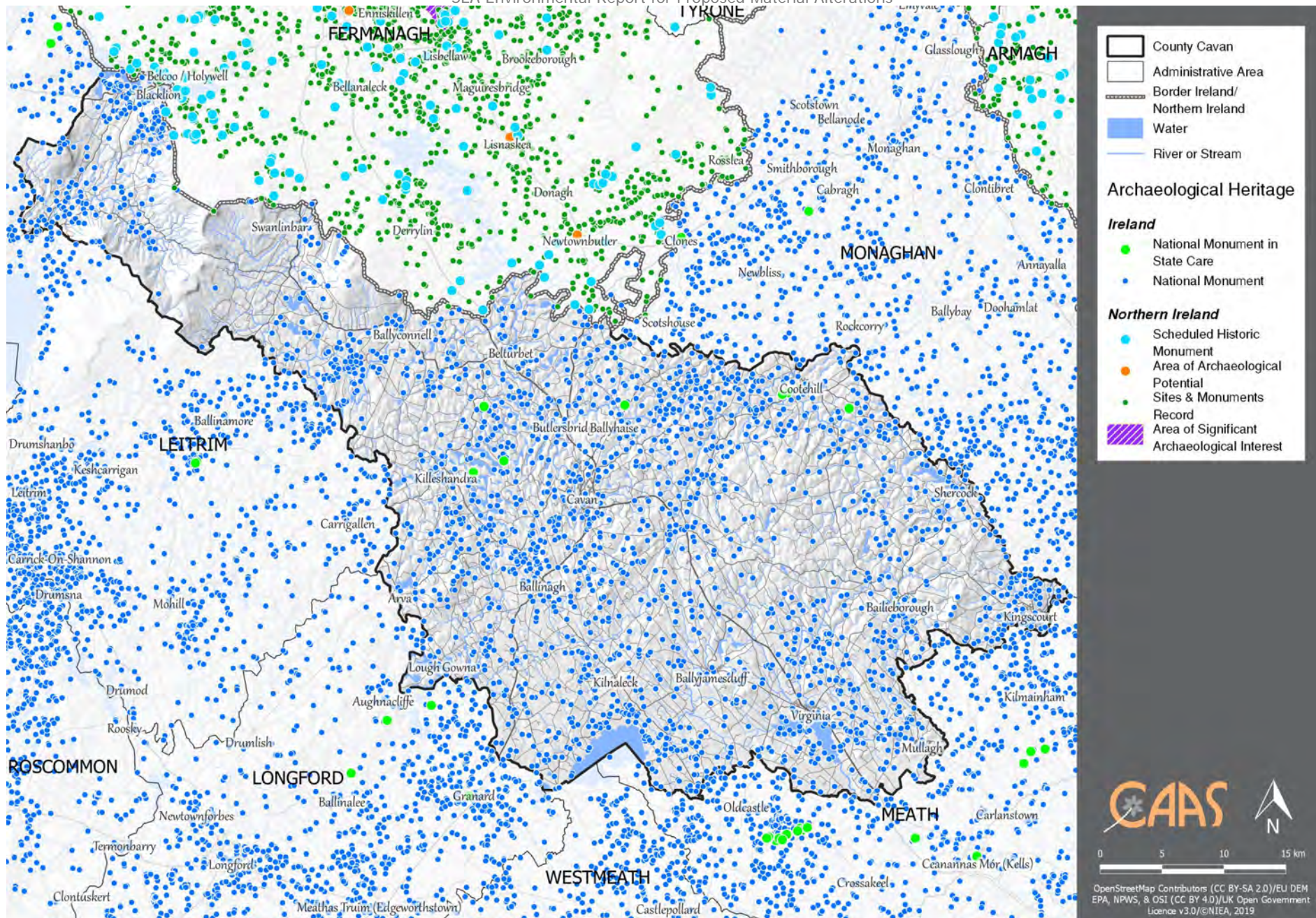


Figure 4.21 Archaeological Heritage
CAAS for Cavan County Council

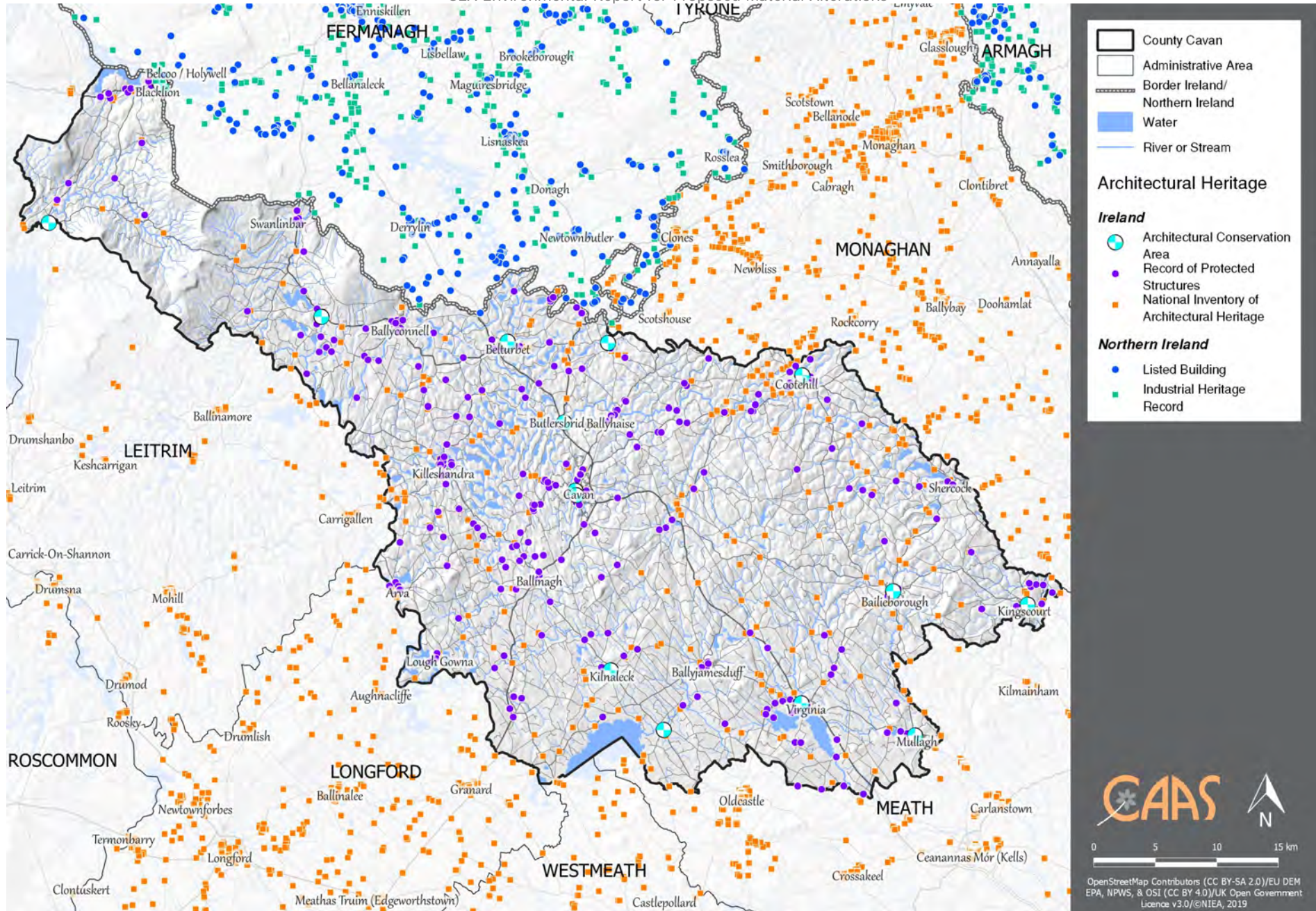


Figure 4.22 Architectural Heritage
CAAS for Cavan County Council

4.13 Landscape

4.13.1 Introduction

Article 1 (a) of the European Landscape Convention provides a definition of landscape as follows; "Landscape means an 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.

Cavan has a diverse landscape, characterised by highlands in the east of the County, Cuilcagh-Anierin uplands in the north-west of the County and drumlin and lakelands throughout.

4.13.2 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.

The purpose of landscape character assessment is to provide the foundation for policy formulation and decision making for landscape management. County Cavan preliminary Landscape Character Assessment has identified the following five Landscape Character Areas:

- Cuilcagh-Anierin Uplands of West Cavan;
- The Lakelands;
- Lake Catchments of South Cavan;
- Drumlin Belt and Uplands of East Cavan; and
- Highlands of East Cavan.

Cavan Town and Environs is designated within the "Lakelands Landscape Character Area".

Landscape Areas in County Cavan (mapped on Figure 4.23) also include:

- **High Landscape Areas:**
 - Upland Areas of West Cavan;
 - Erne-Shannon Canal Corridor;
 - Lough Oughter 'Lakeland' Area;
 - Lough and Lea Mountain

- Special Landscape Area:
 - Kingscourt/Dun a Ri.

4.13.3 Scenic Viewing Points and Scenic Routes

County Cavan encompasses many sites and vantage points from which views over areas of great natural beauty, local landmarks, historic landscapes, adjoining Counties may be obtained. There are 17 Scenic Viewing Points and three Scenic Routes designated within County Cavan that offer attractive cross-sectional views and overall impressions of differing landscapes in the County. These Protected Views and Routes (mapped on Figure 4.23) are considered when assessing planning applications.

4.13.4 County Heritage Sites

There are 25 designated County Heritage Sites in Cavan (mapped on Figure 4.24) including:

- Burren Megalithic Cemetery;
- Moneygashel Ringfort;
- The Shannon Pot;
- Maguire's Chair, Glangevlin;
- Tullydermott Waterfalls;
- Templeport Lake, St. Peter's Church and St. Mogues/ Port Island;
- Bloody Pass Derryvoney, River Erne;
- Turbot Island;
- Drumlane Abbey;
- Castle Saunderson;
- Ballyhaise House;
- Kilmore Motte and Bailey, Kilmore Cathedral, Kilmore Graveyard and See House;
- Clough Oughter Castle;
- Killykeen Forest Park;
- Trinity Island;
- Drumkeen House Woodlands;
- Bruse Hill;
- Cavan County Museum, Ballyjamesduff;
- Mullagh Lake;
- Moybologue Church;
- Dun a Ri Forest Park, Kingscourt;
- Shantemon Mountain;
- Cohaw Megalithic Tomb;
- Bellamont Castle; and
- Whitefathers Cave.

These sites are of important value to the built heritage of the landscape of Cavan.

4.13.5 Other Landscape Designations

Other Landscape designations within County Cavan (mapped on Figure 4.23) include: six Riverside Amenity Areas and 17 Lakeside Amenity Areas.

In addition, there are also four Forest Parks and Other Parks; nine Major Lakes and Lake Environs; and 18 Walking Routes designated within County Cavan.

4.13.6 Landscape Designations in Adjacent Counties

County Leitrim borders County Cavan to the west. There are 14 Landscape Character Areas identified within County Leitrim. The following Landscape Character Areas are adjacent to County Cavan: Lough Macnean Upper; Northern Glens and Central Lowlands; Boleybrack Uplands; Slieve Anierin; and Ballinamore Loughlands. Other landscape designations within County Leitrim include areas of High Visual Amenity and Outstanding Natural Beauty.

County Monaghan borders County Cavan to the north-east. Landscape Character Assessment for Monaghan identifies nine Landscape Character Areas: Slieve Beagh Uplands; Blackwater Valley and Drumlin Farmland; Smithborough Hills; Clones River Valley and Farmed Uplands; Mullyash Uplands; Ballybay Castleblayney Lakelands; Drumlin and Upland Farmland of South Monaghan; Carrickmacross Drumlin and Lowland Farmland. The Landscape Character Areas are divided into 14 Landscape Character Types out of which the following landscape types are adjacent to County Cavan: Flat Riverine Farmland; Undulating Farmland; Farmed Foothills; Drumlin Foothills; Farmed Lakelands; and Drumlin Farmland.

County Meath borders County Cavan to the west. There are four Landscape Character Types designated in the Landscape Character Assessment for Meath. The Landscape Character Types are sub-divided into 20 Landscape Character Areas of which the following landscape areas are adjacent to County Cavan: Lough Sheelin Uplands; Teervurcher Uplands; Blackwater Valley; North Navan Lowlands; and North Meath Lakelands.

County Westmeath borders County Cavan to the south. There are 11 Landscape Character Areas designated within County Westmeath: Northern Hills and Lakes; Inny River Lowlands; River Deel Lowlands; Central Hills and Lakes; Royal Canal Corridor; Western Lowlands; South Central Hills; Uisneach; Lough Ennell and South Eastern Corridor; South Westmeath Eskers; and Lough Ree/Shannon Corridor. Other Landscape

Designations in Westmeath include Areas of High Amenity (High Landscape Value) and a number of Views and Prospects.

County Longford borders County Cavan to the south. Landscape Character Assessment for Longford identifies seven Landscape Character Units: Central Corridor; Inny Basin; Peatlands; Open Agricultural; Shannon Basin/Lough Ree; and the Landscape Character Areas adjacent to the border of County Cavan – Northern Drumlin Lakeland and Northern Upland. Other landscape designations within County Longford include Broad Zones and Views.

County Fermanagh in Northern Ireland borders County Cavan to the north. There are 26 Landscape Character Types designated within the Fermanagh and Omagh District Council Area. The following landscape areas are adjacent to County Cavan: Fermanagh Caveland; Lough Erne Lakeland; and Clogher Valley and Slieve Beagh. Other landscape designations include Areas of Outstanding Natural Beauty.

Northern Ireland has undertaken regional landscape character assessments. Digital data is available from DAERA at: <https://www.daera-ni.gov.uk/articles/download-digitaldatasets>

4.13.7 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.

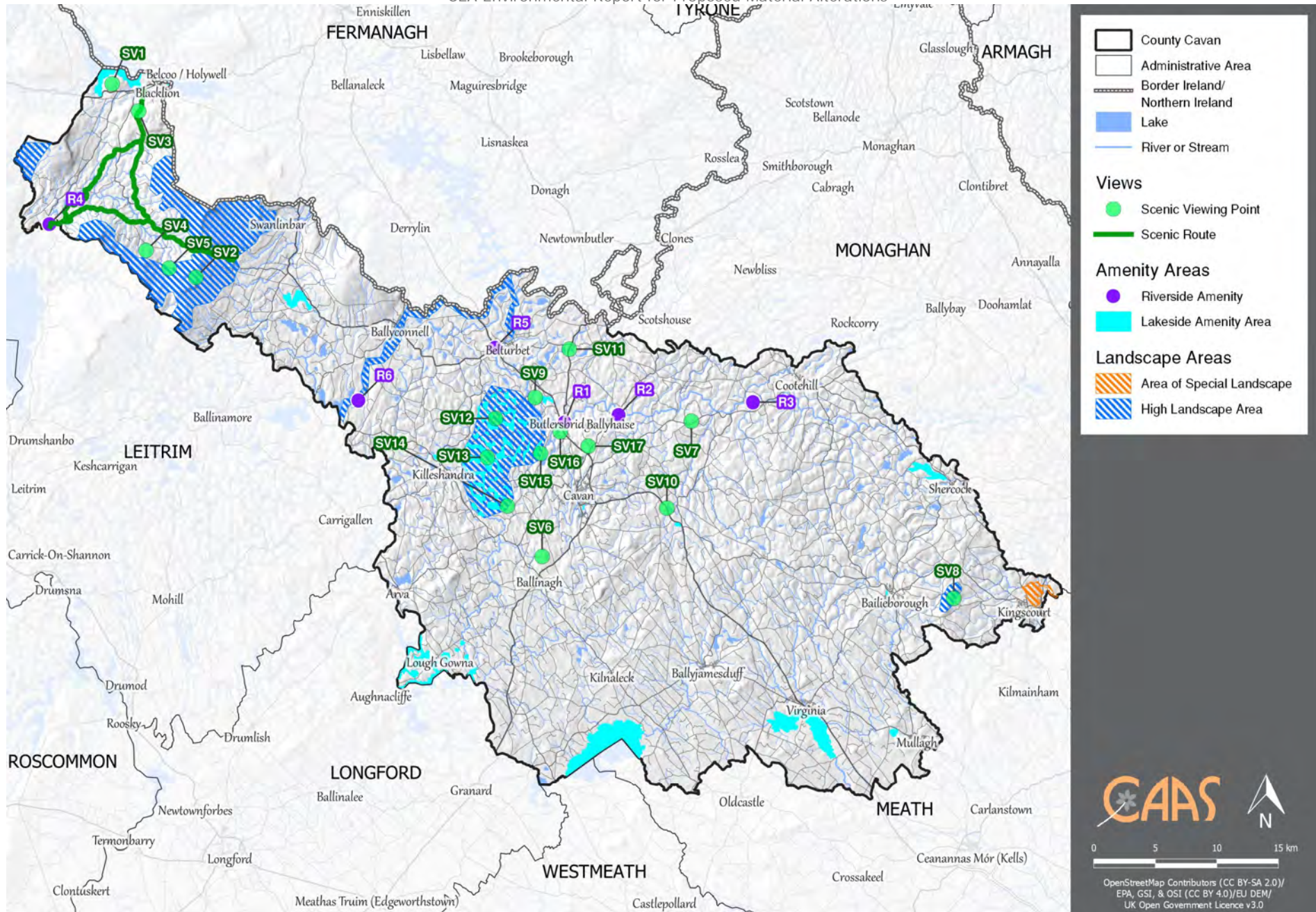


Figure 4.23 Landscape Designations

CAAS for Cavan County Council

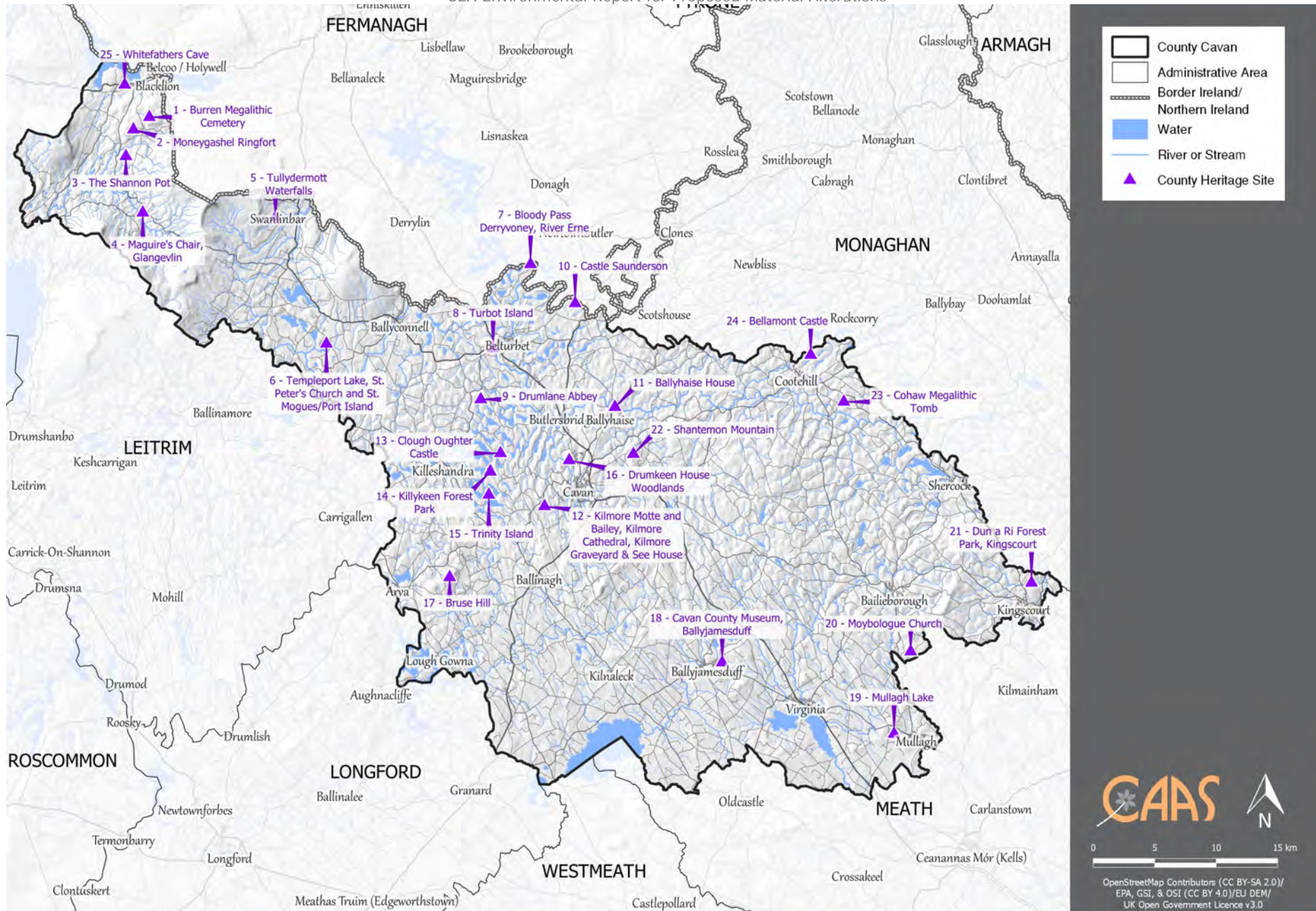


Figure 4.24 County Heritage Sites
CAAS for Cavan County Council

4.14 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 4.25 provides an Overlay of Environmental Sensitivities in the County. Environmental sensitivities are indicated by colours which range from higher to lower sensitivity. The map was prepared using Geographical Information System (GIS) software that allowed for a weighting system to be applied with differentiation in certain layers as follows:

- European sites – SACs and SPAs (10 points);
- Other Ecological designations – NHAs and pNHAs (5 points);
- Sensitive Landcover Categories (10 points);
- Margaritifera sensitive areas - Catchments of SAC populations listed in S.I. 296 of 2009 and Catchments of other extant populations (5 points);
- WFD Status of Surface moderate and unassigned ecological status (5 points);
- WFD Status of Surface water poor ecological status (10 points);
- Groundwater vulnerability (aquifers which are extremely vulnerable - 10 points; and highly vulnerable - 5 points);
- Source Protection Areas (Inner Protection Area and Group Scheme Areas 10 points, Outer Protection Areas 5 points);
- WFD RPA Nutrient Sensitive Rivers, Lakes and Estuaries (10 points) and Rivers in Nutrient Sensitive Areas (5 points);
- WFD RPA Rivers and Lakes for Drinking Water (10 points);
- County Geological Sites (10 points); UNESCO Geopark (5 points);
- GSI Landslide Susceptibility (High or High Inferred – 10 points; Moderately High or Moderately High Inferred – 5 points);
- Preliminary Flood Risk Assessment Fluvial Flood Zone A (10 points) and Fluvial Flood Zone B (5 points);
- Cultural Heritage including: Architectural Conservation Areas; entries to the Record of Protected Structures; entries to the Record of Monuments and Places; National Monuments; National Monuments in State Care; SMR and RMP Zones of Notification; and entries to the National Inventory of Architectural Heritage (10 points); and
- High Landscape Areas, Lakeside Amenity Areas and Areas of Special Landscape (10 points);
- Scenic Routes and View Points (10 points).

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. However, the occurrence of environmental sensitivities does not preclude development; rather it flags at a strategic level that the mitigation measures - which have 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.

The overlay mapping shows that environmental sensitivities are not evenly distributed throughout the County. Most of the County is identified as having low to moderate levels of sensitivity.

The overlay mapping shows that environmental sensitivities are not evenly distributed throughout the County. Most of the County is identified as having low to moderate levels of sensitivity.

The most sensitive areas in the County include:

- Lakes throughout the County, including the Lough Oughter and Associated Loughs SAC around Cavan Town – on account of ecological and landscape designations, water status and flood risk;
- Upland areas, such as the Cuilcagh - Anierin Uplands in the north west of the County – on account of landscape designations, landslide susceptibility, ecological designations and groundwater vulnerability; and
- Certain locations and areas within the existing built-up footprint of the County's settlements, on account of cultural heritage designations, including entries to the Record of Monuments and Places, Entries to the Record of Protected Structures and Architectural Conservation Areas; and
- Extensive areas of extreme and high groundwater vulnerability throughout the County.

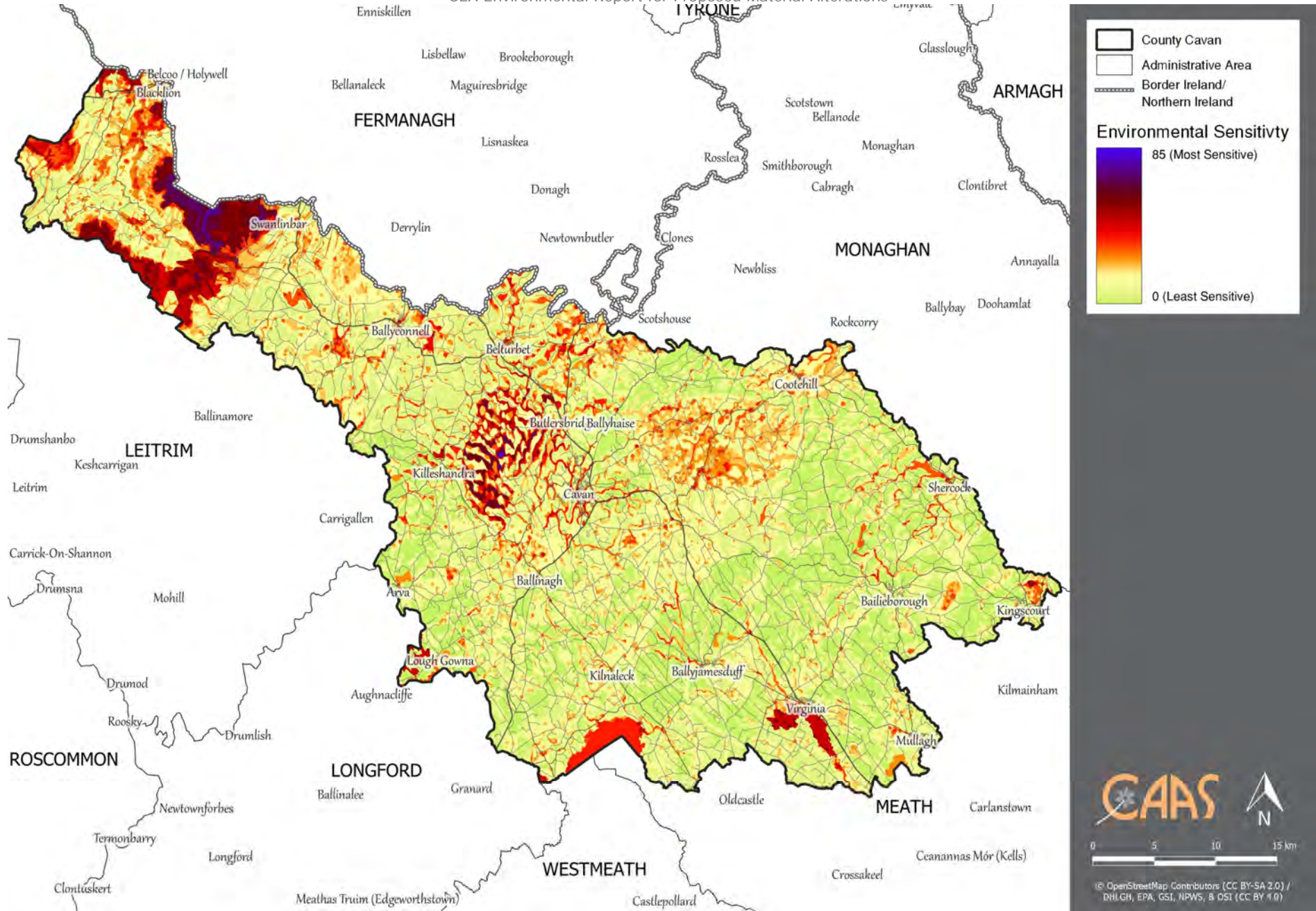


Figure 4.25 Overlay of Environmental Sensitivities in County Cavan

CAAS for Cavan County Council

Section 5 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies that generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives that 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 Draft Plan, the Proposed Material Alterations 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.

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

Given the position of the Development Plan in the land use planning hierarchy beneath RSES, the measures identified in the RSES SEAs, including the Northern and Western RSES SEA, have been used – as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Table 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration ⁷⁸	<ul style="list-style-type: none"> To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital 	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Cavan Local Biodiversity Action Plan
				<ul style="list-style-type: none"> Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted 	<ul style="list-style-type: none"> Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Cavan Local Biodiversity Action Plan
				<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc.
				<ul style="list-style-type: none"> Status of water quality in the County's water bodies 	<ul style="list-style-type: none"> Included under Water below
				<ul style="list-style-type: none"> Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 10 “Natural Heritage” 	<ul style="list-style-type: none"> For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 10 “Natural Heritage”
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being 	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 “Economic” 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 6 “Economic” By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets)
				<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan
				<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
				<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping

⁷⁸ Including with respect to effects on Northern Ireland Priority Species and their habitats barriers to Northern Ireland Priority Species movement, including migratory fish species.

SEA Environmental Report for Proposed Material Alterations

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> • Protect soils against pollution, and prevent degradation of the soil resource • Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County • Safeguard areas of prime agricultural land and designated geological sites 	<ul style="list-style-type: none"> • Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> • Maintain built surface cover nationally to below the EU average of 4% • In accordance with National Policy Objectives 3c of the National Planning Framework, a minimum of 30% of the housing growth targeted in any settlement is to be delivered within the existing built-up footprint of the settlement • To map brownfield and infill land parcels across the County
				<ul style="list-style-type: none"> • Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> • Dispose of contaminated material in compliance with EPA guidance and waste management requirements
				<ul style="list-style-type: none"> • Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> • Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> • Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive • Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments • Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion • Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals 	<ul style="list-style-type: none"> • Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> • Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' • Implementation of the objectives of the River Basin Management Plan
				<ul style="list-style-type: none"> • Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> • Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> • Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County • Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels • Promote the circular economy, reduce waste, and increase energy efficiencies • Ensure there is adequate sewerage and drainage infrastructure in place to support new development 	<ul style="list-style-type: none"> • Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated • Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan 	<ul style="list-style-type: none"> • All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan • Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – in- combination with other septic tanks– contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive • Facilitate, as appropriate, Irish Water in developing water and wastewater infrastructure • See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health

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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
			<ul style="list-style-type: none"> Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids 	<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels 	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) Contribute towards the reduction of greenhouse gas emissions in line with national targets Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport 	<ul style="list-style-type: none"> Implementation of Plan measures relating to climate reduction targets 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets
				<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050
				<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan
				<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	<ul style="list-style-type: none"> Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors
				<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating

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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
				<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 levels Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Cultural Heritage	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage	<ul style="list-style-type: none"> Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan
				<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention	<ul style="list-style-type: none"> Number of developments permitted that 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 	<ul style="list-style-type: none"> 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

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Available reasonable alternatives for the County Development Plan are provided under Tiers 1 to 5 detailed below. These alternatives are assessed in Section 7. The Alternatives described for the Plan below are not affected by the Proposed Material Alterations.

6.2 Limitations in Available Alternatives

The Plan is required to be prepared by the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan. The alternatives available for the Plan are limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Northern and Western Region. These documents set out various requirements for the content of the Plan including on topics such as settlement typology, land use zoning and the sustainable development of rural areas.

6.3 Tier 1: Alternatives for Positioning under the Settlement Hierarchy

The Settlement Hierarchy Levels for the Plan are identified on Table 6.1.

Table 6.1 Settlement Hierarchy Levels in Cavan

Category	Description
Key Town	County Town with large economically active services that provide employment for their surrounding areas and with high-quality transport links and the capacity to act as growth drivers
Self-Sustaining Growth Town	A sub-county town that has significant employment and service functions relative to its regional and local catchment has good regional transport links and has the capacity for continued commensurate growth to become more self-sustaining. It supports the regional driver role of Cavan, and acts as an important local driver providing a range of functions for its resident population and its surrounding catchment including housing, employment, services, retail and leisure opportunities. The town should grow at a sustainable level appropriate to its position in the settlement hierarchy
Self-Sustaining Towns	Self-Sustaining Towns with high levels of population growth but which require targeted 'catch up' investment to become more self-sustaining.
Medium Towns	Towns with a varied employment base and can be reliant on other areas for employment and/or services but which play an important role in supporting the social, economic and cultural life within rural communities.
Small Town	Smaller Towns with local service and employment functions.
Village Category 1	Villages that serve their local area and have serviced land (lands that are able to connect to existing development services, i.e. road and footpath access including public lighting, foul sewer drainage, surface water drainage and water supply, for which there is service capacity available, and can therefore accommodate new development)
Villages Category 2, Rural Community Nodes & Rural remainder	Village Category 2: Villages that serve their local area and have serviced land (lands that are able to connect to existing development services, i.e. road and footpath access including public lighting, foul sewer drainage, surface water drainage and water supply, for which there is service capacity available, and can therefore accommodate new development). Rural Community Nodes: un-serviced rural areas with limited social and community infrastructure. Open countryside

In considering significant realistic alternatives for placing of individual settlements under alternative typologies, the planning authority has taken into account the objectives of the NPF and the Northern and Western RSES. As a result, there is very little scope to consider reasonable alternatives for most settlements under the hierarchy. Nonetheless, there are strategic reasonable alternatives for Virginia. These are:

- **Tier 1 - Alternative A:** Virginia is identified as a Self-Sustaining Growth Town.
- **Tier 1 - Alternative B:** Virginia is identified as a Self-Sustaining Town.

6.4 Tier 2: Alternatives for Population Allocations

Allocating higher or lower population allocations/future growth to different settlements within the County may provide reasonable alternatives for consideration.

- **Tier 2 – Alternative A:** Concentrate future growth in the settlements in the upper tiers of the settlement hierarchy, in particular the Key Town of Cavan Town, Self-Sustaining Growth Town of Virginia and Self-Sustaining Towns of Ballyjamesduff, Bailieborough, Kingscourt and Cootehill with a more limited level of growth in the smaller settlements and open countryside.
- **Tier 2 – Alternative B:** Continued growth of Cavan Town, Ballyjamesduff, Bailieborough, Kingscourt, Virginia and Cootehill with dispersed pattern of growth across the smaller settlements and the open countryside.

6.5 Tier 3: Alternatives for Rural Cavan

Rural Areas under Strong Urban Influence/Pressure

- **Tier 3 (i) – Alternative A:** Designate Rural Areas under Strong Urban Influence and Stronger Rural Areas that require various criteria to be demonstrated in advance of planning permission being granted for a single dwelling for permanent occupation.
- **Tier 3 (i) – Alternative B:** Do not designate Rural Areas under Strong Urban Influence/Stronger Rural Area and assess each planning application on its merits.

Serviced and Unserviced Settlements

- **Tier 3 (ii) – Alternative A:** Provide focus to and targeted provisions for encouraging residential development in serviced and unserviced settlements, as an alternative to rural one-off housing;
- **Tier 3 (ii) – Alternative B:** Serviced and unserviced settlements are included but there is no focus or no targeted provisions for these locations to act as alternatives to one-off housing in the open countryside.

6.6 Tier 4: Alternatives for Densities

Alternatives identified relating to densities comprise:

- **Tier 4 – Alternative A:** Application of a single standard density across the whole County in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy.
- **Tier 4 – Alternative B:** Application of different densities at different locations, as appropriate; higher densities where sustainable transport mode opportunities are available and lower densities where constraints are presented by, for example, character or function of settlement.

6.7 Tier 5: Alternatives for Land Use Zoning

Land use zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF and Northern and Western RSES.

Countywide Residential

- **Tier 5 (i) – Alternative A:** Reduction in the quantum of zoned land for residential purposes in all settlements throughout the County in compliance with NPF, NPF Implementation Roadmap, Section 28 Guidelines for Planning Authorities and RSES. Introduction of a new zoning to facilitate low density residential development as an alternative to one off rural housing. Proposed residential zoning is carried out in a sequential manner with the core principle of compact growth, where possible taking into account land topography.
- **Tier 5 (i) – Alternative B:** No change in the quantum of zoned land for residential purposes in all settlements throughout the County. No introduction of a new zoning to facilitate low density residential development as an alternative to one off rural housing. Proposed residential zoning is carried out in a sequential manner with the core principle of compact growth, where possible taking into account land topography.

Countywide Economic

- **Tier 5 (ii) – Alternative A:** Increase in the quantum of zoned land for economic purposes in all settlements throughout the County in order to address the requirements of RSES, to reduce the levels of commuting out of the County for employment and to provide an alternative for rural based economic activity into urban areas in accordance with the Cavan Economic Study, Strategic Economic Framework (Appendix 3 to the Draft Plan).
- **Tier 5 (ii) – Alternative B:** No increase in the quantum of zoned land for economic purposes in all settlements throughout the County (Appendix 3 to the Draft Plan).

Cavan Town Residential

- **Tier 5 (iii) – Alternative A:** Reduction in the overall quantum of zoned land for residential purposes, omission of phasing of residential land and introduction of residential strategic reserve land use zoning in compliance with NPF, NPF Implementation Roadmap, Section 28 Guidelines for Planning Authorities and RSES. Proposed residential zoning is carried out in a sequential manner with the core principle of compact growth, where possible taking into account land topography, existing services, infrastructure, completion of existing estates and the proximity to zoned neighbourhood centres.
- **Tier 5 (iii) – Alternative B:** No change in the overall quantum of zoned land for residential purposes, omission of phasing of residential land and introduction of residential strategic reserve land use zoning. Proposed residential zoning is carried out in a sequential manner with the core principle of compact growth, where possible taking into account land topography, existing services, infrastructure, completion of existing estates and the proximity to zoned neighbourhood centres.

Cavan Town Economic

- **Tier 5 (iv) – Alternative A:** Increase in the quantum of zoned land for economic purposes in all settlements throughout the County in order to address the requirements of RSES, to reduce the levels of commuting out of the County for employment and to provide an alternative for rural based economic activity into urban areas in accordance with the Cavan Economic Study, Strategic Economic Framework (Appendix 3 to the Draft Plan).
- **Tier 5 (iv) – Alternative B:** No change in the quantum of zoned land for economic purposes in all settlements throughout the County.

Section 7 Evaluation of Alternatives

7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects⁷⁹ of implementing available alternatives that are described in Section 6. This determination sought to understand whether each alternative was likely to improve conflict with or have a neutral interaction with the receiving environment.

Taking into account the extent and nature of changes proposed by the material alterations, the assessment of alternatives described is not affected by the alterations.

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 assessment of alternatives.

The degree to which effects can be determined is limited as implementation of the Plan will involve assessment, consideration and decision-making associated with lower tier plans and individual projects. Nonetheless a comparative evaluation of the various alternatives can be provided.

Table 7.1 Strategic Environmental Objectives⁸⁰

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration ⁸¹	<ul style="list-style-type: none"> To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites

⁷⁹ These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

⁸⁰ See also Section 5

⁸¹ Including with respect to effects on Northern Ireland Priority Species and their habitats barriers to Northern Ireland Priority Species movement, including migratory fish species.

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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> • Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive • Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments • Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion • Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> • Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County • Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels • Promote the circular economy, reduce waste, and increase energy efficiencies • Ensure there is adequate sewerage and drainage infrastructure in place to support new development • Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes • Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart-buildings, cities and grids
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> • To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture • Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency • Promote continuing improvement in air quality • Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution • Meet Air Quality Directive standards for the protection of human health – Air Quality Directive • Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> • To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

7.3 Detailed Assessment of Alternatives

7.3.1 Effects Common to all Alternatives

Each of the alternatives would be part of a wider Plan envisaging – in compliance with the robust policy framework in place at national, regional and local level – sustainable development and compact growth in County Cavan generally. As such, common environmental effects (as detailed on Table 7.2) would be present under Plans adopting each of the different alternatives, albeit to varying degrees.

Table 7.2 Effects common to Plans adopting each of the different alternatives

Environmental Component	Positive/Neutral Effects, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere. • 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. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> • Loss of/damage to biodiversity in designated sites (including European Sites, Wildlife Sites and Areas of Special Scientific Interest) 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 - such as birds and bats - and including: effects on Northern Ireland Priority Species and their habitats; and barriers to Northern Ireland Priority Species movement, including migratory fish species.
Population and Human Health	<ul style="list-style-type: none"> • Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. • Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere • Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere. 	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors.
Soil	<ul style="list-style-type: none"> • Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere. 	<ul style="list-style-type: none"> • Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. • Potential for riverbank erosion.
Water	<ul style="list-style-type: none"> • Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere. 	<ul style="list-style-type: none"> • Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. • Increase in flood risk and associated effects associated with flood events.

Environmental Component	• Positive/Neutral Effects, likely to occur	• Potentially Significant Adverse Environmental Effects, if unmitigated
Material Assets	<ul style="list-style-type: none"> • Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere. • Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. 	<ul style="list-style-type: none"> • Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Increases in waste levels. • Potential impacts upon public assets and infrastructure. • Interactions between agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter.
Air and Climatic Factors	<ul style="list-style-type: none"> • Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere. 	<ul style="list-style-type: none"> • Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. • Potential conflicts between transport emissions, including those from cars, and air quality. • Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. • Potential conflicts with climate adaptation measures including those relating to flood risk management.
Cultural Heritage	<ul style="list-style-type: none"> • Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within existing settlements. 	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology⁸² and protected architecture⁸³ arising from construction and operation activities.
Landscape	<ul style="list-style-type: none"> • Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements. 	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

⁸² Archaeological heritage encompasses designated and unknown archaeological heritage including entries to the Record of Monuments and Places, underwater archaeology, entries to the Northern Ireland Sites and Monuments Record and Northern Ireland Areas of Significant Archaeological Interest and Archaeological Potential. Also encompassed are intervisibility and interrelationships between archaeological heritage within the wider landscape, including cross-border intervisibility and interrelationships.

⁸³ Architectural heritage encompasses that which is designated or included within the National Inventory of Architectural Heritage (NIAH), NIAH Historic Gardens and Designed Landscapes, Records of Protected Structures and Northern Ireland's Listed Buildings and Northern Ireland's Historic Parks, Gardens and Demesnes. Also encompassed are intervisibility and interrelationships between architectural heritage within the wider landscape, including cross-border intervisibility and interrelationships.

7.3.1 Assessment of Tier 1: Alternatives for Positioning under the Settlement Hierarchy

- **Tier 1 - Alternative A:** Virginia is identified as a Self-Sustaining Growth Town.
- **Tier 1 - Alternative B:** Virginia is identified as a Self-Sustaining Town.

Alternative A would provide a greater allocation of population and economic growth to Virginia in the overall context of the County. This results in a more sustainable and lower allocation of growth in the smaller towns which have less services and in the rural countryside. This results in a more sustainable development of the County and is considered to be in the interests of proper planning.

Alternative A would result in lower levels of commuting, benefiting efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets the most. Development in Virginia would be better serviced and there would be a reduced need for greenfield development (and associated adverse environmental effects) in less well-serviced, less-well connected and more sensitive locations in the County, including the open countryside and smaller settlements.

Alternative B would provide a greater allocation of population and economic growth to smaller towns, villages and rural countryside outside of Virginia resulting in a less sustainable pattern of growth for the County, which would not be in the interests of the proper planning and sustainable development, as these smaller towns and rural areas would not have the same level of services and function for the allocation of population growth that the Plan would have allocated for them.

Alternative B would result in a greater expansion of the smaller towns and villages in the County. Services and public transport are more limited. Alternative B would result in higher levels of commuting, conflicting with efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets the most. Alternative B would provide for higher levels of greenfield development (and associated adverse environmental effects) in less well-serviced, less-well connected and more sensitive locations in the County, including the open countryside and smaller settlements. This type of development would result in a higher potential adverse environmental impact, including effects on water, drinking water, human health, ecology and landscape designations.

Tier 1 alternatives are assessed against Strategic Environmental Objectives on Table 7.3.

Table 7.3 Assessment of Tier 1 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative for the Plan in bold)	Likely to Improve status of SEOs		Potential Conflict with status of SEOs – likely to be mitigated	
	to a Greater degree	to a Lesser degree	to a Lesser degree	to a Greater degree
A. Virginia is identified as a Self-Sustaining Growth Town	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	
B. Virginia is identified as a Self-Sustaining Town		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L

7.3.2 Assessment of Tier 2: Alternatives for Population Allocations

- **Tier 2 – Alternative A:** Concentrate future growth in the settlements in the upper tiers of the settlement hierarchy, in particular the Key Town of Cavan Town, Self-Sustaining Growth Town of Virginia and Self-Sustaining Towns of Ballyjamesduff, Bailieborough, Kingscourt and Cootehill with a more limited level of growth in the smaller settlements and open countryside.
- **Tier 2 – Alternative B:** Continued growth of Cavan Town, Ballyjamesduff, Bailieborough, Kingscourt, Virginia and Cootehill with dispersed pattern of growth across the smaller settlements and the open countryside.

Under **Alternative A**, in accordance with NPF and RSES, a greater concentration of future growth is placed in the larger settlements of the County where sufficient capacity exists for a range of functions including housing, employment, services, retail and leisure opportunities. There is a more limited level of growth in the smaller settlements and the open countryside.

Alternative A would allow for more concentrated, compact growth and significantly reduce the proportion of rural one-off housing in the County. This alternative would also direct development towards smaller villages which would also promote compact growth and provide viable alternatives to rural housing.

The concentration of growth into the larger settlements would ensure more sustainable growth, where there are greater opportunities to consolidate development in the existing urban footprint through infill and brownfield development. These settlements have a number of positive attributes including a greater range of services, transport links, a stronger employment base, and a greater capacity to facilitate population and economic growth. By concentrating in the larger settlements in the County, Alternative A would result in lower levels of commuting, benefiting efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets. Development in these centres would be better serviced (including with transport and water services) and there would be a reduced need for greenfield development (and associated adverse environmental effects) in less well-served, less-well connected and more sensitive locations in the County.

Under Alternative B, larger towns in the settlement hierarchy would not reach a sustainable population growth relative to the services and function that they provide. This alternative involves a more dispersed population approach, which has the potential to undermine the role of the larger settlements and make it more difficult to deliver key infrastructure and placemaking projects. It would not reduce the proportion of rural one-off housing in the County. This alternative would also direct development towards smaller villages which would also promote compact growth and provide viable alternatives to rural housing.

Development would be more likely to occur on greenfield lands as there are less infill and brownfield sites available in Rural Settlements and the Open Countryside. Services and public transport are more limited and there would be a greater dependence on commuting for employment and accessing services. Alternative B would result in higher levels of commuting, conflicting with efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets. Alternative B would provide for higher levels of greenfield development (and associated adverse environmental effects) in less well-served, less-well connected and more sensitive locations in the County. This type of development would result in a higher adverse environmental impact, including effects on water, drinking water, human health, ecology and landscape designations.

Tier 2 alternatives are assessed against Strategic Environmental Objectives on Table 7.4.

Table 7.4 Assessment⁸⁴ of Tier 2 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative for the Plan in bold)	Likely to Improve status of SEOs		Potential Conflict with status of SEOs – likely to be mitigated	
	to a Greater degree	to a Lesser degree	to a Lesser degree	to a Greater degree
A. Concentrate future growth in the settlements in the upper tiers of the settlement hierarchy, in particular the Key Town of Cavan Town, Self-Sustaining Growth Town of Virginia and Self-Sustaining Towns of Ballyjamesduff, Bailieborough, Kingscourt and Cootehill with a more limited level of growth in the smaller settlements and open countryside.	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	
B. Continued growth of Cavan Town, Ballyjamesduff, Bailieborough, Kingscourt, Virginia and Cootehill with dispersed pattern of growth across the smaller settlements and the open countryside.		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L

7.3.1 Assessment of Tier 3: Alternatives for Rural Areas

Rural Areas under Strong Urban Influence/Pressure

- **Tier 3 (i) Alternative A:** Designate Rural Areas under Strong Urban Influence and Stronger Rural Areas that require various criteria to be demonstrated in advance of planning permission being granted for a single dwelling for permanent occupation.
- **Tier 3 (i) Alternative B:** Do not designate Rural Areas under Strong Urban Influence/Stronger Rural Area and assess each planning application on its merits.

Alternative A provides for a robust and transparent policy approach to manage rural housing.

Restricting the development of single dwellings in rural areas that are under strong urban influence/pressure 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.

Single dwellings in rural areas would be facilitated as appropriate and urban development would be directed towards established settlements. This alternative would help to prevent low density urban sprawl and associated adverse effects upon sustainable mobility, climate emission reduction targets and various environmental components.

⁸⁴ The alternatives are evaluated using compatibility criteria in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the alternatives are arrayed against each other to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

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 protection/management of the environmental component/issues 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 a potential significant negative effect however these effects would be likely to be mitigated by measures which have been integrated into the Plan.

These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Alternative B Provides a vague and unclear policy approach to rural housing and risks facilitating a significant increase in urban-generated one-off housing in the open countryside which will undermine the role of small towns and villages and have consequences for the environment.

Not restricting the development of single dwellings in rural areas that are under strong urban influence/pressure 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 housing 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, climate emission reduction targets and various environmental components including groundwater, surface water, drinking water and human health.

Tier 3 (i) alternatives are assessed against Strategic Environmental Objectives on Table 7.5.

Table 7.5 Assessment of Tier 3 (i) Alternatives against Strategic Environmental Objectives

Alternative (selected alternative for the Plan in bold)	Likely to Improve status of SEOs		Potential Conflict with status of SEOs – likely to be mitigated	
	to a Greater degree	to a Lesser degree	to a Lesser degree	to a Greater degree
A. Designate Rural Areas under Strong Urban Influence/Pressure that require various criteria to be demonstrated in advance of planning permission being granted for a single dwelling for permanent occupation.	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	
B. Do not designate Rural Areas under Strong Urban Influence/Pressure and assess each planning application on its merits.		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L

Serviced and Unserviced Settlements

- **Tier 3 (ii) Alternative A:** Provide focus to and targeted provisions for encouraging residential development in serviced and unserviced settlements, as an alternative to rural one-off housing;
- **Tier 3 (ii) Alternative B:** Serviced and unserviced settlements are included but there is no focus or no targeted provisions for these locations to act as alternatives to one-off housing in the open countryside.

Alternative A recognises the important role that smaller settlements play in sustaining rural communities and in providing a proactive approach to the sustainable development of rural areas.

Providing focus to and targeted policies/objectives for serviced and unserviced settlements would help to provide a viable alternative to one-off housing in the open countryside. Development within these settlements would be more efficiently and more likely to be served by existing or new infrastructure (including water services infrastructure and safe walking and cycling facilities) and more likely to protect the environment including the status of ground and surface waters, water used for drinking water, human health, biodiversity and flora and fauna and the landscape. Development would be required to be subject to siting, design, protection of residential amenities and normal development management criteria, subject to the satisfactory provision of infrastructure and services and in keeping with the character of the settlement.

Alternative B has the potential to undermine the role that smaller settlements play in sustaining rural communities and providing a viable alternative to one off housing.

Not providing a focus to and targeted policies/objectives for serviced and unserved settlements would be less likely to provide a viable alternative to one-off housing in the open countryside. Development within the open countryside would be less likely to be served by infrastructure (including water services infrastructure and safe walking and cycling facilities) and less likely to protect the environment including the status of ground and surface waters, water used for drinking water, human health, biodiversity and flora and fauna and the landscape.

Tier 3 (ii) alternatives are assessed against Strategic Environmental Objectives on Table 7.6.

Table 7.6 Assessment of Tier 3 (ii) Alternatives against Strategic Environmental Objectives

Alternative (selected alternative for the Plan in bold)	Likely to Improve status of SEOs		Potential Conflict with status of SEOs – likely to be mitigated	
	to a Greater degree	to a Lesser degree	to a Lesser degree	to a Greater degree
A. Provide focus to and targeted provisions for encouraging residential development in serviced and unserved settlements, as an alternative to rural one-off housing	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	
B. Serviced and unserved settlements are included but there is no focus or no targeted provisions for these locations to act as alternatives to one-off housing in the open countryside.		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L

7.3.1 Assessment of Tier 4: Alternatives for Densities

- **Tier 4 – Alternative A:** Application of a single standard density across the whole County in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy.
- **Tier 4 – Alternative B:** Application of different densities at different locations, as appropriate; higher densities where sustainable transport mode opportunities are available and lower densities where constraints are presented by, for example, character or function of settlement.

The application of a singular standard residential density across the County under **Alternative A** would have the potential to push new development towards more environmentally sensitive lands that are less well-served and less well-connected, resulting in unnecessary potentially significant adverse effects on all environmental components.

The application of a singular standard residential density could result in a potential misalignment between the supply of zoned land to meet the projected demand for new housing. This could result in a misalignment between new development and essential services provision with associated potential for adverse effects on environmental components.

Higher densities under **Alternative B** would be provided where sustainable transport mode opportunities are available and lower densities would be provided where constraints are presented by, for example, wastewater and water infrastructure constraints, cultural heritage designations or the local road network. This approach would contribute towards national and regional strategic outcomes including the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society.

Alternative B would help to ensure compact, sustainable development within and adjacent to the existing built-up footprint and would conflict with the protection and management of environmental components the least. Alignment between new development and essential services provision would be most likely under Alternative B.

Tier 4 alternatives are assessed against Strategic Environmental Objectives on Table 7.4.

Table 7.7 Assessment of Tier 4 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative for the Plan in bold)	Likely to Improve status of SEOs		Potential Conflict with status of SEOs – likely to be mitigated	
	to a Greater degree	to a Lesser degree	to a Lesser degree	to a Greater degree
A. Application of a single standard density across the whole County in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy.		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L
B. Application of different densities at different locations, as appropriate; higher densities where sustainable transport mode opportunities are available and lower densities where constraints are presented by, for example, cultural heritage designations or the local road network.	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	

7.3.2 Assessment of Tier 5: Alternatives for Land Use Zoning

Countywide Residential

Alternative A: Reduction in the quantum of zoned land

By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment in settlements across the County. By consolidating the zoning and helping to avoid unnecessary sprawl of the County's settlements, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components including groundwater, surface water, drinking water and human health. Introduction of a new zoning to facilitate low density residential development as an alternative to one off rural housing would further benefit protection and management of the environment. Land topography is a physical constraint to development and limits the range of uses that can be provided for at certain locations within settlements across the County.

Alternative B: No change in the quantum of zoned land

By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment in settlements across the County. By facilitating the unnecessary sprawl of the County's settlements and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects including groundwater, surface water, drinking water and human health. Land topography is a physical constraint to development and limits the range of uses that can be provided for at certain locations within settlements across the County.

Countywide Economic

Alternative A: Increase in the quantum of zoned land

By increasing in the quantum of zoned land for economic purposes in settlements throughout the County in order to fulfil an established planning need, to reduce the levels of commuting out of the County for employment and to provide an alternative for rural based economic activity into urban areas, **Alternative A** would:

- Increase the potential for adverse environmental effects to occur from economic development within existing settlements;
- Decrease the potential for adverse environmental effects to occur from economic development outside of existing settlements; and
- Reduce the levels of commuting out of the County – and associated emissions – for employment.

Alternative B: No increase in the quantum of zoned land

By not increasing in the quantum of zoned land for economic purposes in settlements throughout the County in order to fulfil an established planning need, to reduce the levels of commuting out of the County for employment and to provide an alternative for rural based economic activity into urban areas, **Alternative B** would:

- Reduce the potential for adverse environmental effects to occur from economic development within existing settlements;
- Increase the potential for adverse environmental effects to occur from economic development outside of existing settlements; and
- Fail to reduce levels the levels of commuting out of the County for employment to the same extent as Alternative A.

Cavan Town Residential

Alternative A: Reduction in the overall quantum of zoned land

By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment in Cavan Town. By consolidating the zoning and helping to avoid unnecessary sprawl of Cavan Town, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components including groundwater, surface water, drinking water and human health. Land topography is a physical constraint to development in Cavan Town and limits the range of uses that can be provided for at certain locations.

Alternative B: No change in the overall in the overall quantum of zoned land

By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment in Cavan Town. By facilitating the unnecessary sprawl of Cavan Town and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects including groundwater, surface water, drinking water and human health. Land topography is a physical constraint to development in Cavan Town and limits the range of uses that can be provided for at certain locations.

Cavan Town Economic

Alternative A: Increase in the quantum of zoned

By increasing in the quantum of zoned land for economic purposes in Cavan Town in order to fulfil an established planning need, to reduce the levels of commuting out of the County for employment and to provide an alternative for rural based economic activity into Cavan Town, **Alternative A** would:

- Increase the potential for adverse environmental effects to occur from economic development within Cavan Town;
- Decrease the potential for adverse environmental effects to occur from economic development outside of Cavan Town; and
- Reduce the levels of commuting out of the County – and associated emissions – for employment.

Alternative B: No in the quantum of zoned land

By not increasing in the quantum of zoned land for economic purposes in Cavan Town in order to fulfil an established planning need, to reduce the levels of commuting out of the County for employment and to provide an alternative for rural based economic activity into Cavan Town, **Alternative B** would:

- Reduce the potential for adverse environmental effects to occur from economic development within Cavan Town;
- Increase the potential for adverse environmental effects to occur from economic development outside of Cavan Town; and
- Fail to reduce levels the levels of commuting out of the County for employment to the same extent as Alternative A.

Tier 5 alternatives for Residential land use zoning are assessed against Strategic Environmental Objectives on Table 7.8.

Table 7.8 Assessment of Tier 5 (Residential) Land Use Zoning Alternatives against Strategic Environmental Objectives

Alternative (selected alternative for the Plan in bold)	Likely to Improve status of SEOs		Potential Conflict with status of SEOs – likely to be mitigated	
	to a Greater degree	to a Lesser degree	to a Lesser degree	to a Greater degree
Countywide Residential				
Alternative A: Reduction in the quantum of zoned land	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	
Alternative B: No change in the quantum of zoned land		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L
Cavan Town Residential				
Alternative A: Reduction in the overall quantum of zoned land	PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L	
Alternative B: No change in the overall in the overall quantum of zoned land		PHH MA A C BFF S W CH L		PHH MA A C BFF S W CH L

Tier 5 alternatives for Economic land use zoning are assessed against Strategic Environmental Objectives on Table 7.8.

Table 7.9 Assessment of Tier 5 (Economic) Land Use Zoning Alternatives against Strategic Environmental Objectives

Alternative (selected alternative in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs – likely to be mitigated		
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree
Countywide Economic						
Alternative A: Increase in the quantum of zoned land	A C S BFF W PHH MA L CH ■		S BFF W PHH L CH ▪	A C S BFF W PHH MA L CH ■		S BFF W PHH L CH ▪
Alternative B: No increase in the quantum of zoned land	S BFF W PHH L CH ▪		A C S BFF W PHH MA L CH ■	S BFF W PHH L CH ▪		A C S BFF W PHH MA L CH ■
Cavan Town Economic						
Alternative A: Increase in the quantum of zoned land	A C S BFF W PHH MA L CH ■		S BFF W PHH L CH ▪	A C S BFF W PHH MA L CH ■		S BFF W PHH L CH ▪
Alternative B: No in the quantum of zoned land	S BFF W PHH L CH ▪		A C S BFF W PHH MA L CH ■	S BFF W PHH L CH ▪		A C S BFF W PHH MA L CH ■

▪ = as a result of economic development within existing settlements

■ = as a result of economic development that would occur/would have otherwise occurred outside of existing settlements

Section 8 Evaluation of Plan Provisions

8.1 Introduction

This section provides an assessment of environmental effects using the information on the current state of the environment (provided in Section 4) and the Strategic Environmental Objectives (see Table 8.1) from implementation of the Plan and Proposed Material Alterations.

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. However, a strategic assessment can be undertaken.

Table 8.1 Strategic Environmental Objectives⁸⁵

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration ⁸⁶	<ul style="list-style-type: none"> To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals

⁸⁵ See also Section 5

⁸⁶ Including with respect to effects on Northern Ireland Priority Species and their habitats barriers to Northern Ireland Priority Species movement, including migratory fish species.

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> • Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County • Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels • Promote the circular economy, reduce waste, and increase energy efficiencies • Ensure there is adequate sewerage and drainage infrastructure in place to support new development • Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes • Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart-buildings, cities and grids
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> • To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture • Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency • Promote continuing improvement in air quality • Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution • Meet Air Quality Directive standards for the protection of human health – Air Quality Directive • Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> • To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

8.2 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 two 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 identified under Section 4), 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 8.3 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality.
- 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, to which the Proposed Material Alterations relate, 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 8.2.

Other policies, plans and programmes that have been considered by the assessment of effects include those which are detailed under Section 2.7 (and associated Appendix I “Relationship with Legislation, Plans and Programmes”), Section 4 and Section 5. Plans and programmes from various sectors will interact with the Plan, including those relating to land use planning. These plans and programmes are subject to their own environmental assessment requirements as relevant. Examples include:

- Land use policy, plans and programmes (e.g. the National Planning Framework, the Northern and Western Regional Spatial and Economic Strategy, adjoining County Development Plans, Local Area Plans and other land use plans);
- Cavan Local Economic and Community Plan and the Local Economic and Community Plans of adjoining counties;
- Energy policy, plans and programmes (e.g. Grid25 and associated Implementation Programme, Ireland’s National Renewable Energy Action Plan 2010, Strategy for Renewable Energy 2012-2020, Draft National Energy and Climate Plan 2021-2030 and the Renewable Electricity Policy and Development Framework);
- Climate related policy, plans and programmes (e.g. the National Climate Policy Position and Climate Action 2014, Low Carbon Development Act 2015 and White Paper Ireland’s Transition to a Low Carbon Energy Future 2015, Climate Action Plan 2019, the National Adaptation Framework 2018, and the Cavan Climate Change Adaptation Strategy 2019 and Climate Action Charter 2019);
- 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 Regional Waste Management Plan and Transportation Policies and Strategies); and
- Environmental protection and management plans (e.g. River Basin Management Plan and Flood Risk Management Plans).

Potential cumulative/in combination effects include:

- Contributions towards reductions in travel related greenhouse gas and other emissions to air, reductions in consumption from non-renewables and associated achievement of legally binding targets (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of facilitating:
 - sustainable compact growth;
 - sustainable mobility/a shift from motorised transport modes to more sustainable and non-motorised transport modes; and
 - renewable energy development.

- 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 that is accompanied by appropriate levels of water services thereby contributing towards environmental protection;
- Need for and use of water and waste water 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; 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 is consistent with those described on Table 8.2. These plans and programmes are required to comply with environmental legislation and undergo SEA and AA as relevant 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 Cavan.

A variety of the issues covered by the Plan provisions are regional issues which are considered: at Regional Assembly level, in the Northern and Western RSES 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 County including those arising as a result of the cumulative provision of development in the wider Northern and Western region would potentially conflict with a number of environmental components, across the wider Northern and Western 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.

8.3 Overall Evaluation (including Transboundary) of Draft Plan Provisions to which the Proposed Material Alterations Relate (from SEA Environmental Report May 2021)

Cavan County Council have integrated various recommendations arising from the SEA, AA and SFRA processes into the Draft Plan (see Section 9). Table 8.2 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.

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 identified at Section 9), it has been determined that: significant residual adverse environmental effects will not occur in Ireland; and significant environmental effects will not occur in Northern Ireland.

Table 8.2 Overall Evaluation (including transboundary) – Effects arising from the Draft Plan

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Northern and Western RSES, adjacent Development Plans and other plans and programmes – see Appendix I.			
	Positive/Neutral Effects, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects, following mitigation	
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere. • Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. • Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna. • 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. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> • Loss of/damage to biodiversity in designated sites (including European Sites, Wildlife Sites and Areas of Special Scientific Interest) 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 such as birds and bats. 	<ul style="list-style-type: none"> • 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). 	BFF

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Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Northern and Western RSES, adjacent Development Plans and other plans and programmes – see Appendix I.			
	Positive/Neutral Effects, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects, following mitigation	
Population and Human Health	<ul style="list-style-type: none"> • Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. • Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere. • Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere. • Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water. 	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors. 	<ul style="list-style-type: none"> • Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below. 	PHH
Soil	<ul style="list-style-type: none"> • Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere. • Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land. 	<ul style="list-style-type: none"> • Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. • Potential for riverbank erosion. • Aggregate potential sterilisation. 	<ul style="list-style-type: none"> • Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. • Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change. 	S

SEA Environmental Report for Proposed Material Alterations

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Northern and Western RSES, adjacent Development Plans and other plans and programmes – see Appendix I.			SEO Codes
	Positive/Neutral Effects, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects, following mitigation	
Water	<ul style="list-style-type: none"> • Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere. • Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. • Contribution towards flood risk management and appropriate drainage. 	<ul style="list-style-type: none"> • Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. • Increase in flood risk and associated effects associated with flood events. 	<ul style="list-style-type: none"> • Any increased loadings as a result of development to comply with the River Basin Management Plan. • Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan. 	W
Material Assets	<ul style="list-style-type: none"> • Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere. • Contribution towards compliance with national and regional water services and waste management policies. • Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. • Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. • Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency. 	<ul style="list-style-type: none"> • Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Increases in waste levels. • Potential impacts upon public assets and infrastructure. • Interactions between agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter. 	<ul style="list-style-type: none"> • Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan. • Residual wastes to be disposed of in line with higher-level waste management policies. • Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework. 	MA

SEA Environmental Report for Proposed Material Alterations

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Northern and Western RSES, adjacent Development Plans and other plans and programmes – see Appendix I.			SEO Codes
	Positive/Neutral Effects, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects, following mitigation	
Air and Climatic Factors	<ul style="list-style-type: none"> • Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere. • In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: <ul style="list-style-type: none"> ○ Sustainable compact growth; ○ Sustainable mobility, including walking, cycling and public transport; ○ Drainage, flood risk management and resilience; ○ Sectors including agriculture, forestry, energy and buildings; and ○ Sustainable design, energy efficiency and green infrastructure. 	<ul style="list-style-type: none"> • Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. • Potential conflicts between transport emissions, including those from cars, and air quality. • Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. • Potential conflicts with climate adaptation measures including those relating to flood risk management. 	<ul style="list-style-type: none"> • 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 compact growth and sustainable mobility. • Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised. 	AC
Cultural Heritage	<ul style="list-style-type: none"> • Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within existing settlements. • Contributes towards protection of cultural heritage within existing settlements by facilitating brownfield development and regeneration. 	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology⁸⁷ and protected architecture⁸⁸ arising from construction and operation activities. 	<ul style="list-style-type: none"> • Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	CH
Landscape	<ul style="list-style-type: none"> • Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements. 	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> • Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures. 	L

⁸⁷ Archaeological heritage encompasses designated and unknown archaeological heritage including entries to the Record of Monuments and Places, underwater archaeology, entries to the Northern Ireland Sites and Monuments Record and Northern Ireland Areas of Significant Archaeological Interest and Archaeological Potential. Also encompassed are intervisibility and interrelationships between archaeological heritage within the wider landscape, including cross-border intervisibility and interrelationships.

⁸⁸ Architectural heritage encompasses that which is designated or included within the National Inventory of Architectural Heritage (NIAH), NIAH Historic Gardens and Designed Landscapes, Records of Protected Structures and Northern Ireland's Listed Buildings and Northern Ireland's Historic Parks, Gardens and Demesnes. Also encompassed are intervisibility and interrelationships between architectural heritage within the wider landscape, including cross-border intervisibility and interrelationships.

8.4 Appropriate Assessment and Strategic Flood Risk Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA are being undertaken alongside the preparation of the Plan, including the Proposed Material Alterations. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The emerging conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects⁸⁹.

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA. The Proposed Material Alterations are accompanied by an AA Natura Impact Report, which has informed this SEA Environmental Report.

Strategic Flood Risk Assessment (SFRA) is also being undertaken to inform the preparation of the Draft Plan and the Proposed Material Alterations. The SFRA process has informed this report.

8.5 Integration of Climate Action into the Plan⁹⁰

The Plan, to which the Proposed Material Alterations relate, will contribute towards climate action in combination with:

- The Climate Action Plan that identifies 193 climate mitigation and/or adaptation actions, allocating the following three actions to local authorities: Action 64 Introduce minimum BER standards in the Local Authority social housing stock as part of retrofit works being carried out on older stock or refurbishment of vacant dwellings; Action 65 Develop and establish a climate-action toolkit and audit framework for Local Authority development planning to drive the adoption of stronger climate action policies in relation to the patterns and forms of future development.; and Action 66 Roadmap to develop supply chain to support the phase out of fossil fuel boilers in new dwellings. The Climate Action Plan also identifies local authorities as the lead stakeholder on a number of steps under certain actions – such as those relating to Carbon Pricing and Cross-cutting policies, Citizen Engagement, Community Leadership and Just Transition and Adaptation.
- The National Planning Framework, which has identified National Strategic Outcome Objectives 8 “Build Climate Resilience” and 9 “Support the transition to low carbon and clean energy” under National Strategic Outcome 8 “Transition to a Low Carbon and Climate Resilient Society”.
- The Northern and Western Regional Spatial and Economic Strategy that has identified various Regional Policy Objectives relating to climate action, including:
 - RPO 4.16 The NWRA shall co-ordinate the identification of potential renewable energy sites of scale in collaboration with Local Authorities and other stakeholders within 3 years of the adoption of the RSES. The identification of such sites (which may extend to include energy storage solutions) will be based on numerous site selection criteria including environmental matters, and potential grid connections. RPO 4.17 To position the region to avail of the emerging global market in renewable energy by: Stimulating the development and deployment of the most advantageous renewable energy systems; Supporting research and innovation; Encouraging skills development and transferability; Raising awareness and public understanding of renewable energy and encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses; Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilisation of the energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond.
 - RPO 4.18 Support the development of secure, reliable and safe supplies of renewable energy, to maximise their value, maintain the inward investment, support indigenous industry and create jobs.
 - RPO 4.20 Support and encourage the development of the bio-economy sector, and facilitate its development for energy production, heat, and storage distribution, in particular advocating Combined Heat and Power Units integrated into District Heating networks, in combination with Pyrogenic Carbon Capture and Storage (PyCCS) or Bio-Energy Carbon capture and storage (BECCS) all to be done in collaboration with EPA and other regulators.
 - RPO 4.21 Promote innovative new building design and retrofitting of existing buildings, both private properties, and publicly owned, to improve building energy efficiency, energy conservation and the use of renewable energy sources following National Regulations, and Policy.

⁸⁹ 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.

⁹⁰ This section is informed by content from Section 2.2.2 of the Draft Plan

- RPO 5.1 The Assembly will support through CARO and Local Authorities the preparation and implementation of Local Climate Strategies which will, inter alia, address vulnerability to climate risks and provide prioritised actions in accordance with the guiding principles of the National Adaptation Framework.
- RPO 6.51 Promote values and policies that make it easy to commute between home, work and school across the region in a way that contributes to a healthy, attractive and climate-friendly region.

Progressing climate action is a priority for the County Development Plan which will be done through a Climate Strategy which incorporates national and regional policy through an approach which includes mitigation and adaptation. This is outlined fully under Chapter 5 of the Plan. The two components of climate action are critical in order to build resilience and adapt to the changing climate in a planned and structured way.

Climate Mitigation Measures from the Plan encompass sectors including:

- Buildings
- Agriculture, Land Management and Forestry
- Transport
- Energy Production
- Minerals
- Resource Management

Climate Adaptation Measures from the Plan encompass sectors including:

- Buildings
- Agriculture, Land Management and Forestry
- Water Management
- Infrastructure, including flood defences
- Wildlife and biodiversity
- Economy and Tourism
- Human Health, Risk and Insurance

8.6 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; neither implementation of the Plan, nor the Proposed Material Alterations, will affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.3.

Table 8.3 Presence of Interrelationships between Environmental Components

Component	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air and Climatic factors	Material assets	Cultural heritage	Landscape
Biodiversity, flora and fauna		Yes	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								

8.7 Detailed Evaluation⁹¹

For an explanation of SEO codes e.g. **BFF**, **PHH**, **S**, **W**, etc. refer to Table 8.1 on page 93.

The Plan, to which the Proposed Material Alterations relate, is situated in a hierarchy of documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management, such as the National Planning Framework, the National Development Plan, the National Adaptation Framework, the Climate Action Plan and the Regional Spatial and Economic Strategy for the Northern and Western Region (for additional detail please refer to Section 2.7 “*Relationship with other relevant Plans and Programmes*” in this report). These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and already provide for various measures that have been compiled into the Plan. The Plan aligns with these documents and will be incorporated into the review and preparation of these documents. Lower tier plans and projects must be consistent and comply with the provisions of the Plan and of these other policies, plans etc. and will be subject to their own project level EIA and AA requirements as relevant. An assessment of cumulative effects is provided at Section 8.2 of this report.

Proposed Material Alterations No's. ⁹²	Commentary	Likely to Improve status of SEOs	Additional Conflicts that would need to be mitigated	No Likely interaction with status of SEOs above those already identified for the original Draft Plan
13, 20, 73, 76, 86, 90, 98, 100, 102, 106, 110, 123, 124, 125, 126, 128, 129, 132, 136 and 137	These alterations could be considered mitigation in relation to the Plan elements that could potentially affect the integrity of European sites under the Plan, further to that already included in the Draft Plan. Therefore it was deemed prudent to undertake Stage 2 AA. Consequently, SEA was advised as prudent. The changes arising from the alterations would also benefit the protection and management of various environmental components, in addition to European sites, including water, landscape, human health, soil, cultural heritage, air and climatic factors and the adequate provision of water services.	BFF PHH W MA L A C S CH		
122	This alteration would have the potential to affect the full range of environmental components including ecology, water and landscape, however; such effects would be mitigated. Potential effects on ecology include those relating to European sites including the River Shannon Callows SAC, the Lower River Shannon SAC, Lough Derg SAC, North-east Shore SAC, Lough Derg (Shannon) SPA, River Shannon and River Fergus Estuaries SPA and Middle Shannon Callows SPA. Measures have been integrated into the Draft Plan that will ensure the protection of such sites from potential impacts arising.		BFF PHH S W MA A C CH L	

⁹¹ The Proposed Material Alterations are evaluated using compatibility criteria in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the Proposed Material Alterations are arrayed against each other in order to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

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 protection/management of the environmental component/issues 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 a potential significant negative effect however these effects would be likely to be mitigated by measures which have been integrated into the Plan.

These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

⁹² For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

SEA Environmental Report for Proposed Material Alterations

Proposed Material Alterations No's. ⁹²	Commentary	Likely to Improve status of SEOs	Additional Conflicts that would need to be mitigated	No Likely interaction with status of SEOs above those already identified for the original Draft Plan
11, 154, 165, 168, 177, 185, 204 and 212	<p>These alterations would not be consistent with established population targets and/or the proper planning and sustainable development of the County. As a result they would present additional, unnecessary and potentially significant adverse effects on various environmental components, including soil, water, biodiversity, air and climatic factors and material assets. Any land use zoning proposed is considered to be premature in the context of current population targets.</p> <p>Potentially significant adverse unnecessary effects, would be likely to include:</p> <ul style="list-style-type: none"> • Effects on non-designated habitats and species • Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces • Increased loadings on water bodies • Conflict with efforts to maximise sustainable compact growth and sustainable mobility • Occurrence of adverse visual impacts <p>Where such alterations are further from the centre of settlements, potentially significant unnecessary adverse effects would be likely to include:</p> <ul style="list-style-type: none"> • Difficulty in providing adequate and appropriate waste water treatment as a result of zoning outside of established built development envelopes of settlements • Adverse impacts upon the economic viability of providing for public assets and infrastructure • Adverse impacts upon carbon emission reduction targets in line with local, national and European environmental objectives • Conflicts between transport emissions, including those from cars, and air quality • Conflicts between increased frequency of noise emissions and protection of sensitive receptors • Potential effects on human health as a result of potential interactions with environmental vectors <p>Alteration No. 11 relates to the Core Strategy table, which has been affected by a number of the other alterations listed here relating to land use zoning.</p> <p>Alteration No. 154 relates to Strategic Residential Reserve lands and allows for single residential development that would not compromise the development of the remainder of the lands.</p>		BFF PHH S W MA A C CH L	
184	<p>This alteration would not provide the most evidence-based framework for development and have the potential to undermine sustainable development and proper planning, including compact growth, by removing land use zoning for Community Facilities. This alteration would have the potential to result in new growth that is less well-served by community facilities and push development that would be appropriate in certain locations to more sensitive, less well-served, less well-connected locations.</p>		BFF PHH S W MA A C CH L	

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. These measures also apply to Proposed Material Alterations. 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 the recommendations of these processes into the Plan, the Council would ensure that both the beneficial environmental effects of implementing the Plan are maximised and that potential adverse effects are avoided, reduced or offset.

Mitigation relating to the Proposed Material Alterations is recommended under Section 9.2 below.

Mitigation as part of the Draft Plan preparation/SEA process was achieved through the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development, to which the Proposed Material Alterations relate;
- Considering alternatives for the Plan, to which the Proposed Material Alterations relate;
- Integration of environmental considerations into zoning provisions of the Plan, to which the Proposed Material Alterations relate; and
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan, to which the Proposed Material Alterations relate.

9.2 Mitigation Recommended for Proposed Material Alterations

Mitigation relating to the Proposed Material Alterations is recommended under Table 9.1 below.

Table 9.1 Mitigation Recommended for Proposed Material Alterations

Alteration No. <small>⁹³</small>	Mitigation Description - for further information on adverse environmental effects refer to Table 8.2	Recommendation
165, 168, 177, 184, 185, 204 and 212	Protect the environment, contribute towards sustainable development and provide the most evidence-based framework for development.	Do not adopt as part of Draft Plan.
154	Protect the environment, contribute towards sustainable development and provide the most evidence-based framework for development.	Further modify as per Office of Planning Regulator's submission on Draft Plan.

⁹³ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

9.3 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 on public display, Cavan 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;
- Sustainable Communities;
- Climate Action;
- Economic Development;
- Transportation;
- Infrastructure;
- Environment;
- Water and Drainage;
- Tourism; and
- Rural Development.

9.4 Consideration of Alternatives

Although strategic alternatives in relation to the content of the Plan were significantly limited for the Plan (see Section 6), as part of the Plan preparation/SEA process, the Council considered a number of alternatives for the Draft Plan, to which the Proposed Material Alterations relate .

These alternatives were assessed by the SEA process (see Section 7) and the findings of this assessment informed the selection of preferred alternatives, facilitating an informed choice with respect to the type of Plan that was prepared and placed on public display.

9.5 Integration of environmental considerations into Zoning of the Plan

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

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF and Northern and Western RSES.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist seeks to facilitate zoning that will help to avoid inappropriate development being permitted in areas of elevated sensitivity, such as in areas at risk of flooding or ecological sensitivity. Various provisions have been integrated into the Plan that provide for flood risk management and ecological protection and management at project level.

Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

9.6 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. These measures also apply to Proposed Material Alterations.

Table 9.2 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 help to minimise flood risk and the protection of human health, for example.

Table 9.2 Integration of Environmental Considerations into the Plan

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
Various	Various	<p>Core Strategy - Ecosystems Services Approach and Natural Capital In preparing the Draft Plan and developing policy objectives, the Council have followed these Ecosystem Services⁹⁴ Approach principles:</p> <ol style="list-style-type: none"> Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function. Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation, resources for food, fibre or fuel, or for recreation, culture and quality of life. Involving people - those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them. Public consultation has informed the preparation of the Draft Plan which will be further refined before adoption, taking into account submissions/observations made on the Draft Plan during public display. <p>The Council shall promote an Ecosystem Services Approach, following the above principles, in its decision-making processes, including those relating to the preparation of statutory land use plans. In recognition of the need to manage natural capital⁹⁵, provisions have been integrated into the Plan that will contribute towards management of air quality, noise pollution, light pollution, water quality and integrated river basin management.</p> <p>United Nations Sustainability Goals Contribute, as practicable, towards achievement of the 17 Sustainable Development Goals of the United Nations' 2030 Agenda for Sustainable Development, which came into force in 2016.</p> <p>Various other Objectives GR 09 New roads and other transport infrastructure projects that are not already provided for by existing plans/programmes or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environment Report and the objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Road Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage1 – Router Corridor Identification, Evaluation and Sections; and Stage 2 – Route Identification, Evaluation and Selection. RCWM-05 All relevant development proposals shall include a Construction Environmental Management Plan (CEMP) with planning application documentation⁹⁶. GE 08 Where undergrounding and/or overgrounding of cables is being pursued, proposals should demonstrate that environmental impacts including the following are minimise:</p> <ul style="list-style-type: none"> - Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties). - Short to medium term impacts on the landscape where, for example, hedgerows are encountered;

⁹⁴ Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing

⁹⁵ Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)

⁹⁶ Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:

- location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse;
- location of areas for construction site offices and staff facilities;
- details of site security fencing and hoardings;
- details of on-site car parking facilities for site workers during the course of construction;
- details of the timing and routing of construction traffic to and from the construction site and associated directional signage;
- measures to obviate queuing of construction traffic on the adjoining road network;
- measures to prevent the spillage or deposit of clay, rubble or other debris;
- 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;
- details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
- 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);
- disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government;
- 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;
- details of a water quality monitoring and sampling plan;
- if peat is encountered - a peat storage, handling and reinstatement management plan;
- measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed);
- appointment of an ecological clerk of works at site investigation, preparation and construction phases; and
- details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bats.

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		<ul style="list-style-type: none"> - Impacts on underground archaeology; - Impacts on soil structure and drainage; - Impacts on surface waters as a result of sedimentation and - Visual impacts.
<p>Biodiversity and flora and fauna</p>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> • Loss of/damage to biodiversity in designated sites (including European Sites, Wildlife Sites and Areas of Special Scientific Interest) 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 such as birds and bats. • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species - such as birds and bats - and including: effects on Northern Ireland Priority Species and their habitats; and barriers to Northern Ireland Priority Species movement, including migratory fish species. 	<p>Lighting Development Objectives</p> <p>LP 01 Control lighting in urban and rural areas and in particular sensitive locations, in order to minimise impacts on residential amenity, habitats and species of importance.</p> <p>LP 03 Ornamental lighting of public buildings, bridges, monuments and public spaces must not fall beyond the area intended or directed skywards. Architecturally sensitive tones such as passive, warm coloured lights should be considered before blue or rich white lights and only used where necessary.</p> <p>Natural Heritage Development Objectives</p> <p>NH1 Conserve, protect and manage the County's natural heritage assets for future generations while encouraging appreciation, understanding and enjoyment of the amenity value for the present generation.</p> <p>NH2 Maximise the social, economic and environmental benefits that may be derived from the conservation and management of Cavan's Natural Heritage and green infrastructure.</p> <p>NH3 Support the implementation of relevant actions in the National Biodiversity Plan, the All Ireland Pollinator Plan and the National Peatlands Strategy.</p> <p>NH4 Implement, in partnership with Cavan County Heritage Forum, relevant stakeholders and the wider community, Cavan County Heritage and Biodiversity Plans and any revisions thereof.</p> <p>NH5 Integrate biodiversity consideration into all Cavan County Council activities through the County Biodiversity Action Plan process.</p> <p>NH6 Ensure the protection of species of flora and fauna afforded legal protection under Irish and European Legislation.</p> <p>NH7 Assess the impact on biodiversity of proposals for large developments, particularly those on greenfield sites, or in environmentally sensitive areas. Such developments must include measures for the enhancement and protection of biodiversity.</p> <p>NH8 Promote the conservation of biodiversity outside of designated areas, including features such as wetlands, woodlands, hedgerows and uplands.</p> <p>Development Objectives for Designated Sites</p> <p>NHDS1 Protect and conserve Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas and proposed Natural Heritage Areas.</p> <p>NHDS2 Ensure that no plans, programmes or projects giving rise to significant cumulative, direct, indirect or secondary impacts on European Sites arising from their size or scale, land take, proximity, resource requirements, emissions, transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted (either individually or in combination with other plans, programmes, or projects).</p> <p>NHDS3 Ensure that any plan or project that could have an adverse impact on a NHA, pNHA, SAC, SPA, SPA (either by themselves or in combination with other plans and projects) or upon the conservation objectives of the site or would result in the deterioration of any habitat or any species reliant on that habitat will not be permitted.</p> <p>NHDS4 Ensure an Appropriate Assessment (AA) in accordance with Article 6(3) and Article 6(4) of the Habitats Directive, and in accordance with the Department of the Environment, Heritage and Local Government Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009 and relevant EPA and European Commission guidance documents, is carried out in respect of any Plan or Project likely to have significant effect on a Natura 2000 site(s), either individually or in combination.</p> <p>NHDS5 Require an ecological appraisal for development not directly connected with or necessary to the management of Natura Sites, or a proposed Natura Site and which are likely to have significant effects on that site either individually or cumulatively.</p> <p>NHDS6 Support the development of a Strategic Habitat Map for the Cuilcagh Lakelands UNESCO Global Geopark in consultation with National Parks and Wildlife Service and relevant stakeholders.</p> <p>NHDS7 Promote the maintenance and as appropriate, achievement of favourable conservation status of habitats and species and to improve the ecological coherence of the Natura 2000 network, by maintaining and where appropriate, developing features in the landscape which are of major importance for wild fauna and flora.</p> <p>NHDS8 Ensure that new development proposals affecting designated sites have regard to the sensitivities identified in the SEA Environmental Report prepared in respect of this plan.</p> <p>NHDS9 Have regard to the views of the National Parks and Wildlife Service in respect of proposed development where such development may have an impact on a designated National or European site or proposed site for designation.</p> <p>NHDS10 Consult with National Parks and Wildlife Service (NPWS) in regard to any developments (those requiring planning permission and those not requiring planning permission) which the council proposes to carry out within pNHAs, NHAs, SACs, SPAs, SPAs and other important ecological sites.</p> <p>NHDS11 Maintain the conservation value of Council owned land within NHAs and pNHAs and promote the conservation value of Council owned land adjoining NHAs.</p> <p>NHDS12 Continue to undertake surveys and collect data that will assist Cavan County Council in building its knowledge base and meeting its obligations under Article 6 of the Habitat Directives.</p> <p>NHDS 13 Projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) 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 not be permitted 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.</p> <p>NHDS 14 Contribute towards the protection and enhancement of biodiversity and ecological connectivity where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones.</p>

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		<p>Development Objectives for Non- Designated Sites</p> <p>NHND1 Support the protection of non-designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve biological diversity.</p> <p>NHND2 Conserve the existing wide range of flora, fauna and wildlife habitats in the county through the preservation of ecological corridors and networks vital to the migration, dispersal and genetic exchange of wild species. To designate County Biodiversity Sites within the lifetime of this plan and to protect the ecological integrity of these sites.</p> <p>NHND3 Implement the actions of Cavan County Biodiversity Plan and any subsequent revisions in fulfilment of the requirements of the National Biodiversity Plan.</p> <p>NHND4 Continue habitat mapping of the county to enable planning for the future development in a sensitive and sustainable manner and this mapping to inform the development management policy.</p> <p>Development Objectives for Invasive Species</p> <p>IN1 Support initiatives, which reduce the risk of invasions, help control and manage new and established invasive species, monitor impacts and raise public awareness.</p> <p>IN2 Encourage the use of native species in amenity planting and stocking and related community actions to reduce the introduction and spread of non-native species.</p> <p>IN3 Prevent the spread of invasive species within the plan area, including requiring landowners and developers to adhere to best practice guidance in relation to the control of invasive species.</p> <p>IN4 Ensure proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, the applicant will be required to submit a control and management programme for the particular invasive species as part of the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I 4777/2011)</p> <p>IN5 Support 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.</p> <p>Development Objectives for Wetlands</p> <p>WL 1 Development that would negatively impact upon any wetland including fragmentation or degradation will be resisted in the County.</p> <p>WL 2 Review and update the 2008 Wetlands Survey for County Cavan with a view to mapping the extent and condition of wetland sites in the county as a comprehensive GIS Layer. This review will also identify information gaps and inform future wetland policy.</p> <p>WL3 Where it is intended to fill or reclaim a wetland area, an ecological impact assessment will be required.</p> <p>WL4 Protect wetlands, floodplains and watercourses for biodiversity and flood protection value.</p> <p>WL5 Ensure land zonings carefully consider appropriate riparian setback distances that support high ecological status of water bodies, the conservation of biodiversity, healthy ecosystems and buffer zones from flood plains.</p> <p>WL6 Implement 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 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.</p> <p>Development Objectives for Woodlands, Trees, Hedgerows and Stonewalls</p> <p>WTHS1 Continue to co-operate with relevant stakeholders to improve public access to State forests for amenity purposes and consider development which will enhance the amenity provided by existing trees and woodlands.</p> <p>WTHS2 Promote awareness, understanding and best practice in the management of Cavan's woodland, tree, hedgerow and stone wall resource.</p> <p>WTHS3 Encourage the retention of mature trees and the use of tree surgery rather than felling where possible when undertaking, approving or authorising development.</p> <p>WTHS4 Protect Champion and Heritage Trees where identified on the Tree Register of Ireland and Heritage Tree Database, when undertaking, approving, or authorising development.</p> <p>WTHS5 Encourage the use of native species wherever possible in Cavan County Council's own landscaping work, and on Council property.</p> <p>WTHS6 Promote and encourage planting of native hedgerow species of local provenance.</p> <p>WTHS7 Encourage the retention of hedgerows and stonewalls and other distinctive boundary treatments in rural areas and prevent loss and fragmentation, where possible. Where removal of a hedgerow or stone wall is unavoidable, mitigation by provision of the same type of boundary will be required.</p> <p>WTHS8 Carry out a review of the Cavan Hedgerow Survey undertaken in 2006 during the lifetime of this plan.</p> <p>Landscape Character/ Natural Heritage Climate Change Development Objectives</p> <p>LCC 01 Within the lifetime of the plan, undertake a survey and vector mapping exercise to identify exemplar wetlands, bogs, individual trees and/or stands of trees and/or woodlands throughout the county worthy of protection and preservation.</p> <p>LCC 02 Encourage the potential community woodlands areas in urban/urban fringe areas and the development of community woodlands throughout rural Cavan.</p> <p>LCC 03 Promote the use in public spaces of hot water, foam stream, flame weeding and/or concentrated vinegar in favour of glyphosate weedkillers.</p> <p>LCC 04 Prepare a Peatland Strategy that shall encourage the rewilding, restoration and protection of peat bogs after turf cutting and/or peat extraction has ceased.</p> <p>LCC 05 Support the National Ambient Air Quality Monitoring Programme 2017 – 2022.</p> <p>LCC06 Promote the roll-out of renewables and stringent protection and enhancement of carbon pools, such as forests, peatlands and permanent grasslands.</p> <p>LCC 07 Explore the opportunity of engaging the services of a full-time Ecologist on a shared basis amongst neighbouring Local Authorities.</p> <p>LCC 08 Install and promote the installation of bird, bat, and owl boxes, and bee bricks and insect hotels or equivalent, at all relevant locations and developments, where possible.</p> <p>LCC 09 Actively participate and seek to adopt recommendations originating out of the Climate Action Regional Office (CARO) and Northern and Western Climate Action Region.</p>

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		<p>LCC 10 Fracking and the industrial extraction of fossil fuels will not be encouraged within Cavan's functional area.</p> <p>LCC 11 Develop a strategy to support an active native Tree Planting programme in the context of climate adaptation.</p> <p>Various Other Objectives</p> <p>LW 04 Facilitate increased access to Cavan's waterways, from towns and villages where visitor services are located, with an emphasis on providing a strong visitor experience associated with the lakes and waterways and their heritage and amenity value, including trails, bird hides, and water sports facilities, subject to the protection of environmentally sensitive areas and the requirements of the Habitats Directive.</p> <p>T 09 Ensure all tourism developments shall integrate climate change adaptation, the enhancement of nature and biodiversity measures into their activities, plans and proposals.</p> <p>CC 10 Support collaboration between local authorities and relevant stakeholders regarding integrated peatland management and support for rehabilitation and/or re-wetting of suitable peatland habitats, in particular the Geopark and Cuilcagh Carbon sequestration potential.</p> <p>Tourism Development Objectives</p> <p>T 01 Promote the development and strengthening of the overall value of Cavan as a tourist destination by encouraging the enhancement and development of sustainable and high-quality visitor attractions, activities and infrastructure, enabling an increase in the overall capacity and long-term development of the county's tourism industry, subject to appropriate siting and design criteria and the protection of environmentally sensitive areas.</p> <p>T 02 Engage and collaborate with key stakeholders, relevant agencies, sectoral representatives and local communities to develop the tourism sector in Cavan, to ensure that the economic potential of the tourism sector is secured for the local economy.</p> <p>T 03 Support the implementation of the County's Tourism Strategy in line with national and regional policy, tourism trends and identified challenges, in collaboration with Fáilte Ireland, Waterways Ireland, tourism businesses and communities and other supporting agencies.</p> <p>T 04 Continue to work closely with Fáilte Ireland to maximise the benefit of national and regional initiatives for the county, with a particular emphasis on initiatives which will increase the economic benefit from tourism, support local business development and encourage new enterprise opportunities.</p> <p>T 05 Utilise the county's natural and heritage resources to foster the development of tourism as a viable sector of the economy in a sustainable manner which complements the scale, quality and unique features of the location and county.</p> <p>T 06 Protect and conserve the natural, built and cultural heritage features which add value to the visitor experience in Cavan and seek to restrict developments which would damage or detract from the quality of scenic areas and identified natural and cultural heritage assets.</p> <p>T 07 Support actions to increase access to state and semi-state lands such as National Parks, Forest Parks, Waterways, together with Monuments and Historic Properties, for recreation and tourism purposes, subject to the requirements of the Habitats Directive, National Monuments Act and other provisions and policies to protect and safeguard these resources and subject to the ability of local infrastructure to support the resulting increased tourism.</p> <p>LW 04 Facilitate increased access to Cavan's waterways, from towns and villages where visitor services are located, with an emphasis on providing a strong visitor experience associated with the lakes and waterways and their heritage and amenity value, including trails, bird hides, and water sports facilities, subject to the protection of environmentally sensitive areas and the requirements of the Habitats Directive.</p> <p>LW 05 Support the provision of infrastructure to enable increased tourism activity associated with Cavan's waterways, including boating, marina/berthing, kayaking, angling, blueways and harbour amenities while ensuring that such provision does not negatively impact on sensitive environments and subject to the requirements of the Birds and Habitats Directives.</p> <p>LW 07 Support the provision of walking and cycling links between lakes, rivers, bogs and nearby towns, villages and visitor attractions, provided such developments do not negatively impact on sensitive environments.</p> <p>GCW 09 Promote the principles of 'Leave no Trace' in all trail information panels, promotional materials and events and use all statutory procedures to deter negative environmental impact resulting from use of our trails and outdoor recreation amenities.</p> <p>TC 03 Support opportunities for increased tourism within limits of existing infrastructure and sensitive habitats.</p> <p>TC 07 Support, implement and require best-practice environmental management and climate proofing of tourism related developments and activities, such as accommodation, restaurants, activity providers, festivals and events and tourism enterprises, to include zero climate impact, energy efficiency, waste management, and recycling.</p> <p>HHAS 03 Support enhanced access to state, semi-state and private lands such as bogs, forests, waterways, together with National Monuments and Historic Properties, for recreation and tourism purposes. Access should be planned and managed in a sustainable manner that protects heritage, environmental sensitivities, ecological corridors, and the ability of local infrastructure to support increased tourism.</p> <p>T 10 Monitor and manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.</p>
<p>Population and human health</p>	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors. 	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>Air Quality Development Objectives</p> <p>AQ 01 Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/5/0/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards, as set out in the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) (or any updated/superseding documents).</p> <p>Noise Development Objectives</p> <p>N 01 Support the implementation of the Noise Directive 2002/49/EC and all associated Environmental Noise Regulations 2006.</p> <p>N 02 Require all developments to be designed and operated in a manner that will minimise and contain noise levels.</p>

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		<p>Human Health Development Objectives HH 01 Ensure new developments will not have significant adverse effects on the amenities of an area through pollution by noise, fumes, odours, dust, grit or vibration or cause pollution of air, water and or soil unless mitigation measures eliminate adverse environmental impacts or reduce them to an acceptable operating level. HH 02 Ensure the implementation of the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding regulations that may be published within the lifetime of this Plan).</p>
Soil	<ul style="list-style-type: none"> Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank erosion. 	<p>Also refer to measures under other environmental components including Water.</p> <p>Development Objectives for Geological Heritage GH1 Protect and enhance the geological heritage of the Cavan Geological Survey GH2 Support the implementation of recommendations in the Geological Audit of Cavan GH3 Provide safe and sustainable access to geological sites where appropriate and subject to requirements of Article 6 of the Habitat's Directive. GH4 Consult Geological Survey of Ireland (GSI) when undertaking, authorising developments likely to impact on the County Geological Sites or involve significant ground excavations. GH5 Continue to promote the unique geological heritage of the Cuilcagh Lakelands Global Geopark (UNESCO Geopark). Individual notable sites within the Cuilcagh Lakelands Global Geopark include Cuilcagh Mountain and Mid-Cavan Drumlinised Ribbed Moraines. These sites should be valued for their scientific and educational value to the community. GH6 Have regard to the geological and geomorphological heritage values of County Cavan geological heritage sites and to avoid inappropriate development, through consultation with the Geological Survey of Ireland.</p> <p>Development Objectives for Marble Arch Caves, UNESCO Global Geopark GP1 Conserve and manage the geological resources of a discrete area to develop sustainable tourism, enterprise and community life. GP2 Build on the existing progress and achievements of the Cuilcagh Lakelands UNESCO Global Geopark in supporting the ten-year Development Plan 2020-2030. GP3 Support the development of geotourism and the recreational potential of Cavan Burren, the Shannon Pot, Killykeen, Lough Oughter and Associated Loughs, Cuilcagh and other Geopark sites through increased social use of the landscape, with attendant conservation, economic, social and community benefits within the region. GP4 Support the continuing development of strategic walking routes, trails and other countryside recreational opportunities within the Geopark such as the cross-border 'Smuggler's Route'. GP5 Continue to support the CANN cross-border environmental project restoring blanket bog habitat on Cuilcagh summit. GP6 Enhance the geodiversity, biodiversity and natural environments of the region including additional measures to conserve geosites and natural habitats where appropriate. GP7 Develop knowledge and understanding of geology, related Earth Sciences, endangered habitats and associated environmental issues through education and research programmes. GP8 Encourage enquiry through fieldwork and inspire scientific research through education and research programmes. GP9 Recognise the strategic location of Blacklion at the heart of the Geopark and other Geopark towns, villages and communities and seek to promote the development of appropriate ancillary facilities like interpretation, accommodation and social outlets. GP10 Support Swanlinbar and other Geopark towns, villages and communities as hubs for appropriate outdoor recreational activities.</p> <p>Waste Management Development Objectives WM 14 Treatment and/or management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p>
Water	<ul style="list-style-type: none"> Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	<p>Also refer to measures under other environmental components including Soil and Material Assets and various settlement specific measures provided for under Chapter 2 Settlement Strategy.</p> <p>Groundwater Development Objectives GW 01 Ensure that groundwater is protected by ensuring compliance with the following: o The appropriate control of development in areas of high groundwater vulnerability. o Implementation of the Programme of Measures as required in the River Basin Management Plans o Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010) o Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 610 OF 2010, which give effect to several EU Directives including in relation to protection of waters against pollution from agricultural sources ('the Nitrates Directive'), dangerous substances in water and protection of groundwater. GW 02 Protect ground water resources and abstraction points, and as ensures such sources and their zones of contribution are protected and safeguarded in the interests of common good and public health. GW 03 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands. GW 04 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). The European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the</p>

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		<p>Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same, to have cognisance of, where relevant, the EUs Common Implementation Strategy Guidance Document No. 20 and No. 36 which provide guidance on exceptions to the environmental objectives of the Water Framework Directive).</p> <p>GW 05 In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018 (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>GW 06 Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021, and any subsequent local or regional plans.</p> <p>GW 07 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>GW 08 Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.</p> <p>GW 09 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>GW 10 Protect both ground and surface water resources including taking account of the impacts of climate change, and to support Irish Water in the development and implementation of Drinking Water Safety Plans and the National Water Resources Plan.</p> <p>GW 11 Promote water conservation and demand management measures among all water users and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements.</p> <p>GW 12 Promote measures to prevent siltation of water courses from developments including planting and clear felling of commercial forests.</p> <p>GW 13 Promote measures to prevent acidification of water courses.</p> <p>Water Development Objectives</p> <p>W 01 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>W 02 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). THE European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same).</p> <p>W 03 In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018' (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>W 04 Ensure that in assessing applications for development, consideration is GIVEN to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.</p> <p>W 05 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>W 06 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>Agri-Food Development Objectives</p> <p>AF 06 Support agricultural development as a contributory means of maintaining population and sustaining the rural economy, whilst maintaining and enhancing the standing of the rural environment through application of the EU Water Framework Directive and EU Habitats Directive.</p> <p>AF 09 Facilitate the development of environmentally sustainable agricultural activities, whereby natural waters and watercourses, wildlife habitats, conservation areas and areas of ecological importance and other environmental assets are protected from the threat of pollution, and where development does not impinge on the visual amenity of the countryside.</p> <p>Agricultural Buildings and Structures Development Objectives</p> <p>ABS 01 Facilitate the development of environmentally sustainable agricultural activities, whereby watercourses, habitats, areas of ecological importance and environmental assets are protected and development does not impinge on the visual amenity of the countryside.</p> <p>Forestry Development Objectives</p> <p>F 01 Encourage the development of a well-managed sustainable forestry sector, which is compatible with the protection of the environment including the avoidance of likely significant effects on European Sites (SACs and SPAs); and is planted, managed and harvested in accordance with the 'Forest Service Guidelines for Landscape, Forest Harvesting and Environmental, Archaeology, Biodiversity and Water Quality'.</p> <p>F 02 Promote forestry development of appropriate scale and character while ensuring that such development does not have a negative impact on the residential amenity or the countryside, (including public access/rights of way, traditional walking routes and recreational facilities), or cause pollution or degradation of wildlife habitats, natural waters or areas of ecological importance.</p> <p>Horticulture Development Objectives</p> <p>H 01 Encourage the development of environmentally sustainable horticultural practices, to ensure that development does not impinge on the visual amenity of the countryside and that watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution.</p>

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		<p>Water Quality and Groundwater Policy Objectives</p> <p>WQG 01 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>WQG 02 Collaborate with Irish Water in contributing towards compliance with the S.I. No. 122/2014 - European Union (Drinking Water) Regulations 2014 and any regulations made thereunder. and compliance of water supplies with the parameters identified in these Regulations.</p> <p>WQG 03 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). THE European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same).</p> <p>WQG 04 In conjunction with Irish Water, have regard to the EPA 2020 'Drinking Water Quality in Public Supplies 2019' (and any subsequent update) in the establishment and maintenance of water sources in the County in the establishment and maintenance of water sources in the County.</p> <p>WQG 05 In conjunction with Irish Water, support recommendations made by the EPA arising from any failures to meet drinking water standards and any enlistment on the EPA's Remedial Action List.</p> <p>WQG 06 Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.</p> <p>WQG 07 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>WQG 08 Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.</p> <p>WQG 09 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>Various Other Objectives</p> <p>IW1 Protect and enhance the natural heritage and landscape character of the County's Waterways and to maintain them free from inappropriate development and to provide for public access, where feasible, acknowledging the existence of contiguous Natura 2000 sites.</p> <p>IW2 Protect the biodiversity of rivers, streams and other water courses and maintain them in an open state and to discourage the culverting or realignment thereof.</p> <p>IW3 Consult with, as appropriate, the Inland Fisheries Ireland in relation to any development that could have a potential impact on the aquatic ecosystems and associated riparian habitats.</p> <p>IW4 Consult with Waterways Ireland and the National Parks and Wildlife Service, the DECLG and the Inland Waterways Association on the development proposals that may affect inland waterways, rivers, lakes, canals or watercourses.</p> <p>IW5 Ensure that the County's watercourses are retained for their biodiversity and flood protection values and conserve and enhance, where possible, the wildlife habitats of the county's rivers and riparian zones, lakes, canals and streams which occur outside of designated areas to provide for a network of habitats and biodiversity corridors throughout the county.</p> <p>CP12 Encourage the use of materials and engineering solutions that optimise natural surface water drainage as part of Sustainable Urban Drainage Systems (SuDS) associated with large scale car parks.</p> <p>GED 02 Engage with all relevant government stakeholders, enterprise agencies and sectoral representatives in pursuing green approaches to economic development, and actively collaborate with key industry and educational bodies to promote Cavan based initiatives the economic sectors.</p> <p>RIC 21 Require the incorporation of Sustainable Drainage Schemes (SuDS) for all future developments with an identified need.</p> <p>LW 05 Support the provision of infrastructure to enable increased tourism activity associated with Cavan's waterways, including boating, marina/berthing, kayaking, angling, blueways and harbour amenities while ensuring that such provision does not negatively impact on sensitive environments and subject to the requirements of the Birds and Habitats Directives.</p> <p>NH8 Promote the conservation of biodiversity outside of designated areas, including features such as wetlands, woodlands, hedgerows and uplands.</p> <p>WL4 Protect wetlands, floodplains and watercourses for biodiversity and flood protection value.</p> <p>WL5 Ensure land zonings carefully consider appropriate riparian setback distances that support high ecological status of water bodies, the conservation of biodiversity, healthy ecosystems and buffer zones from flood plains.</p>
<p>Air and Climatic Factors</p>	<ul style="list-style-type: none"> • Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. • Potential conflicts between transport emissions, including those from cars, and air quality. 	<p>Also refer to detailed measures for Climate Action to Section 8.5 of this SEA Environmental Report "Integration of Climate Action into the Plan".</p> <p>Air Quality Development Objectives</p> <p>AQ 01 Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/5/0/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards, as set out in the Air Quality Standards Regulations 2011 (S.I. No. 180 of 201) (or any updated/superseding documents).</p> <p>Noise Development Objectives</p> <p>N 01 Support the implementation of the Noise Directive 2002/49/EC and all associated Environmental Noise Regulations 2006.</p> <p>N 02 Require all developments to be designed and operated in a manner that will minimise and contain noise levels.</p>

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	<ul style="list-style-type: none"> • Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. • Potential conflicts with climate adaptation measures including those relating to flood risk management. 	<p>Human Health Development Objectives</p> <p>HH 01 Ensure new developments will not have significant adverse effects on the amenities of an area through pollution by noise, fumes, odours, dust, grit or vibration or cause pollution of air, water and or soil unless mitigation measures eliminate adverse environmental impacts or reduce them to an acceptable operating level.</p>
<p>Material Assets</p>	<ul style="list-style-type: none"> • Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Increases in waste levels. • Potential impacts upon public assets and infrastructure. • Interactions between agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter. 	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions and various settlement specific measures provided for under Chapter 2 Settlement Strategy.</p> <p>LUR 09 Require all major developments to submit Traffic Impact Assessments and Mobility Management Plans.</p> <p>Groundwater Development Objectives</p> <p>GW 01 Ensure that groundwater is protected by ensuring compliance with the following:</p> <ul style="list-style-type: none"> o The appropriate control of development in areas of high groundwater vulnerability. o Implementation of the Programme of Measures as required in the River Basin Management Plans o Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010) o Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 610 OF 2010, which give effect to several EU Directives including in relation to protection of waters against pollution from agricultural sources ('the Nitrates Directive'), dangerous substances in water and protection of groundwater. <p>GW 02 Protect ground water resources and abstraction points, and as ensures such sources and their zones of contribution are protected and safeguarded in the interests of common good and public health.</p> <p>GW 03 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>GW 04 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). The European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same, to have cognisance of, where relevant, the EUs Common Implementation Strategy Guidance Document No. 20 and No. 36 which provide guidance on exceptions to the environmental objectives of the Water Framework Directive).</p> <p>GW 05 In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018 (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>GW 06 Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021, and any subsequent local or regional plans.</p> <p>GW 07 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>GW 08 Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.</p> <p>GW 09 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>GW 10 Protect both ground and surface water resources including taking account of the impacts of climate change, and to support Irish Water in the development and implementation of Drinking Water Safety Plans and the National Water Resources Plan.</p> <p>GW 11 Promote water conservation and demand management measures among all water users and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements.</p> <p>GW 12 Promote measures to prevent siltation of water courses from developments including planting and clear felling of commercial forests.</p> <p>GW 13 Promote measures to prevent acidification of water courses.</p> <p>Foul Drainage and Wastewater Development Objective</p> <p>FDW 01 Collaborate with Irish Water in contributing towards compliance with the relevant provisions of the Urban Wastewater Treatment Regulations 2001 and 2004 and the Waste Water Discharge (Authorisation) Regulations 2007, as amended</p> <p>FDW 02 Ensure that development will only be permitted in instances where there is sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) of wastewater.</p>

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		<p>FDW 03 Liaise with and work in conjunction with Irish Water during the lifetime of the plan for the provision, extension and upgrading of wastewater collection and treatment systems in all towns and villages and Rural Community Nodes of the County, to serve existing populations and facilitate sustainable development of the County, in accordance with the requirements of the Settlement Strategy and associated Core Strategy.</p> <p>FDW 04 Support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface networks to accommodate future growth in the County</p> <p>FDW 05 Ensure new developments provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm.</p> <p>FDW 06 Incorporate the requirement for Sustainable Urban Drainage Systems where appropriate in local authority projects and private development sites.</p> <p>FDW 07 Prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection for foul water. Support the Assessment of the need for upgrades of drainage systems, including separation of sewer and surface water required to reduce risk of capacity pressure on drainage systems.</p> <p>FDW 08 Ensure all new developments connect to the public wastewater infrastructure, where available, and to encourage existing developments that are in close proximity to a public sewer to connect to that sewer, subject to connection agreements with Irish Water.</p> <p>FDW 09 Protect against development proposals, involving individual treatment systems, which would increase effluent loading within existing housing clusters located within areas of high groundwater vulnerability.</p> <p>FDW 10 Ensure that private wastewater treatment plants, where permitted, are operated in compliance with EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), or any updates thereafter.</p> <p>FDW 12 Incorporate considerations of the impact of climate change into proposals submitted under the OPW Minor Works Programme.</p> <p>FDW 13 Support appropriate options for the extraction of energy and other resources from sewerage sludge in the County.</p> <p>FDW 14 Support the servicing of rural villages (serviced sites) to provide an alternative to one-off housing in the countryside in line with the Regional Spatial and Economic Strategy.</p> <p>FDW 15 Support the development of group water supplies and public drinking water supplies throughout the county.</p> <p>FDW 16 Liaise with Irish Water with regard to the installation of a wastewater treatment facility in Miltown.</p> <p>FDW 17 Ensure new developments provide adequate storm water infrastructure in order to accommodate the planned levels of growth and ensure there is appropriate flood management measures implemented to protect property and infrastructure.</p> <p>FDW18 Support Irish Water in the promotion of effective management of trade discharges to sewers in order to maximise the capacity of existing sewer networks and minimise detrimental impacts on sewerage treatment works.</p> <p>Waste Management Development Objectives</p> <p>WM 01 Support the implementation of the Connacht-Ulster Region Waste Management Plan 2015-2021 and any updates made thereto.</p> <p>WM 02 Implement EU and national waste and related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.</p> <p>WM 03 Prioritise waste prevention through behavioural change activities to decouple economic growth and resource use.</p> <p>WM 04 Encourage the transition from a waste management economy to a green circular economy to enhance employment and increase the value recovery and recirculation of resources</p> <p>WM 05 Promote sustainable waste management treatment in keeping with the waste hierarchy and the move towards a circular economy and greater self sufficiency.</p> <p>WM 06 Encourage and support waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.</p> <p>WM 07 Facilitate the transition from a waste management economy to a green circular economy to increase the value recovery and recirculation of resources.</p> <p>WM 08 Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.</p> <p>WM 09 Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives, that will lead to local sustainable waste management practices.</p> <p>WM 10 Ensure that the Council fulfils its duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No. 524 of 2008) including those in relation to the identification and registration of closed landfills.</p> <p>WM 11 Encourage and promote technologies, for example anaerobic digestion, that will contribute positively and grow the Circular and Bio-economy to promote sustainable rural and urban economic development, as part of the overall aim of transitioning to a low carbon economy with reduced green house gases.</p> <p>WM 12 Ensure that the local authority is cognisant of targets under EU Circular Economy proposals, landfill capacity limitations and proper management of soil, stone and C&D materials</p> <p>WM 13 To require developers to prepare construction and demolition waste management plans for new construction projects over certain thresholds which shall meet the relevant recycling/recovery targets for such waste in accordance with the national legislation and national and regional waste management policy.</p> <p>WM 14 Treatment and/or management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p> <p>Wastewater Treatment in Rural Areas Development Objectives</p> <p>WTR 01 Ensure proposals involving the installation of an on site wastewater treatment system are in accordance with the requirements of the 'EPA Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses,' (2009) or any subsequent Code of Practice which supersedes it.</p> <p>WTR 02 Ensure proposals shall be accompanied by a Site Characterisation Form which has been properly completed by a suitably qualified person.</p>

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		<p>WTR 03 Proposals for significant extensions will be required to ensure that existing effluent treatment systems are adequate to cater for any additional loading that may result from the extension.</p> <p>WTR 04 Ensure that private wastewater treatment plants, where permitted, are operated in compliance with EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), as may be amended.</p> <p>WTR 05 Protect against development proposals, involving individual treatment systems, which would increase effluent loading within existing housing clusters located within areas of high groundwater vulnerability.</p> <p>Private Wells Development Objectives</p> <p>PW 01 Support householders, through advice and guidance, to ensure that private wells are to acceptable drinking water standards.</p> <p>Environment, Water and Waste Water Climate Context and Development Objectives</p> <p>EWC 01 Require in accordance with the Department of the Environment, Heritage and Local Government's 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Protects (2006), the submission of a Construction and Demolition Waste Management Plan (CDWMP) for any project in excess of:</p> <ul style="list-style-type: none"> - aggregate floor area in excess of 1250 sq. m; - demolition or refurbishment of 100 m3 of Construction of Demolition waste; or - civil engineering projects in excess of 500 m3 of waste. <p>Fisheries</p> <p>LW 02 Continue to engage with Inland Fisheries Ireland on the delivery of the National Strategy for Angling Development in Cavan</p> <p>LW 05 Support the provision of infrastructure to enable increased tourism activity associated with Cavan's waterways, including boating, marina/berthing, kayaking, angling, blueways and harbour amenities while ensuring that such provision does not negatively impact on sensitive environments and subject to the requirements of the Birds and Habitats Directives.</p>
<p>Cultural Heritage</p>	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology⁹⁷ and protected architecture⁹⁸ arising from construction and operation activities. 	<p>BCHPO 01 Undertake to preserve, conserve, enhance and promote understanding of the cultural heritage of County Cavan by:</p> <ul style="list-style-type: none"> - Making heritage more accessible to all citizens of Cavan - Promoting heritage learning and its value as an educational resource - Developing heritage-based tourism products by facilitating the development of infrastructure both hard and soft, heritage events and festivals - Supporting the development and implementation of Cavan Heritage Plan 2021-2026 (currently in development). <p>Protected Structures Development Objectives</p> <p>RPS1 Protect, conserve and manage the built heritage of County Cavan and to encourage sensitive and sustainable development to ensure its preservation for future generations.</p> <p>RPS2 Review and update the Record of Protected Structures on an on-going basis.</p> <p>RPS3 Positively consider proposals to improve, alter, extend or change use of Protected Structures so as to render them viable for modern use, subject to suitably qualified Conservation Architects and / or other relevant experts, suitable design materials and construction methods.</p> <p>RPS4 Quality contemporary and innovative designs will be supported. These designs should not detract from the historic fabric of a Protected Structure.</p> <p>RPS5 Ensure all development works on or at the sites of Protected Structures, including site works necessary are carried out using best heritage practice for the protection and preservation of those aspects or features of the structures /site that render it worthy of protection. The form and structural integrity of Protected Structures should be retained as part of any redevelopment proposal and the relationship between the Protected Structure and any complex of adjoining buildings, designed landscape features, or designed views and vistas from to the structure should be considered.</p> <p>RPS6 Support the re-introduction of traditional features on Protected Structures where there is evidence that such features previously existed.</p> <p>RPS7 Applications for works to Protected Structures will be assessed in accordance with the Architectural Heritage Protection Guidelines 2011. Works should ensure that the special character and integrity of the Protected Structure is preserved.</p> <p>RPS8 Resist the demolition and inappropriate alteration of Protected Structures.</p> <p>RPS9 Support the rehabilitation, renovation and re-use of existing Protected Structures for their own economic benefit and that area in which they are located.</p> <p>RPS10 Proposals for large scale developments and infrastructure projects should consider the impacts on the architectural heritage and seek to avoid them. The extent, route, services and signage for such projects should be sited at a distance from Protected Structures, outside the boundaries of designed historic landscapes, and not</p>

⁹⁷ Archaeological heritage encompasses designated and unknown archaeological heritage including entries to the Record of Monuments and Places, underwater archaeology, entries to the Northern Ireland Sites and Monuments Record and Northern Ireland Areas of Significant Archaeological Interest and Archaeological Potential. Also encompassed are intervisibility and interrelationships between archaeological heritage within the wider landscape, including cross-border intervisibility and interrelationships.

⁹⁸ Architectural heritage encompasses that which is designated or included within the National Inventory of Architectural Heritage (NIAH), NIAH Historic Gardens and Designed Landscapes, Records of Protected Structures and Northern Ireland's Listed Buildings and Northern Ireland's Historic Parks, Gardens and Demesnes. Also encompassed are intervisibility and interrelationships between architectural heritage within the wider landscape, including cross-border intervisibility and interrelationships.

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		<p>interrupt specifically designed vistas. Where this is not possible the visual impact must be minimised through appropriate mitigation measures such as high-quality design and/or use of screen planting.</p> <p>RPS11 Carry out an audit of Protected Structures within the council's ownership and devise a management / maintenance plan for these structures.</p> <p>RPS12 Identify Protected Structures in council ownership that are under threat directly or indirectly through climate change.</p> <p>RPS13 Seek to integrate climate adaptation measures into future conservation and management plans for Protected Structures.</p> <p>RPS14 Support owners / occupiers of Protected Structures seeking to upgrade energy efficiency and climate resilience measures. Works to upgrade the environmental performance and the implementation of measures to address the impacts of climate change will be encouraged to ensure the sustainability of Protected Structures and buildings sited within an ACA. Such works should not adversely impact the special character of a structure.</p> <p>RPS15 Support schemes which encourage the conservation of Protected Structures e.g. Built Heritage Investment Scheme, Historic Structures Fund, Historic Towns Initiative.</p> <p>Architectural Conservation Areas Development Objectives</p> <p>ACA1 Ensure that all development proposals within the boundaries of the ACA will enhance rather than detract from the historic and architectural character and settings of the buildings within the ACA. Proposals within ACAs should be in accordance with Statement of Characters prepared for ACAs.</p> <p>ACA2 Avoid the removal of structures and distinctive elements (such as boundary treatments, street furniture, paving and landscaping) that positively contribute to the character of Architectural Conservation Areas.</p> <p>ACA3 Ensure that Architectural Conservation Areas (ACAs), including any associated public realm area, are protected and ensure that any new development or alteration of a building within or adjoining an ACA positively enhances the character of the area and is appropriate in terms of plot size, proposed design, including: scale, mass, height, proportions, density, layout, materials, plot ratio and building lines. Planning permission will not normally be approved for developments that are not consistent with and complementary to the character of the ACA.</p> <p>ACA4 Support and promote best practice conservation in works to Protected Structures and buildings within ACAs and to encourage the use of tradespeople, professionals trained in the use of traditional skills, materials, and building techniques.</p> <p>ACA5 Protect and enhance the special character of the public domain of an ACA. Features of the public domain including traffic and parking infrastructure, signage, public utilities, street furniture, and street lighting must be appropriately designed to enhance and preserve the character of the ACA.</p> <p>ACA6 Encourage the rehabilitation and reuse of derelict and vacant sites within an ACA.</p> <p>Vernacular Buildings and Structures Development Objectives</p> <p>VA1 Encourage the retention, rehabilitation and reuse of older buildings that are not Protected Structures in recognition of their contribution both individually and collectively to the unique character, heritage and identity of local areas and the County.</p> <p>VA2 Seek the retention of original and early fabric of older buildings, including windows, doors, roof material, glazing and render or external finishes. The Planning Authority will encourage reinstatement of known original or early features where possible.</p> <p>VA3 Protect vernacular architecture, such as thatched cottages, farm buildings and old school-houses in County Cavan for the benefit of future generations.</p> <p>Historical Shop Fronts Development Objective</p> <p>HSF1 Seek the repair and retention of traditional timber and/or rendered shop fronts and pub fronts, including, where appropriate, those that may not be Protected Structures.</p> <p>Industrial Heritage Development Objectives</p> <p>IH1 Utilise the information provided within Cavan Industrial Heritage Survey when assessing development proposals for industrial heritage sites.</p> <p>IH2 Support the retention and appropriate repair/maintenance of historic bridges and other significant industrial heritage sites.</p> <p>IH3 Protect our industrial architecture and encourage appropriate new uses for vacant structures.</p> <p>Historic Gardens, Demesnes and Country Estates Development Objectives</p> <p>HG1 Utilise existing surveys to identify and evaluate the surviving historic designed landscapes in Cavan and promote the conservation of their essential character, both built and natural.</p> <p>HG2 Ensure that proposals for development within historic designed landscapes include an appraisal of the designed landscape, including an ecological assessment, prior to the initial design of any development, in order for this evaluation to inform the design which must be sensitive to and respect the built heritage elements and green space values of the site.</p> <p>Language Heritage Development Objectives</p> <p>LH1 Preserve historic place and street names and ensure that new street names reflect appropriate local historical or cultural features in the area.</p> <p>LH2 Encourage the naming of new residential developments in bi-lingual format.</p> <p>LH3 Ensure that the naming of mixed residential and mixed used schemes reflect local history, townlands, folklore and/or place names or cultural features.</p> <p>LH4 Support the use of the Irish language on shopfronts.</p> <p>Archaeological Heritage Development Objectives</p> <p>AH1 Protect and safeguard the county's archaeological resource and ensure the sympathetic enhancement of archaeological heritage. Applications will be referred to the Department of Housing, Local Government and Heritage by the Planning Authority in its capacity of being charged with the implementation of the National Monuments Acts.</p> <p>AH2 Protect and enhance archaeological sites and monuments, their settings and zones of archaeological potential that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are the subject of Preservation Orders or have been registered in the Register of Historic Monuments. Ensure the protection of sites which have been identified subsequent to the publication of the Record of Monuments and Places.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
		<p>AH3 Development adjacent to or near an archaeological site or monument should not interfere with the character of the site, or its setting. Proposed developments should be sited to ensure minimal impact on the site or monument. Development which has a negative impact on a site or monument will not be permitted.</p> <p>AH4 Seek to promote best practice for archaeological excavation ensuring that they are undertaken according to best practice as outlined by the National Monuments Service, Department of Housing, Local Government and Heritage, The National Museum and the Institute of Archaeologists of Ireland.</p> <p>AH5 Encourage the dissemination of findings from archaeological investigations and excavations through the publication of archaeological reports.</p> <p>AH6 Support the growth of cultural tourism within the county, including the potential for niche heritage-tourism products by facilitating the development of heritage events and infrastructure such as heritage trails, walkways and cycleways.</p> <p>AH7 Seek funding to prepare and implement a Conservation Management Plan for Clough Oughter Castle in consultation with the OPW and the National Monuments Service.</p> <p>AH8 Continue to support the development of sustainable heritage-based tourism initiatives in the UNESCO Cuilcagh Lakelands Geopark subject to archaeological and ecological assessment.</p> <p>AH9 Facilitate appropriate guidance in relation to the protection of the archaeological heritage and implications of a proposed development.</p> <p>AH10 Promote public awareness of the rich archaeological heritage of the county.</p> <p>AH11 Secure the preservation of sites and features of historical and archaeological interest. The preservation in-situ of archaeological monuments and sites as a preferred option.</p> <p>AH12 Where archaeological sites or monuments have to be removed as a result of development, it is essential that they be preserved by record, through archaeological excavation and recording, which is to be undertaken by a suitably qualified professional archaeologist.</p> <p>AH13 Support the appropriate management and maintenance of the county's historical burial grounds, in accordance with conservation principles and best practice guidelines. In this regard, seek to continue to support the work of the Historic Graveyards Network.</p> <p>AH14 Seek to co-operate with other agencies regarding the impact of climate change on our archaeological heritage.</p> <p>Built and Cultural Heritage Climate Development Objectives</p> <p>BCHC 01 Adopt the principles of conservation-led regeneration by applying the Guidelines for Planning Authorities on Architectural Heritage Protection (2011).</p> <p>BCHC 02 Seek enrolment on all future Historic Towns Initiatives (HTI).</p> <p>BCHC 03 Notify owners of Protected Structures of the increased threat climate change presents, while reminding them of their continued and legal requirement to ensure the structure(s) do not become endangered through neglect, decay, damage or harm (Practical advice on basic methods of conservation should accompany the notice).</p> <p>BCHC 04 Require the proposed demolition of any structure or part thereof, as considered of merit by the Planning Authority, to be accompanied by a report from a registered / chartered professional within a related discipline justifying same, to the satisfaction of the planning authority.</p> <p>BCHC 05 Require the submission of a life-cycle cost report with all applications in excess of 500 sq. m, new build construction, unless deemed otherwise by the Planning Authority.</p> <p>BCHC 06 Require the submission of a cost benefit analysis by a chartered quantity surveyor justifying any demolition or refurbishment of 100 m3 of construction and demolition waste, or above, unless deemed otherwise by the Planning Authority.</p> <p>Development Objectives for County Heritage Sites</p> <p>CHS1 Restrict incompatible development in order to protect the amenity, scientific and historical values of these areas.</p>
Landscape	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>Development Objectives for Landscape Character Areas</p> <p>LC1 Ensure the preservation of the unique landscape character type by having regard to the character, value and sensitivity of a landscape when determining a planning application.</p> <p>LC2 Ensure development reflects and reinforces the distinctiveness and sense of place of the landscape character areas. This should include the retention of important features or characteristics which contribute to their distinctiveness such as geology and landform, habitats, settlement patterns, historic and vernacular heritage.</p> <p>LC3 Resist development such as houses, forestry, masts, extractive operations, landfills, caravan parks and large agricultural /horticulture units which would interfere with the character of highly sensitive areas or with a view or prospect of special amenity value.</p> <p>LC4 Ensure that new development does not impinge in any significant way on the character, integrity and distinctiveness of highly sensitive areas and does not detract from the scenic value of the area such as visual harm, not in keeping elements of the landscape, causes loss or disturbance of the landscape elements contributing to the local distinctiveness, historic elements that contribute to landscape character and quality, vegetation which is characteristic of a particular landscape and visual conditions of a landscape.</p> <p>LC5 Ensure new development meets high standards of siting and design.</p> <p>LC6 Protect skylines and ridgelines from development</p> <p>LC7 Ensure necessary assessments including visual impact assessments are prepared prior to approving development in highly sensitive areas.</p> <p>LC8 Undertake a Landscape Character Assessment during the lifetime of this plan.</p> <p>Development Objectives for Areas of High Landscape Value or Special Landscape Interest</p> <p>SLPA1 Maintain the scenic and recreation value of these areas by restricting all adverse uses and negative visual impacts.</p> <p>Development Objectives for Scenic Viewing Points</p> <p>SVP1 Restrict development that would obstruct views and to minimise visual intrusion by only permitting compatible uses.</p> <p>SVP2 Ensure the location, design and visual prominence of developments are examined, including possible effects on views from the public realm toward sensitive or vulnerable landscape features.</p>

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Topic	Potentially Adverse Effect, if Unmitigated	Significant if Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
		<p>Development Objectives for Scenic Routes</p> <p>SR1 Regulate development that would seriously obstruct and detract from views of high scenic value from designated Scenic Routes.</p> <p>SR2 Maintain and protect the natural landscapes visual character which is recognised to be of an exceptional high amenity value. Development Objectives for Forest Parks and Other Parks</p> <p>FP1 Regulate development within Forest Parks and other Parks to maximise recreational, amenity and community uses</p> <p>Development Objectives for Major Lakes and Lake Environs</p> <p>ML&LE1 Maintain major lake and lake environment amenity value within a landscape recreational and ecological context by restricting and regulating development that would prejudice use and enjoyment of the areas, give rise to adverse visual impacts or threaten habitats through disposal of effluents.</p> <p>ML&LE2 Maintain and protect shorelines of lakes and their immediate area adjoining including skyline development on surrounding hill crests. Development Objectives for Lakeside Amenity Areas</p> <p>LAA 1 Regulate development of adjoining lands to Lakeside Amenity Areas to ensure that public use is not prejudiced by incompatible use or adverse visual impact.</p> <p>Development Objectives for Riverside Amenity Areas</p> <p>RAA1 Regulate all development on lands adjoining Riverside Amenity Areas in order to maintain their amenity value.</p> <p>Development Objectives for Inland Waterways</p> <p>IW1 Protect and enhance the natural heritage and landscape character of the County's Waterways and to maintain them free from inappropriate development and to provide for public access, where feasible, acknowledging the existence of contiguous Natura 2000 sites.</p> <p>IW2 Protect the biodiversity of rivers, streams and other water courses and maintain them in an open state and to discourage the culverting or realignment thereof.</p> <p>IW3 Consult with, as appropriate, the Inland Fisheries Ireland in relation to any development that could have a potential impact on the aquatic ecosystems and associated riparian habitats.</p> <p>IW4 Consult with Waterways Ireland and the National Parks and Wildlife Service, the DECLG and the Inland Waterways Association on the development proposals that may affect inland waterways, rivers, lakes, canals or watercourses.</p> <p>IW5 Ensure that the County's watercourses are retained for their biodiversity and flood protection values and conserve and enhance, where possible, the wildlife habitats of the county's rivers and riparian zones, lakes, canals and streams which occur outside of designated areas to provide for a network of habitats and biodiversity corridors throughout the county.</p> <p>IW6 Support the development of blueways in County Cavan.</p> <p>Landscape Character/ Natural Heritage Climate Change Development Objectives</p> <p>LCC 01 Within the lifetime of the plan, undertake a survey and vector mapping exercise to identify exemplar wetlands, bogs, individual trees and/or stands of trees and/or woodlands throughout the county worthy of protection and preservation.</p> <p>LCC 02 Encourage the potential community woodlands areas in urban/urban fringe areas and the development of community woodlands throughout rural Cavan.</p> <p>LCC 03 Promote the use in public spaces of hot water, foam stream, flame weeding and/or concentrated vinegar in favour of glyphosate weedkillers.</p> <p>LCC 04 Prepare a Peatland Strategy that shall encourage the rewilding, restoration and protection of peat bogs after turf cutting and/or peat extraction has ceased.</p> <p>LCC 05 Support the National Ambient Air Quality Monitoring Programme 2017 – 2022.</p> <p>LCC06 Promote the roll-out of renewables and stringent protection and enhancement of carbon pools, such as forests, peatlands and permanent grasslands.</p> <p>LCC 07 Explore the opportunity of engaging the services of a full-time Ecologist on a shared basis amongst neighbouring Local Authorities.</p> <p>LCC 08 Install and promote the installation of bird, bat, and owl boxes, and bee bricks and insect hotels or equivalent, at all relevant locations and developments, where possible.</p> <p>LCC 09 Actively participate and seek to adopt recommendations originating out of the Climate Action Regional Office (CARO) and Northern and Western Climate Action Region.</p> <p>LCC 10 Fracking and the industrial extraction of fossil fuels will not be encouraged within Cavan 's functional area.</p> <p>LCC 11 Develop a strategy to support an active native Tree Planting programme in the context of climate adaption.</p>

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, to which the Proposed Material Alterations relate.

Monitoring can both demonstrate the positive effects facilitated by the Plan and can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

The occurrence of significant adverse environmental effects not predicted and mitigated by this assessment, which are directly attributable to the implementation of the Plan, would necessitate consideration of these effects in the context of the Plan and potential remediation action(s) and/or review of part(s) of the Plan.

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. Given the position of the Development Plan in the land use planning hierarchy beneath RSES, the measures identified in the RSES SEAs, including the Northern and Western RSES SEA, have been used – as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

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.

Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may be updated to deal with specific environmental issues – including unforeseen effects – as they arise.

10.3 Sources

The Draft Plan will form part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the National Planning Framework and the Northern and Western RSES, is subject to its own SEA (and associated monitoring) requirements. At lower tiers of the hierarchy, Local Area Plans and individual projects will be subject to their own monitoring requirements as relevant.

In implementing the Monitoring Programme the Council will take into account this hierarchy of planning and environmental monitoring.

Sources for indicators may include existing monitoring databases (including those maintained by planning authorities and national/regional government departments and agencies) and the output of lower-tier environmental assessment and decision making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan, in consultation with others. This report will seek to address the indicators set out on Table 10.1. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.

Table 10.1 Indicators, Targets, Sources and Remedial Action

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Cavan Local Biodiversity Action Plan 	<ul style="list-style-type: none"> DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years)⁹⁹ DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 3 years)¹⁰⁰ Consultations with the NPWS¹⁰¹ (see Section 10.4) 	<ul style="list-style-type: none"> Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
		<ul style="list-style-type: none"> Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted 	<ul style="list-style-type: none"> Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Cavan Local Biodiversity Action Plan 	<ul style="list-style-type: none"> Internal review of local land use plans¹⁰² 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Internal monitoring of preparation of local land use plans 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> Status of water quality in the County's water bodies 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below
		<ul style="list-style-type: none"> Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 10 “Natural Heritage” 	<ul style="list-style-type: none"> For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 10 “Natural Heritage” 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Population and Human Health	PHH	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 “Economic” 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 6 “Economic” By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets) 	<ul style="list-style-type: none"> Internal review of progress on implementing Plan objectives Consultations with DECC (see Section 10.4) 	<ul style="list-style-type: none"> Review internal systems Consultations with DECC
		<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA

⁹⁹ Including monitoring of wetland sites, wind energy projects, one off rural houses and walking and cycling routes (including artificial lighting and disturbance) where available

¹⁰⁰ Including monitoring of wetland sites, wind energy projects, one off rural houses and walking and cycling routes (including artificial lighting and disturbance) where available

¹⁰¹ Including monitoring of wetland sites, wind energy projects, one off rural houses and walking and cycling routes (including artificial lighting and disturbance) where available

¹⁰² Including monitoring of wetland sites, wind energy projects, one off rural houses and walking and cycling routes (including artificial lighting and disturbance) where available

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Cavan County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
		<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems
Soil (and Land)	S	<ul style="list-style-type: none"> Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> Maintain built surface cover nationally to below the EU average of 4% In accordance with National Policy Objectives 3c of the National Planning Framework, a minimum of 30% of the housing growth targeted in any settlement is to be delivered within the existing built-up footprint of the settlement To map brownfield and infill land parcels across the County 	<ul style="list-style-type: none"> EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH AA/Screening for AA for each application 	<ul style="list-style-type: none"> Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.
		<ul style="list-style-type: none"> Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	<ul style="list-style-type: none"> Internal review of grants of permission where contaminated material must be disposed of 	<ul style="list-style-type: none"> Consultations with the EPA and Development Management
		<ul style="list-style-type: none"> Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Internal monitoring of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Water	W	<ul style="list-style-type: none"> Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan 	<ul style="list-style-type: none"> EPA Monitoring Programme for WFD compliance¹⁰³ 	<ul style="list-style-type: none"> Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Irish Water to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.
		<ul style="list-style-type: none"> Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	MA	<ul style="list-style-type: none"> Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated 	<ul style="list-style-type: none"> All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water (see Section 10.4) 	<ul style="list-style-type: none"> Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.

¹⁰³ Including monitoring of nitrogen deposition due to bioenergy projects where available

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		<ul style="list-style-type: none"> Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan 	<ul style="list-style-type: none"> applications demonstrate that the outfall from the septic tank will not – in- combination with other septic tanks– contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Irish Water in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health 	<ul style="list-style-type: none"> DHLGH in conjunction with Local Authorities 	
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Cavan County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Air	A	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	<ul style="list-style-type: none"> CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications (see Section 10.4) 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above
Climatic Factors	C	<ul style="list-style-type: none"> Implementation of Plan measures relating to climate reduction targets 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 	<ul style="list-style-type: none"> Monitoring of Cavan County Council's Climate Change Adaptation Strategy 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with DECC (at monitoring evaluation - see Section 10.4) 	<ul style="list-style-type: none"> Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.
		<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan 		
		<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	<ul style="list-style-type: none"> Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors 		
		<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 		

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 levels Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Cavan County Council's Climate Change Adaptation Strategy 2019-2024 CSO data Monitoring of Cavan County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions. Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Cultural Heritage	CH	<ul style="list-style-type: none"> Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where monitoring reveals visitor pressure is causing negative effects on key tourist features along these routes, the Council will work with Regional Assembly, Fáilte Ireland and other stakeholders to address the pressures through additional mitigation tailored to the plans.
		<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Consultation with DHLGH (see Section 10.4). 	
Landscape	L	<ul style="list-style-type: none"> Number of developments permitted that 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation

Appendix I Relationship with Legislation and Other Policies, Plans and Programmes¹⁰⁴

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.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower-level objectives, actions etc.	Relevance to the Plan
International/European Level SEA Directive (2001/42/EC)	<ul style="list-style-type: none"> Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment. 	<ul style="list-style-type: none"> Carry out an environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. Inform relevant authorities and stakeholders on the decision to implement the plan or programme. Issue a statement to include requirements detailed in Article 9 of the Directive. Monitor and mitigate significant environmental effects identified by the assessment. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	<ul style="list-style-type: none"> Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment. Aims to assess and implement avoidance or mitigation measures to eliminate 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. 	<ul style="list-style-type: none"> All projects listed in Annex I are considered as having significant effects on the environment 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Birds Directive (2009/147/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.

¹⁰⁴ Yet to be updated following submissions made on the Draft Plan.

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EU Nitrates Directive (91/676/EC)	<ul style="list-style-type: none"> Reducing water pollution caused or induced by nitrates from agricultural sources and – preventing further such pollution. 	<p>Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third NAP came into operation in 2014. Each Member State's NAP must include:</p> <ul style="list-style-type: none"> a limit on the amount of livestock manure applied to the land each year set periods when land spreading is prohibited due to risk set capacity levels for the storage of livestock manure 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	<ul style="list-style-type: none"> The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions. 	<p>The IPPC Directive is based on several principles:</p> <ul style="list-style-type: none"> an integrated approach best available techniques, flexibility; and public participation 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
EU Plant Protection (products) Directive 2009/127/EC	<ul style="list-style-type: none"> The Directive aims at reducing the risks and impacts of pesticide use on human health and the environment by introducing different targets, tools and measures such as Integrated Pest Management (IPM) or National Action Plans (NAPs). 	<ul style="list-style-type: none"> The Framework Directive applies to pesticides which are plant protection products. Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
EU Renewables Directive (2009/28/EC)	<ul style="list-style-type: none"> The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU. It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020 – to be achieved through the attainment of individual national targets. All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020. 	<ul style="list-style-type: none"> The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets. The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables. EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans. Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Indirect Land Use Change Directive (2012/0288 (COD))	<ul style="list-style-type: none"> Article 3(4) of Directive 2009/28/EC of the European Parliament and of the Council (3) requires Member States to ensure that the share of energy from renewable energy sources in all forms of transport in 2020 is at least 10 % of their final energy consumption. The blending of biofuels is one of the methods available for Member States to meet this target, and is expected to be the main contributor. Other methods available to meet the target are the reduction of energy consumption, which is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise, and the use of electricity from renewable energy sources. 	<ul style="list-style-type: none"> Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1st July 2014; Encourage a greater market penetration of advanced (low-ILUC) biofuels by allowing such fuels to contribute more to the targets in the Renewable Energy Directive than conventional biofuels; Improve the reporting of greenhouse gas emissions by obliging Member States and fuel suppliers to report the estimated indirect land-use change emissions of biofuels. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Alternative Fuels Infrastructure Directive (2014/94/EU)	<ul style="list-style-type: none"> This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport. 	<ul style="list-style-type: none"> This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>

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<p>EU Energy Efficiency Directive (2012/27/EU)</p>	<ul style="list-style-type: none"> Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption. 	<ul style="list-style-type: none"> Energy distributors or retail energy sales companies have to achieve 1.5% energy savings per year through the implementation of energy efficiency measures EU countries can opt to achieve the same level of savings through other means, such as improving the efficiency of heating systems, installing double glazed windows or insulating roofs The public sector in EU countries should purchase energy efficient buildings, products and services Every year, governments in EU countries must carry out energy efficient renovations on at least 3% (by floor area) of the buildings they own and occupy Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering National incentives for SMEs to undergo energy audits Large companies will make audits of their energy consumption to help them identify ways to reduce it Monitoring efficiency levels in new energy generation capacities. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>EU Seveso Directive (2012/18/EU)</p>	<ul style="list-style-type: none"> This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner. 	<p>The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas:</p> <ul style="list-style-type: none"> Classification, labelling and packaging of chemicals; The Union's Civil Protection Mechanism; The Security Union Agenda including CBRN-E and Protection of critical infrastructure; Policy on environmental liability and on the protection of the environment through criminal law; Safety of offshore oil and gas operations. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>European Union Biodiversity Strategy to 2020</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Outlines six targets and twenty actions to aid European Union in halting the loss to biodiversity and eco-system services. The six targets cover: <ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>EU Green Infrastructure Strategy</p>	<p>Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.</p>	<ul style="list-style-type: none"> Promoting GI in the main EU policy areas. Supporting EU-level GI projects. Improving access to finance for GI projects. Improving information and promoting innovation. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage</p>	<ul style="list-style-type: none"> links concepts of nature conservation and the preservation of cultural properties; and recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two. 	<ul style="list-style-type: none"> sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them; each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage; encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>UN (1992) The Convention on Biological Diversity</p>	<p>An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.</p>	<p>The Convention has three main goals:</p> <ul style="list-style-type: none"> the conservation of biological diversity (or biodiversity); the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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</p>

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UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	achievement of the objectives of the regulatory framework for environmental protection and management. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	<p>The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.</p> <p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
EU 2020 Climate and Energy Package	<ul style="list-style-type: none"> 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. 	<p>Four pieces of complimentary legislation:</p> <ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
EU 2030 Framework for Climate and Energy	<ul style="list-style-type: none"> A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries. Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario. 	<p>To meet the targets, the European Commission has proposed the following policies for 2030:</p> <ul style="list-style-type: none"> A reformed EU emissions trading scheme (ETS). New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive) Fourth Daughter Directive (2004/107/EC)	<ul style="list-style-type: none"> The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter 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. 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. 	<ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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: <ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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Floods Directive (2007/60/EC)	<ul style="list-style-type: none"> 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 	<p>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.</p> <ul style="list-style-type: none"> 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. Inform the public and allow the public to participate in planning process. 	<p>achievement of the objectives of the regulatory framework for environmental protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Water Framework Directive (2000/60/EC)	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> The Drinking Water Abstraction Directive Sampling Drinking Water Directive Exchange of Information on Quality of Surface Freshwater Directive Shellfish Directive Freshwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive 	<ul style="list-style-type: none"> 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 districts 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Groundwater Directive (2006/118/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Drinking Water Directive (98/83/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Urban Waste Water Treatment Directive (91/271/EEC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>

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Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	<ul style="list-style-type: none"> Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage. 	<ul style="list-style-type: none"> 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. 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 met. The Environmental Liability Directive has been amended through a number of Directives. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing knowledge and new needs. 	<p>framework for environmental protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	<ul style="list-style-type: none"> 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. 	<p>The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	<ul style="list-style-type: none"> The main purpose of the Convention is 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	<ul style="list-style-type: none"> It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World. 	<ul style="list-style-type: none"> (I) Document and understand industrial heritage structures, sites, areas and landscapes and their values; (II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes; (III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and</p>

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	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.
European Landscape Convention 2000	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Promote protection, management and planning of landscapes. Organise European co-operation on landscape issues. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	<p>It identifies three key objectives:</p> <ul style="list-style-type: none"> to protect, conserve and enhance the Union's natural capital to turn the Union into a resource-efficient, green, and competitive low-carbon economy to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing 	<p>Four so called "enablers" will help Europe deliver on these objectives (goals):</p> <ul style="list-style-type: none"> Better implementation of legislation. Better information by improving the knowledge base. More and wiser investment for environment and climate policy. Full integration of environmental requirements and considerations into other policies. <p>Two additional horizontal priority objectives complete the programme:</p> <ul style="list-style-type: none"> To make the Union's cities more sustainable. To help the Union address international environmental and climate challenges more effectively. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	<p>The convention has three main aims:</p> <ul style="list-style-type: none"> to conserve wild flora and fauna and their natural habitats to promote cooperation between states to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species 	<p>The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also:</p> <ul style="list-style-type: none"> Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control. Look at implementing the Bern Convention in central Eastern Europe and the Caucasus. Take account of the potential impact on natural heritage by other policies. Promote education and information of the public, ensuring the need to conserve species is understood and acted upon. Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co-operation with other organisations. Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Bali Road Map (2007)	<p>The overall goals of the project are twofold:</p> <ul style="list-style-type: none"> To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities. 	<p>The Bali Action Plan is centred on four main building Blocks:</p> <ul style="list-style-type: none"> mitigation adaptation technology financing 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Cancun Agreements (2010)	<p>Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover:</p> <ul style="list-style-type: none"> Mitigation Transparency of actions Technology Finance Adaptation Forests Capacity building 	<p>Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Doha Climate Gateway (2012)	<p>Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.</p>	<ul style="list-style-type: none"> Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); Complete the work under Bali Action Plan and to focus on new completing new targets; Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and

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		<ul style="list-style-type: none"> Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries. 	<p>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.</p>
EU Common Agricultural Policy	<ul style="list-style-type: none"> To improve agricultural productivity, so that consumers have a stable supply of affordable food; and To ensure that EU farmers can make a reasonable living. 	<ul style="list-style-type: none"> ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future; Climate change and sustainable management of natural resources; Looking after the countryside across the EU and keeping the rural economy alive. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
EU REACH Regulation (EC 1907/2006)	<ul style="list-style-type: none"> Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. 	<p>The aims are achieved by applying REACH, namely:</p> <ul style="list-style-type: none"> Registration, Evaluation, Authorisation; and Restriction of chemicals. <p>REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Stockholm Convention	<ul style="list-style-type: none"> The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants. 	<ul style="list-style-type: none"> Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced Persistent Organic Pollutants (POPs) that are listed in Annex A to the Convention Restrict the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex B to the Convention Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner To target additional POPs Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
Ramsar Convention	<p>The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".</p>	<p>Under the "three pillars" of the Convention, the Contracting Parties commit to:</p> <ul style="list-style-type: none"> Work towards the wise use of all their wetlands; Designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management; Cooperate internationally on transboundary wetlands, shared wetland systems and shared species. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
European 2020 Strategy for Growth	<p>Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities:</p> <ul style="list-style-type: none"> Smart growth: developing an economy based on knowledge and innovation; Sustainable growth: promoting a more resource efficient, greener and more competitive economy; Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion. 	<p>In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020:</p> <ol style="list-style-type: none"> 75 % of the population aged 20-64 should be employed; 3% of the EU's GDP should be invested in R&D; the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 20 million less people should be at risk of poverty. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
European Parliament resolutions, including: The European Green Deal (EGD) 2020	<p>The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.</p>	<ul style="list-style-type: none"> It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution. It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise.</p>

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		<ul style="list-style-type: none"> In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050. 	Implementation of the Plan needs 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.
EU (2020) Biodiversity Strategy	A long-term plan for protecting nature and reversing the degradation of ecosystems across the European Union.	<p>The Strategy contains specific commitments and actions to be delivered by 2030, including:</p> <ul style="list-style-type: none"> Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value. An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss. A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision-making. Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Leaders Pledge for Nature 2020	Political leaders (including Taoiseach Michael Martin) participating in the United Nations Summit on Biodiversity in September 2020, representing 75 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030.	<p>As part of the UN Decade of Action to achieve sustainable development, the leaders commit to achieve the vision of Living in Harmony with Nature by 2050 by undertaking ten actions, including:</p> <ul style="list-style-type: none"> Putting biodiversity, climate, and the environment at the heart of COVID-19 recovery strategies and investments as well as national and international development and cooperation; Developing and implementing an ambitious and transformational post-2020 global biodiversity framework for adoption at the 15th meeting of the Conference of the Parties (COP 15) to the UN Convention on Biological Diversity (CBD) in Kunming, China, as a key instrument to reach the SDGs; Raising ambition and aligning domestic climate policies with the Paris Agreement on climate change, with enhanced nationally determined contributions (NDCs) and long-term strategies consistent with the temperature goals of the Paris Agreement, and the objective of net zero greenhouse gas (GHG) emissions by mid-century, and strengthen climate resilience of economies and ecosystems; and Mainstream biodiversity into relevant sectoral and cross-sectoral policies at all levels, including in food production, agriculture, fisheries and forestry, energy, tourism, infrastructure and extractive industries, and trade and supply chains, as well as into key international agreements and processes. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National			
Ireland 2040 - Our Plan, the National Planning Framework and the National Development Plan (2021-2030)	<ul style="list-style-type: none"> The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development up to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people. 	<p>National Strategic Outcomes as follows:</p> <ol style="list-style-type: none"> Compact Growth Enhanced Regional Accessibility Strengthened Rural Economies and Communities Sustainable Mobility A Strong Economy, supported by Enterprise, Innovation and Skills High-Quality International Connectivity Enhanced Amenities and Heritage Transition to a Low-Carbon and Climate-Resilient Society Sustainable Management of Water and other Environmental Resources Access to Quality Childcare, Education and Health Services 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Planning, Land Use and Transport Outlook 2040 [in preparation]	The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will:	In preparation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-

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	<p>1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term;</p> <p>2. Consider how fiscal, environmental and technological developments might impact on this investment; and,</p> <p>3. Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.</p>		<p>combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>Planning and Development Act 2000 (as amended)</p>	<ul style="list-style-type: none"> The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2009 with specific regard given to supporting economic renewal and sustainable development. 	<ul style="list-style-type: none"> Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas. There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission. Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large-scale projects. Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011</p>	<ul style="list-style-type: none"> The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment – commonly known as the Strategic Environmental Assessment (SEA) Directive. 	<ul style="list-style-type: none"> The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning. Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004). 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)</p>	<ul style="list-style-type: none"> These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds. 	<ul style="list-style-type: none"> They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites. The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>Waste Management Act 1996, as amended</p>	<ul style="list-style-type: none"> To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters. 	<ul style="list-style-type: none"> The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>European Communities Environmental Objectives (FPM) Regulations 2009 (S.I 296 of 2009)</p>	<ul style="list-style-type: none"> The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels 	<ul style="list-style-type: none"> Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). Require the production of sub-basin management plans with programmes of measures to achieve these objectives. Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>European Communities Environmental Objectives (Groundwater) Regulations 2010</p>	<ul style="list-style-type: none"> To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 	<p>The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-</p>

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(S.I 9 of 2010), as amended (S.I. No. 366 of 2016)	amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	<ul style="list-style-type: none"> Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution. Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values. Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established. 	combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	<ul style="list-style-type: none"> These Regulations, which give effect to Ireland's 3rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources 	<p>The Regulations include measures such as:</p> <ul style="list-style-type: none"> Periods when land application of fertilisers is prohibited Limits on the land application of fertilisers Storage requirements for livestock manure; and Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Climate Action and Low Carbon Development Act 2015	<ul style="list-style-type: none"> An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy. 	<p>When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:</p> <ul style="list-style-type: none"> The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that objective, The policy of the Government on climate change, Climate justice, Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	<ul style="list-style-type: none"> National Implementation Plan 2018 - 2020 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). The Plan provides an 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes an 'SDG Policy Map' indicating the relevant national policies for each of the targets. 	<p>The Plan identifies four strategic priorities to guide implementation:</p> <ul style="list-style-type: none"> Awareness: raise public awareness of the SDGs; Participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals; Support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation; and Policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Infrastructure and Capital Investment Plan (2016-2021)	<ul style="list-style-type: none"> €27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland. 	<ul style="list-style-type: none"> This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all. It includes allocations for new projects across a number of key areas and funding to ensure that the present stock of national infrastructure is refreshed and maintained. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013)	These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in European sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).	<ul style="list-style-type: none"> Regulation 3 provides for the submission of a Fisheries Natura Plan in relation to planned fisheries; Regulation 4 provides for a screening of a Fisheries Natura Plan to determine whether or not an appropriate assessment is required; Regulation 5 provides for an appropriate assessment of a Fisheries Natura Plan and also provides for public and statutory consultation; Regulation 6 provides for the Minister to make a determination to adopt a Fisheries Natura Plan. The Minister may amend, withdraw or revoke a plan; Regulation 7 provides for publication of the adopted Fisheries Natura Plan; 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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		<ul style="list-style-type: none"> Regulation 8 provides for a Risk Assessment of unplanned fisheries and also provides for public and statutory consultation on the assessment; Regulation 9 provides for the issue of a Natura Declaration to prohibit, restrict including restricting by permit, control, etc. of sea fishing activities; Regulation 10 provides for Natura Permits to be issued where required by Natura Declarations; and Regulations 11 to 31 deal with functions of authorised officers and related matters, offences, etc. 	framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	<ul style="list-style-type: none"> The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC. 	<ul style="list-style-type: none"> The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Strategy for Renewable Energy (2012-2020)	<ul style="list-style-type: none"> The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost-efficient manner for consumers. Of critical importance is the role which the renewable energy sector plays in job creation and economic activity as part of the Government's action plan for jobs. 	<p>This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020:</p> <ul style="list-style-type: none"> Increasing on and offshore wind, Building a sustainable bioenergy sector, Fostering R&D in renewables such as wave & tidal, Growing sustainable transport; and Building out robust and efficient networks. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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.	<p>2030 will represent a significant milestone, meaning:</p> <p>Reduced GHG emissions from the energy sector by between 80% and 95%</p> <p>Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Policy Position on Climate Action and Low Carbon Development (2014)	<ul style="list-style-type: none"> The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050. Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015. 	<p>National climate policy in Ireland:</p> <ul style="list-style-type: none"> Recognises the threat of climate change for humanity; Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future; Recognises the challenges and opportunities of the broad transition agenda for society; and Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Climate Action Plan	The National Climate Action Plan is an all of Government plan to tackle climate change and bring about a step change in Ireland's climate ambition over the coming years. The plan sets out an ambitious course of action over the coming years to address the diverse and wide-ranging impacts climate disruption is having on Ireland's environment, society, economic and natural resources.	The Climate Action Plan sets out clear 2030 targets for each sector with the ultimate objective of achieving a transition to a competitive, low-carbon, climate-resilient, and environmentally sustainable society and economy by 2050. The Action Plan deals with both mitigation and adaptation.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Clean Air Strategy [in preparation]	The Clean Air Strategy will provide the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	<ul style="list-style-type: none"> Having a National Strategy will provide a policy framework by which Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation. The Strategy should also help tackle climate change. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise.

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		<ul style="list-style-type: none"> The Strategy will consider a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture. In any discussion relating to clean air policy, the issue of people's health is paramount and this will be a strong theme of the Strategy. 	Implementation of the Plan needs 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.
EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022	<p>EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland: <i>"Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."</i></p>	<ul style="list-style-type: none"> Grid25, EirGrid's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
All Island Grid Study 2008	<ul style="list-style-type: none"> The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources. The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system. 	<p>Key conclusions of the study:</p> <ul style="list-style-type: none"> The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study. All but the high coal-based portfolio lead to significant reductions of CO₂ emissions compared to portfolio 1 All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports. The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact. Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered. Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Strategy for the Future Development of National and Regional Greenways (2018)	<ul style="list-style-type: none"> The objective of this Strategy is to assist in 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. It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity. 	<ul style="list-style-type: none"> A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism to Ireland and are regularly used by overseas visitors, domestic visitors and locals thereby contributing to a healthier society through increased physical activity; Greenways that provide a substantially segregated off road experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and Greenways that provide opportunities for the development of local businesses and economies, and Greenways that are developed with all relevant stakeholders in line with an agreed code of practice. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Water Resources Plan [in preparation]	<ul style="list-style-type: none"> The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment. 	<p>The key objectives of the plan are to:</p> <ul style="list-style-type: none"> Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions Assess the current and future water demand from homes, businesses, farms, and industry Consider the impacts of climate change on Ireland's water resources Develop a drought plan advising measures to be taken before and during drought events Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water Identify, develop and assess options to help meet potential shortfalls in water supplies Assess the water resources available at a national level including lakes, rivers and groundwater 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Strategic Plan for Aquaculture Development (2014-2020)	<p>Vision: <i>"Aquaculture in RC is economically, socially and ecologically sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."</i></p>	<p>General development and growth objectives of marine and freshwater aquaculture (2014 – 2020):</p> <ul style="list-style-type: none"> Strengthen the social, business and administrative environment for aquaculture development Increase in the total production to 24,050 tonnes while adhering to the principles of economic, social and ecological sustainability 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with

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		<ul style="list-style-type: none"> Improvement of the perception and increase in the national consumption of National products 	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	<ul style="list-style-type: none"> Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated. 	This Strategy therefore addresses issues including: <ul style="list-style-type: none"> A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong; Continuing improvement of the planning process, striking the right balance between current and future requirements; The availability of financing for viable and worthwhile projects; Access to mortgage finance on reasonable and sustainable terms; Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety; Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Sustainable Development: A Strategy for Ireland (1997)	<ul style="list-style-type: none"> The overall aim of this Strategy is to ensure that economy and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community. 	<ul style="list-style-type: none"> The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	<ul style="list-style-type: none"> The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. Landscape Strategy Vision: <i>“Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning.”</i> 	The objectives of the National Landscape Strategy are to: <ul style="list-style-type: none"> Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Ireland’s National Waste Policy 2020 – 2025	The Policy sets out new targets to tackle waste and move towards a circular economy.	The plan includes halving our food waste by 2030, the introduction of a deposit and return scheme for plastic bottles and cans, a ban on certain single use plastics from July 2021, and a levy on disposable cups. Other measures include applying green criteria and circular economy principles in all public procurement, a waste recovery levy to encourage recycling, and ensuring all packaging is reusable or recyclable by 2030.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Hazardous Waste Management Plan (EPA) 2014-2020	This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period: <ul style="list-style-type: none"> To prevent and reduce the generation of hazardous waste by industry and society generally; To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste; To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; To minimise the environmental, health, social and economic impacts of hazardous waste generation and management. 	The revised Plan makes 27 recommendations under the following topics: <ul style="list-style-type: none"> Prevention Collection Self-sufficiency Regulation Legacy issues North-south cooperation Guidance and awareness Implementation 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.

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<p>Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines</p>	<ul style="list-style-type: none"> The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density. 	<ul style="list-style-type: none"> The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025</p>	<ul style="list-style-type: none"> The vision is: <i>“A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone’s responsibility.”</i> 	<p>These four goals are interlinked, interdependent and mutually supportive:</p> <ul style="list-style-type: none"> Goal 1: Increase the proportion of people who are healthy at all stages of life Goal 2: Reduce health inequalities Goal 3: Protect the public from threats to health and wellbeing Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>Our Sustainable Future: A Framework for Sustainable Development for Ireland 2012</p>	<p>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.</p>	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)</p>	<ul style="list-style-type: none"> Outlines a policy for how a sustainable travel and transport system can be achieved. Sets out five key goals: <ul style="list-style-type: none"> To reduce overall travel demand. To maximise the efficiency of the transport network. To reduce reliance on fossil fuels. To reduce transport emissions. To improve accessibility to transport. 	<ul style="list-style-type: none"> Others lower level aims include: <ul style="list-style-type: none"> 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 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport</p>	<ul style="list-style-type: none"> SFILT sets out a set of priorities to guide the allocation of the State’s investment to best develop and manage Ireland’s land transport network over the coming decades. 	<p>The three priorities stated in SFILT are:</p> <ul style="list-style-type: none"> Priority 1: Achieve steady state maintenance (meaning that the maintenance and renewal of the existing transport system is at a sufficient level to maintain the system in an adequate condition); Priority 2: Address urban congestion; and Priority 3: Maximise the value of the road network. <p>In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for:</p> <ul style="list-style-type: none"> Planned replacement programme for the bus fleet operated under Public Service Obligation (“PSO”) contracts; Tram refurbishment and asset renewal in the case of light rail; and To the extent within the Authority’ remit, support for the operation of the existing rail network within the GDA. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.</p>
<p>Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)</p>	<ul style="list-style-type: none"> White paper setting out a framework for delivering a sustainable energy future in Ireland. Outlines strategic Goals for: <ul style="list-style-type: none"> Security of Supply Sustainability of Energy Competitiveness of Energy Supply 	<p>The underpinning Strategic Goals are:</p> <ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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</p>

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National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans	<ul style="list-style-type: none"> NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur 	<ul style="list-style-type: none"> Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance-based actions. Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance 	framework for environmental protection and management. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
2030 Climate and Energy Framework	Adopted October 2014, includes EU-wide targets and policy objectives for the period from 2021 to 2030.	Key targets for 2030: <ul style="list-style-type: none"> At least 40% cut in greenhouse gas emissions (from 1990 levels). At least 32% share for renewable energy. This was revised upwards in 2018. At least 32.5% improvement in energy efficiency. This was revised upwards in 2018. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Renewable Energy Action Plan (2010)	<ul style="list-style-type: none"> Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive. 	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	<ul style="list-style-type: none"> This is the second National Energy Efficiency Action Plan for Ireland. 	<ul style="list-style-type: none"> The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Energy & Climate Plan (NECP) 2021 – 2030	Ireland's National Energy & Climate Plan (NECP) 2021-2030 takes into account energy and climate policies developed up to 2019, the levels of demographic and economic growth identified in the National Planning Framework - Project 2040 and includes all of the climate and energy measures as set out in the National Development Plan 2018-2027.	The planned policies and measures that were identified up to the end of 2019, collectively deliver a 30% reduction by 2030 in non-Emission Trading Systems greenhouse gas emissions (from 2005 levels). Ireland is committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. The NECP was drafted in line with the current EU effort-sharing approach, before the Government committed to this higher level of ambition, and therefore does not reflect this higher commitment. Ireland is currently developing those policies and measures and intends to integrate the revision of the NECP into the process which will be required for increasing the overall EU contribution under the Paris Agreement.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	<ul style="list-style-type: none"> The act provides protection and conservation of wild flora and fauna. 	<ul style="list-style-type: none"> 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 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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			framework for environmental protection and management.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 marine environment. To expand and improve on the management of protected areas and legally protected species. To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Broadband Plan (2012)	<ul style="list-style-type: none"> Sets out the strategy to deliver high speed broadband throughout Ireland. 	<p>The Plan sets out:</p> <ul style="list-style-type: none"> 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. A series of specific complementary measures to promote implementation of Government policy in this area. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014) European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)	<ul style="list-style-type: none"> 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 gives EPA and the CER the authority to regulate and supervise their actions. 	<ul style="list-style-type: none"> Requires the public to be informed and consulted on the Plan and for progress reports to be published on River Basin Districts (RBDs). 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 criteria for assessment of groundwater. Outlines environmental objectives to be 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	<ul style="list-style-type: none"> Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation. 	<ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Water Pollution Acts 1977 to 1990	<ul style="list-style-type: none"> The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division. 	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Water Services Act 2007 Water Services (Amendment) Act 2012	<ul style="list-style-type: none"> Provides the water services infrastructure. Outlines the responsibilities involved in delivering and managing water services. 	<p>Key strategic objectives include:</p> <ul style="list-style-type: none"> Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all

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Water Services Act (No. 2) 2013	<ul style="list-style-type: none"> 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 waste water services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland. 	<ul style="list-style-type: none"> 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. 	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.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	<ul style="list-style-type: none"> 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. 	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Waste water. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in the Future. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas	<ul style="list-style-type: none"> Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs 	<ul style="list-style-type: none"> Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning. Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Food Harvest 2020	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	not applicable	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Rural Environmental Protection Scheme (REPS) Agri-Environmental Options Scheme (AEOS) Green, Low-Carbon, Agri-environment Scheme (GLAS)	<ul style="list-style-type: none"> Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. GLAS is the new replacement for REPS and AEOS which are both expiring. 	<ul style="list-style-type: none"> Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation. Protect biodiversity, endangered species of flora and fauna and wildlife habitats. Ensure food is produced with the highest regard to the environment. Implement nutrient management plans and grassland management plans. Protect and maintain water bodies, wetlands and cultural heritage. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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	<p>At a more detailed level, the programme also:</p> <ul style="list-style-type: none"> 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 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and

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		<ul style="list-style-type: none"> 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 	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.
Realising our Rural Potential: The Action Plan for Rural Development 2017	The Plan aims to unlock the potential of rural Ireland through a framework of supports at national and local level which will ensure that people who live in rural areas have increased opportunities for employment locally, and access to public services and social networks that support a high quality of life.	The Plan contains 276 actions across five key pillars. The five pillars are: <ul style="list-style-type: none"> Supporting Sustainable Communities, Supporting Enterprise and Employment, Maximising our Rural Tourism and Recreation Potential, Fostering Culture and Creativity in Rural Communities, and Improving Rural Infrastructure and Connectivity. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Forestry Programme (2014-2020)	<ul style="list-style-type: none"> Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020. 	Measures include the following: <ul style="list-style-type: none"> 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 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
River Basin Management Plan	<ul style="list-style-type: none"> The River Basin Management Plan sets out the measures planned to maintain and improve the status of waters. 	<ul style="list-style-type: none"> Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. Identify and manages water bodies in the RBD. Establish a programme of measures for monitoring and improving water quality in the RBD. Involve the public through consultations. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Peatlands Strategy (2015-2025)	This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.	Objectives of the Strategy include: <ul style="list-style-type: none"> To give direction to Ireland's approach to peatland management. To apply to all peatlands, including peat soils. To ensure that the relevant State authorities and state-owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions. To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsibly. To inform appropriate regulatory systems to facilitate good decision making in support of responsible use. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	<ul style="list-style-type: none"> 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 have been 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 the 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 developing bioenergy. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower-level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources. 	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Alternative Fuels Infrastructure for the Transport Sector (DTAS) 2017- 2030	This 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 Framework.	Targets for alternative fuel infrastructure include the following: <ul style="list-style-type: none"> AFV forecasts Electricity targets Natural gas (CNG, LNG) targets Hydrogen targets Biofuels targets LPG targets Synthetic and paraffinic fuels targets 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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: <ul style="list-style-type: none"> 85% increase in exports to €19 billion. 70% increase in value added to €13 billion. 60% increase in primary production to €10 billion. The creation of 23,000 additional jobs all along the supply chain from producer level to high-end value-added product development. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Cycle Network Scoping Study 2010	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	<ul style="list-style-type: none"> This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer-term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors. 	This policy set out to achieve five key goals in transport: <ul style="list-style-type: none"> Reduce overall travel demand Maximise the efficiency of the transport network Reduce reliance on fossil fuels Reduce transport emissions Improve accessibility to transport These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the Tourism Leadership Group has identified as priorities to be progressed until 2021 in order to maintain sustainable growth in overseas tourism revenue and employment. Each action involves specific tourism stakeholders, both in the public and private sectors, all of whom we expect to proactively work towards the completion of actions within the specified timeframe.	The Plan contains 27 actions focusing on the following areas: <ul style="list-style-type: none"> Policy Context Marketing Ireland as a Visitor Destination Enhancing the Visitor Experience Research in the Irish Tourism Sector Supporting Local Communities in Tourism Wider Government Policy International Context 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower-level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> Co-ordination Structures 	achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	<p>The Tourism Policy Statement sets three headline targets to be achieved by 2025:</p> <ul style="list-style-type: none"> Overseas tourism revenue of €5 billion per year net of inflation excluding carrier receipts; 250,000 people employed in tourism; and 10 million overseas visitors to Ireland per year. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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.	<p>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.</p> <p>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.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This 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 Framework.	<p>Targets for alternative fuel infrastructure include the following:</p> <ul style="list-style-type: none"> AFV forecasts Electricity targets Natural gas (CNG, LNG) targets Hydrogen targets Biofuels targets LPG targets Synthetic and paraffinic fuels targets 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
People Place and Policy - Growing Tourism to 2025, (DTTAS, 2014)	Growing Tourism to 2025 is a policy framework for the development of tourism within the Country.	<p>The framework establishes the overall tourism goal of Government:</p> <ul style="list-style-type: none"> Employment in the tourism sector will be 250,000 by 2025, compared with around 200,000 at present. There will be 10 million visits to Ireland annually by 2025. <p>The Government's ambition is that overseas tourism revenue will reach €5 billion in real terms by 2025.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Waterways Ireland Heritage Plan 2016-2020	The overarching aim of the Plan is to: <i>"Identify and protect the unique waterways heritage and promote its sustainable use for the enjoyment of this and future generations"</i> .	<p>Four objectives of the Plan include the following:</p> <ul style="list-style-type: none"> Objective 1: Fostering partnerships to continue building waterway heritage knowledge through storing information, undertaking research and developing best practice. Objective 2: Promoting awareness, appreciation and enjoyment of our waterway heritage with a focus on community engagement. Objective 3: Promoting the integrated management, conservation, protection and sustainable use of the inland navigable waterway asset. Objective 4: To develop Waterways Ireland as a heritage organisation committed to achieving the aim of this plan. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Tourism Development and Innovation – A Strategy for Investment 2016-2022, (Fáilte Ireland, 2016)	This strategy sets out the framework and mechanism for the delivery of investment to cities, towns, villages, communities and businesses across the country. It identifies priorities to support innovation in the sector to retain and grow the country's competitiveness in the marketplace. Its ultimate aim is to strengthen the appeal of Ireland for international visitors.	<p>The objectives of the Tourism Development and Innovation Strategy are:</p> <ul style="list-style-type: none"> To successfully and consistently deliver a world class visitor experience; To support a tourism sector that is profitable and achieves sustainable levels of growth and delivers jobs; To facilitate communities to play an enhanced role in developing tourism in their locality, thereby strengthening and enriching local communities; and To recognise, value and enhance Ireland's natural environment as the cornerstone of Irish tourism. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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Regional, County, Local			
Northern and Western Regional Economic and Spatial Strategy 2020-2032	The Regional Spatial and Economic Strategy provides a long-term strategic planning and economic framework for the Northern and Western Region in order to support the implementation of the National Planning Framework.	The Northern and Western Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Donegal County Council; Leitrim County Council; Cavan County Council; Monaghan County Council; Cavan County Council; Mayo County Council; Sligo County Council; Galway City Council; Galway County Council.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Integrated Implementation Plan 2019-2024	The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Greater Dublin Transport Strategy 2016-2035, focused on improving public and sustainable transport. While the bulk of the Plan relates solely to the Greater Dublin Area, certain areas such as public transport services and activities related to small public service vehicles are dealt with on a national basis.	The Implementation Plan identifies investment proposals for a number of areas including: <ul style="list-style-type: none"> • Bus • Light Rail; • Heavy Rai; • Integration Measures and Sustainable Transport Investment; • Integrated Service Plan; and • Integration and Accessibility. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Regional Development Strategy 2035 (Northern Ireland)	<ul style="list-style-type: none"> • Spatial strategy for the future development of Northern Ireland. Strategic planning framework to facilitate and guide public and private sectors. 	<ul style="list-style-type: none"> • Aims to provide long-term policy direction with a strategic spatial perspective. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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.	<ul style="list-style-type: none"> • 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
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.	<ul style="list-style-type: none"> • 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include: <ul style="list-style-type: none"> • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives 	<ul style="list-style-type: none"> • Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected. • These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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Groundwater Protection Schemes	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	<ul style="list-style-type: none"> A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development. 	framework for environmental protection and management. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Land Use Plans including those in force in County Cavan, in other adjoining planning authorities and in adjoining planning authorities in Northern Ireland including Fermanagh and Omagh District Council	<ul style="list-style-type: none"> Outline planning objectives for land use development. Strategic framework for planning and sustainable development including those set out in National Planning Framework and Northern and Western Regional Economic and Spatial Strategy. Set out the policies and proposals to guide development in the relevant area. 	<ul style="list-style-type: none"> Identify future infrastructure, development and zoning required. Protect and enhances amenities and environment. Guide planning authority in assessing proposals. Aim to guide development in the area and the amount of nature of the planned development. Aim to promote sustainable development. Provide for economic development and protect natural environmental, heritage. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Local Economic and Community Plans (LECPs), including the Cavan LECP 2016-2022	<ul style="list-style-type: none"> The overarching vision for each LECP is: “to promote the well-being and quality of life of citizens and communities 	<ul style="list-style-type: none"> The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
County Cavan Landscape Character Assessment and Landscape Character Assessments in adjoining counties	Characterises the geographical dimension of the landscape.	<ul style="list-style-type: none"> Identifies the quality, value, sensitivity and capacity of the landscape area. Guides strategies and guidelines for the future development of the landscape. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Cavan County Local Biodiversity Action Plan	The Cavan County Local Biodiversity Action Plan translates International, European and National legislation and obligations in relation to biodiversity at a local level. The preparation and adoption of this plan will provide a framework for the conservation of biodiversity. It will assist sustainable planning and development and raise public awareness of biodiversity through engaging a number of people from wide ranging sectors.	<p>The over main aims of the Cavan County Local Biodiversity Action Plan are:</p> <ul style="list-style-type: none"> To conserve, protect and manage biodiversity throughout County Cavan in line with the Cavan County Heritage Plan To sustain the rich and diverse natural heritage of County Cavan for present and future generations To enable the people of the County to cherish and celebrate their natural heritage To ensure that natural heritage related matters are communicated effectively to all sectors. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Cavan Noise Action Plan 2019	Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.	The main purpose of Noise Action Plans is to: Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects Reduce noise, where possible, and maintain the environmental acoustic quality where it is good	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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

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Cavan County Council's Climate Adaptation Strategy 2019-2024 and Local Authority Climate Action Charter	Response to the impact that the climate change is having and will continue to have on the County of Cavan and its citizens. It addresses how Cavan County as an organisation responds to the impacts of Climate Change. The Climate Action Charter, of which, Cavan County Council is a signatory place a commitment on the Local Authority to provide a framework for carbon-proofing major decisions, programmes and projects such as investment in infrastructure and energy. Accordingly, the Climate Action Charter signed by Cavan County Council has informed the preparation of this Plan and the commitments therein are reflected in the various climate, energy and environmental related policy objectives throughout this document.	<p>The Plans' objectives include:</p> <ul style="list-style-type: none"> • Ensure a proper comprehension of the key risks and vulnerabilities of climate change; • Bring forward the implementation of climate resilient actions in a planned and proactive manner; and • Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of the local authority. <p>In line with the Local Authority Climate Action Charter, Cavan County Council committed to deliver a 50% improvement in energy efficiency in the operations of the Local Authority by 2030.</p>	framework for environmental protection and management. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Connacht-Ulster Regional Waste Management Plan 2015-2021	These plans give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
County Cavan Tourism Statement of Strategy and Work Programme 2017-2022	This statement of strategy sets out a clear roadmap to grow the tourism sector in Cavan in the years ahead.	<p>The objectives for the Tourism Strategy are to:</p> <ul style="list-style-type: none"> • Develop a Tourism Marketing Fund • Develop Cavan Tourism Network • Rebrand/Remarket the County • Build on the Capacity and Engagement of Stakeholders (State, Regional & Community) • Development/Investment in Flagship Projects • Development of Blueway/Shannon Corridor • Maximise potential for transport link including IWAK (Ireland West Airport Knock Support Flagship Festival through Festival Funding) 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Fáilte Ireland Tourism plans, strategies, including those relating to Ireland's Hidden Heartland	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Hidden Heartland and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	<p>Some of Fáilte Ireland's plans and strategies include various projects relating to land use and infrastructural development, including those relating to development of land or on land and the carrying out of land use activities. Many of these projects exist already while some are not currently in existence.</p> <p>The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These assessments ensure that environmental effects are considered, including: those arising from new and intensified uses and activities; and those arising from various sectors such as tourism.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.
Various existing, planned and emerging projects provided for by the above plans and programmes	These projects have been provided for by higher-level plans and programmes.	These projects will contribute towards the development of the area to which the Plan relates and/or wider area and will contribute towards environmental protection and management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs 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.

Appendix II Ecological Designations

SACs (6) and SPAs (4) within County Cavan		
Site Code	Site Name	Sensitive Features
002032	Boleybrack Mountain SAC	Sensitive features include: dystrophic lakes; wet heath dry heath; molinia meadows; and blanket bogs.
000979	Corratirrim SAC	Sensitive features include: limestone pavement.
000584	Cuilcagh - Anierin Uplands SAC	Sensitive features include: oligotrophic waters; dystrophic lakes; wet heath; dry heath; alpine and subalpine heaths; species-rich nardus grassland; blanket bogs; transition mires; petrifying springs; siliceous scree; siliceous rocky slopes; and slender green feather-moss.
000006	Killyconny Bog (Cloghbally) SAC	Sensitive features include: raised bog; and degraded raised bog.
002299	River Boyne and River Blackwater SAC	Sensitive features include: alkaline fens; alluvial forests; river lamprey; Atlantic salmon; and otter.
000007	Lough Oughter and Associated Loughs SAC	Sensitive features include: natural eutrophic lakes; bog woodland; and otter.
004049	Lough Oughter SPA	Sensitive features include: great crested grebe; whooper swan; wigeon; wetland and waterbirds.
004065	Lough Sheelin SPA	Sensitive features include: great crested grebe; pochard; tufted duck; goldeneye; wetland and waterbirds.
002299	River Boyne and River Blackwater SPA	Sensitive features include: kingfisher.
004061	Lough Kinale and Derragh Lough SPA	Sensitive features include: pochard; tufted duck; wetland and waterbirds.
SACs (12) and SPAs (2) in Ireland within 15km buffer, beyond County's boundary		
Site Code	Site Name	Sensitive Features
000428	Lough Melvin SAC	Sensitive features include: oligotrophic to mesotrophic standing waters; molinia meadows; Atlantic salmon and otter.
000679	Garriskil Bog SAC	Sensitive features include: raised bog; degraded raised bog; and rhynchosporion vegetation.
001403	Arroo Mountain SAC	Sensitive features include: wet heath; dry heath; alpine and subalpine heaths; blanket bogs; petrifying springs; calcareous scree; and calcareous rocky slopes.
001786	Kilroosky Lough Cluster SAC	Sensitive features include: hard water lakes; cladium fens; alkaline fens; and white-clawed crayfish.
001810	White Lough, Ben Loughs And Lough Doo SAC	Sensitive features include: hard water lakes; and white-clawed crayfish.
001976	Lough Gill SAC	Sensitive features include: natural eutrophic lakes; orchid-rich calcareous grassland; old oak woodlands; alluvial forests; white-clawed crayfish; sea lamprey; brook lamprey; river lamprey; Atlantic salmon; and otter.
002120	Lough Bane And Lough Glass SAC	Sensitive features include: hard water lakes; and white-clawed crayfish.
002121	Lough Lene SAC	Sensitive features include: hard water lakes; and white-clawed crayfish.
002201	Derragh Bog SAC	Sensitive features include: degraded raised bog; and bog woodland.
002203	Girley (Drewstown) Bog SAC	Sensitive features include: degraded raised bog.
002340	Moneybeg and Clareisland Bogs SAC	Sensitive features include: raised bog; degraded raised bog; and rhynchosporion vegetation.
002341	Ardagullion Bog SAC	Sensitive features include: raised bog; degraded raised bog; and rhynchosporion vegetation.
004043	Lough Derravaragh SPA	Sensitive features include: whooper swan; pochard; tufted duck; coot; wetland and waterbirds.
004102	Garriskil Bog SPA	Sensitive features include: Greenland white-fronted goose.

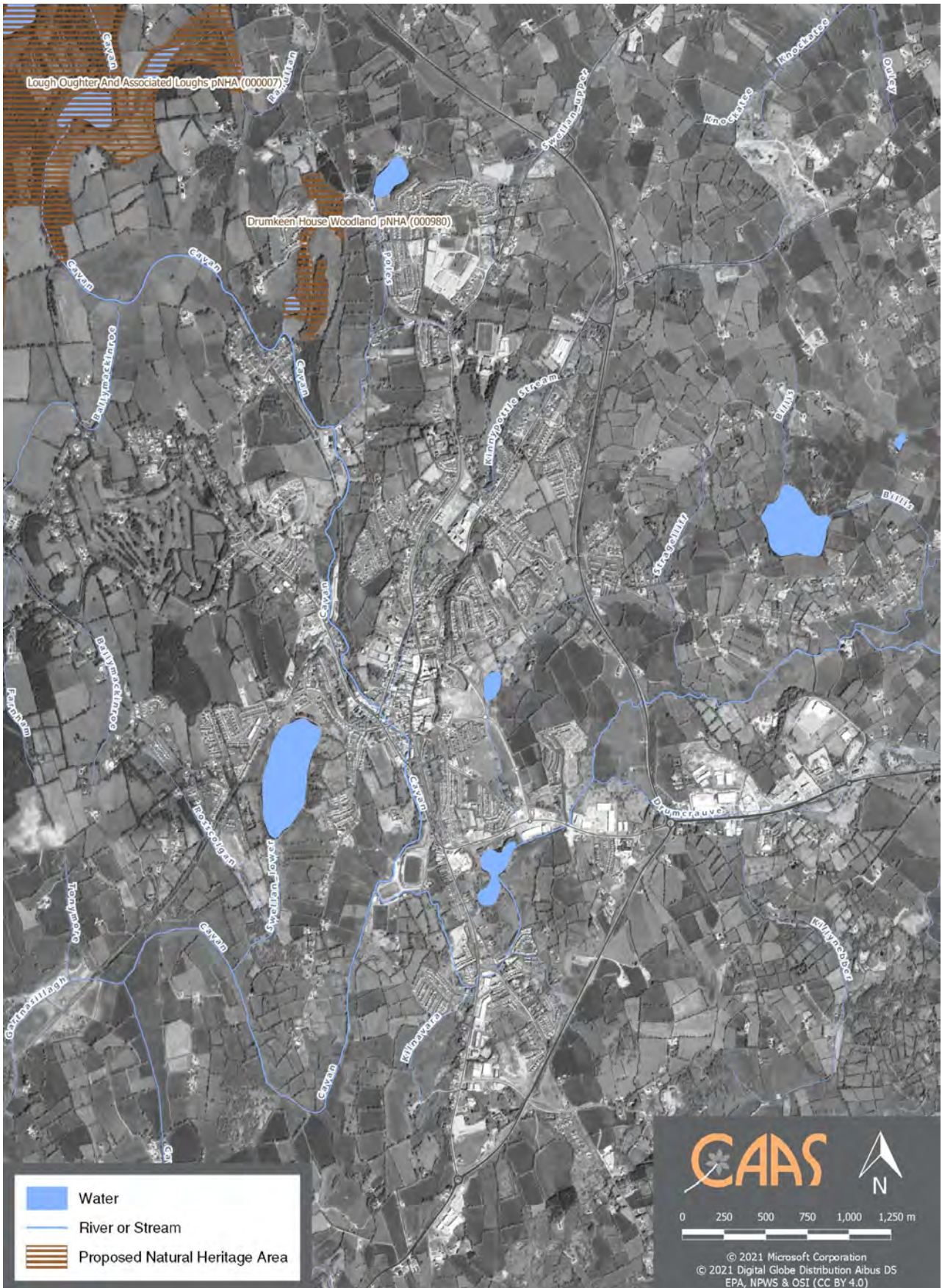
SEA Environmental Report for Proposed Material Alterations

SACs (10) and SPAs (2) in Northern Ireland within 15km buffer, beyond County's boundary ¹⁰⁵		
Site Code	Site Name	Sensitive Features
UK0016603	Cuilcagh Mountain SAC	Sensitive features include: blanket bogs; alpine and boreal heaths; European dry heaths; natural dystrophic lakes and ponds; and Northern Atlantic wet heaths.
UK0016614	Upper Lough Erne SAC	Sensitive features include: alluvial forests; otter; natural eutrophic lakes; and old sessile oak woods.
UK0016619	Monawilkin SAC	Sensitive features include: semi-natural dry grasslands and scrubland facies; and old sessile oak woods.
UK0016621	Magheraveely Marl Loughs SAC	Sensitive features include: calcareous fens; white-clawed crayfish; hard oligo-mesotrophic waters; and alkaline fens.
UK0030045	Largalinn SAC	Sensitive features include: old sessile oak woods.
UK0030047	Lough Melvin SAC	Sensitive features include: oligotrophic to mesotrophic standing waters; old sessile oak woods; and Atlantic salmon.
UK0030068	Fardrum and Roosky Turloughs SAC	Sensitive features include: turloughs.
UK0030116	Cladagh (Swanlinbar) River SAC	Sensitive features include: freshwater pearl mussel; and water courses of plain to montane levels.
UK0030212	Moninea Bog SAC	Sensitive features include: active raised bogs.
UK0030300	West Fermanagh Scarplands SAC	Sensitive features include: blanket bogs; limestone pavements; petrifying springs with tufa formation; alkaline fens; natural eutrophic lakes; and Northern Atlantic wet heaths.
UK9020071	Upper Lough Erne SPA	Sensitive features include: whooper swan wintering population.
UK9020302	Slieve Beagh-Mullaghfad-Lisnaskea SPA	Sensitive features include: hen harrier breeding population.
Other SACs (7) and SPAs (10) Connected to County Cavan, Beyond 15km Buffer		
Site Code	Site Name	Sensitive Features
000216	River Shannon Callows SAC	Sensitive features include: molinia meadows; lowland hay meadows; limestone pavement; alluvial forests; and otter.
000440	Lough Ree SAC	Sensitive features include: natural eutrophic lakes; orchid-rich calcareous grassland; active raised bog; degraded raised bog; alkaline fens; limestone pavement; bog woodland; alluvial forests; and otter.
000455	Dundalk Bay SAC	Sensitive features include: estuaries; tidal mudflats and sandflats; perennial vegetation of stony banks; Salicornia mud; Atlantic salt meadows; and Mediterranean salt meadows.
001818	Lough Forbes Complex SAC	Sensitive features include: natural eutrophic lakes; raised bog; degraded raised bog; rhynchosporion vegetation; and alluvial forests.
001957	Boyne Coast And Estuary SAC	Sensitive features include: estuaries; tidal mudflats and sandflats; annual vegetation of drift lines; salicornia mud; Atlantic salt meadows; embryonic shifting dunes; marram dunes; and fixed dunes.
002165	Lower River Shannon SAC	Sensitive features include: sandbanks; estuaries; tidal mudflats and sandflats; coastal lagoons; large shallow inlets and bays; reefs; perennial vegetation of stony banks vegetated sea cliffs; salicornia mud; Atlantic salt meadows freshwater pearl mussel; sea lamprey; brook lamprey; river lamprey; Atlantic salmon; bottle-nosed dolphin; and otter.
002241	Lough Derg, North-east Shore SAC	Sensitive features include: juniper scrub; cladium fens alkaline fens; limestone pavement; alluvial forests; and yew woodlands.
004026	Dundalk Bay SPA	Sensitive features include: great crested grebe; greylag goose; light-bellied brent goose; shelduck; teal; mallard; pintail; common scoter; red-breasted merganser; oystercatcher; ringed plover; golden plover; grey plover; lapwing; knot; and dunlin.
004046	Lough Iron SPA	Sensitive features include: whooper swan; wigeon; teal; shoveler; coot; golden plover; Greenland white-fronted goose; wetland and waterbirds.
004058	Lough Derg (Shannon) SPA	Sensitive features include: cormorant; tufted duck; goldeneye; common tern; wetland and waterbirds.
004064	Lough Ree SPA	Sensitive features include: little grebe; whooper swan wigeon; teal; mallard; shoveler; tufted duck; common scoter; and goldeneye.
004077	River Shannon and River Fergus Estuaries SPA	Sensitive features include: cormorant; whooper swan; light-bellied brent goose; shelduck; wigeon; teal; pintail; shoveler; scaup; and ringed plover.
004080	Boyne Estuary SPA	Sensitive features include: shelduck; oystercatcher; golden plover; grey plover; lapwing; and knot.
004091	Stabannan-Braganstown SPA	Sensitive features include: greylag goose.
004096	Middle Shannon Callows SPA	Sensitive features include: whooper swan; wigeon; corncrake; golden plover; lapwing; black-tailed godwit; black-headed gull; wetland and waterbirds.
004101	Ballykenny-Fisherstown Bog SPA	Sensitive features include: Greenland white-fronted goose.
004151	Donegal Bay SPA	Sensitive features include: great northern diver; light-bellied brent goose; common scoter; sanderling; wetland and waterbirds.

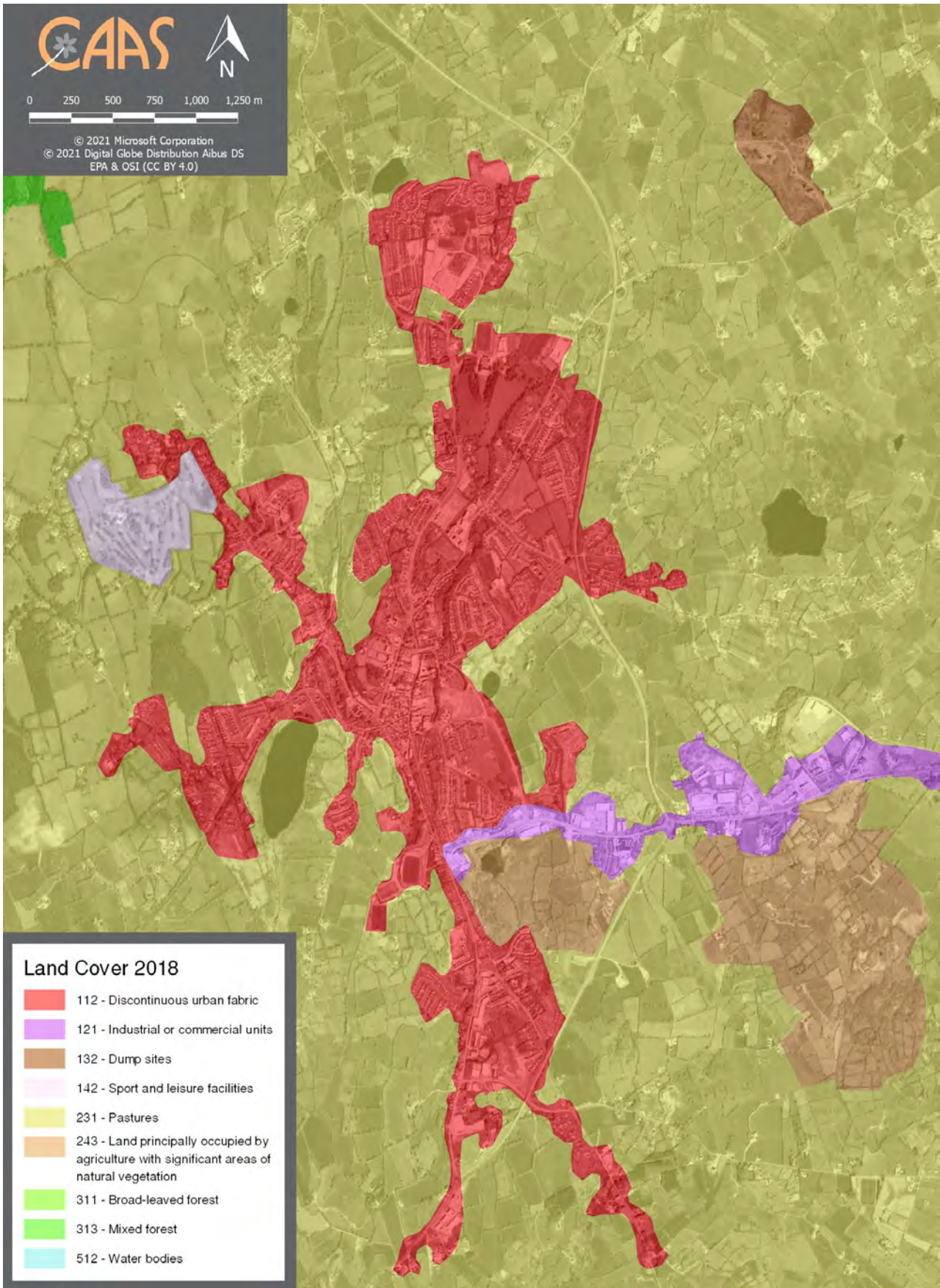
¹⁰⁵ Yet to be updated following submissions made on the Draft Plan.

SEA Environmental Report for Proposed Material Alterations

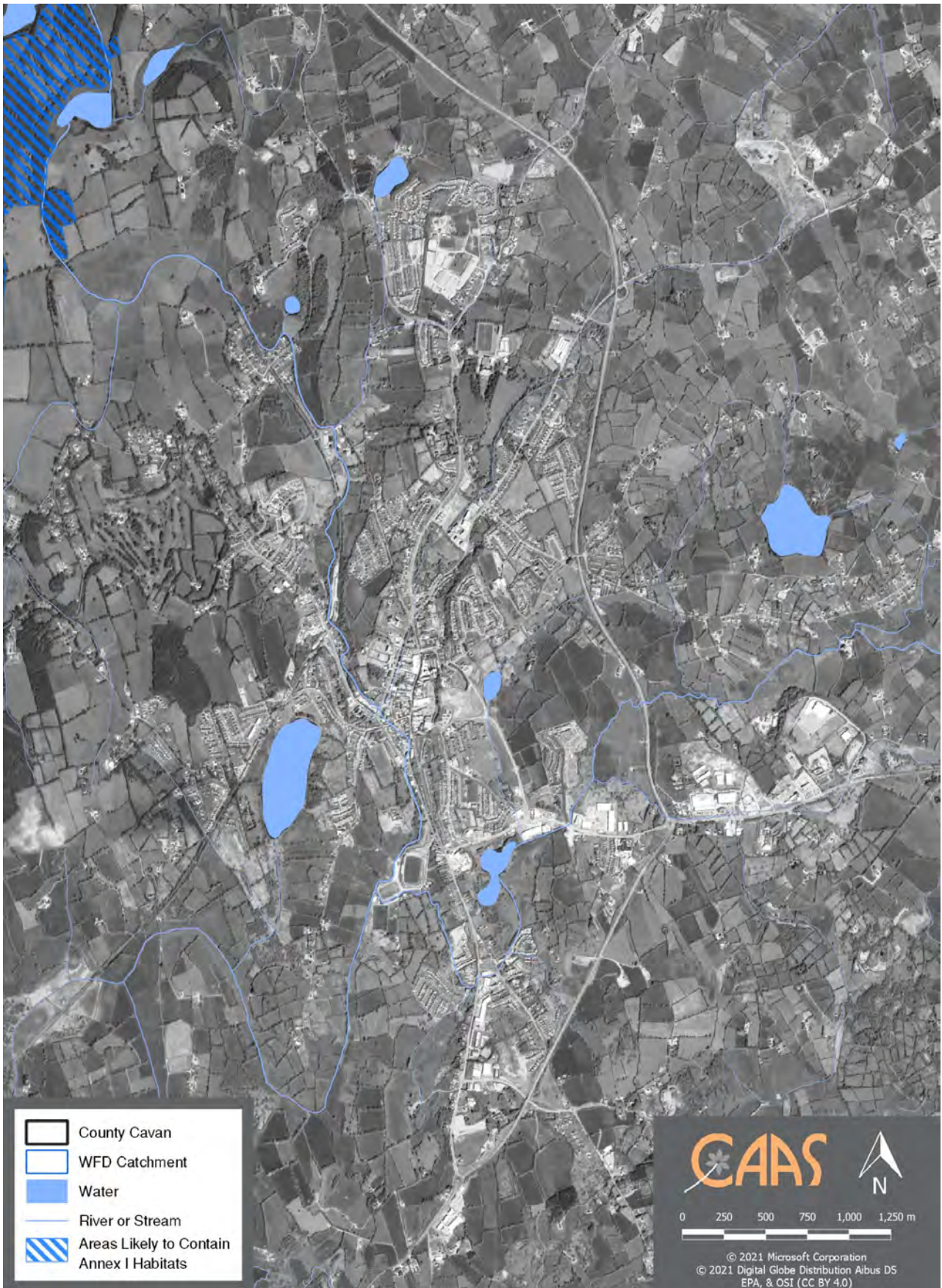
NHAs (2) and pNHAs (20) within County Cavan			
Site Code	Site Name	Site Code	Site Name
000985	Lough Kinale and Derragh Lough NHA	000977	Clonty Lough pNHA
000009	Slieve Rushen Bog NHA	000978	Cordonaghy Bog pNHA
000001	Dramore Lakes pNHA	000979	Corratirrim pNHA
000002	Bruse Hill pNHA	000980	Drumkeen House Woodland pNHA
000003	Cootehill Church pNHA	000983	Glasshouse Lake pNHA
000006	Killyconny Bog (Cloghbally) pNHA	000984	Lough Garrow and Lough Gubdoo pNHA
000007	Lough Oughter and Associated Loughs pNHA	000986	Lough Macnean Upper pNHA
000008	Lough Ramor pNHA	000987	Lough Sheelin pNHA
000584	Cuilcagh – Anierin Uplands pNHA	000988	Madabawn Marsh pNHA
000974	Annagh Lough (Ballyconnell) pNHA	000992	Lough Gowna pNHA
000976	Blackrock's Cross pNHA	001841	Drumcor Lough pNHA



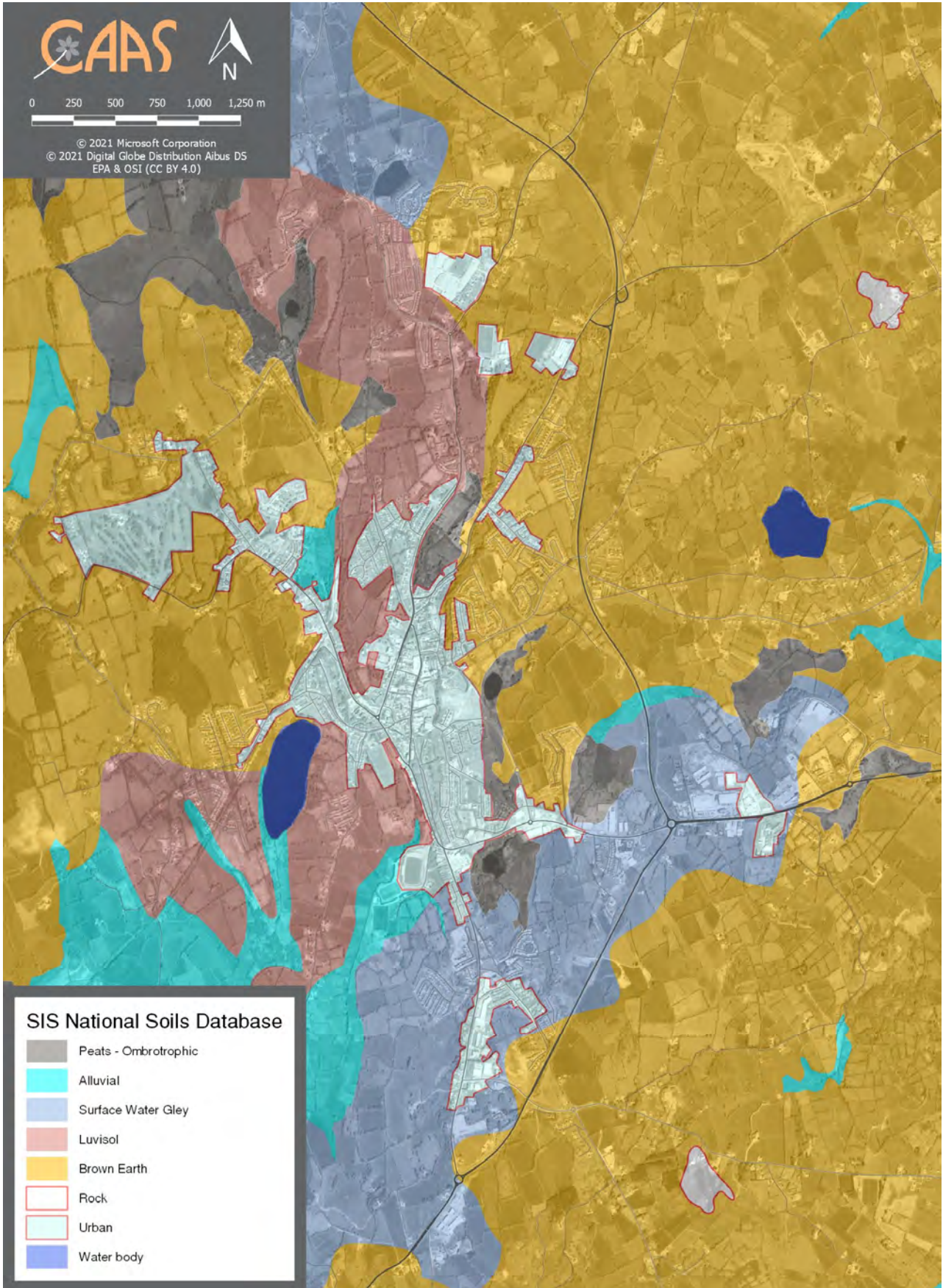
Appendix III Map 2: Proposed Natural Heritage Areas within and adjacent to Cavan Town and Environs



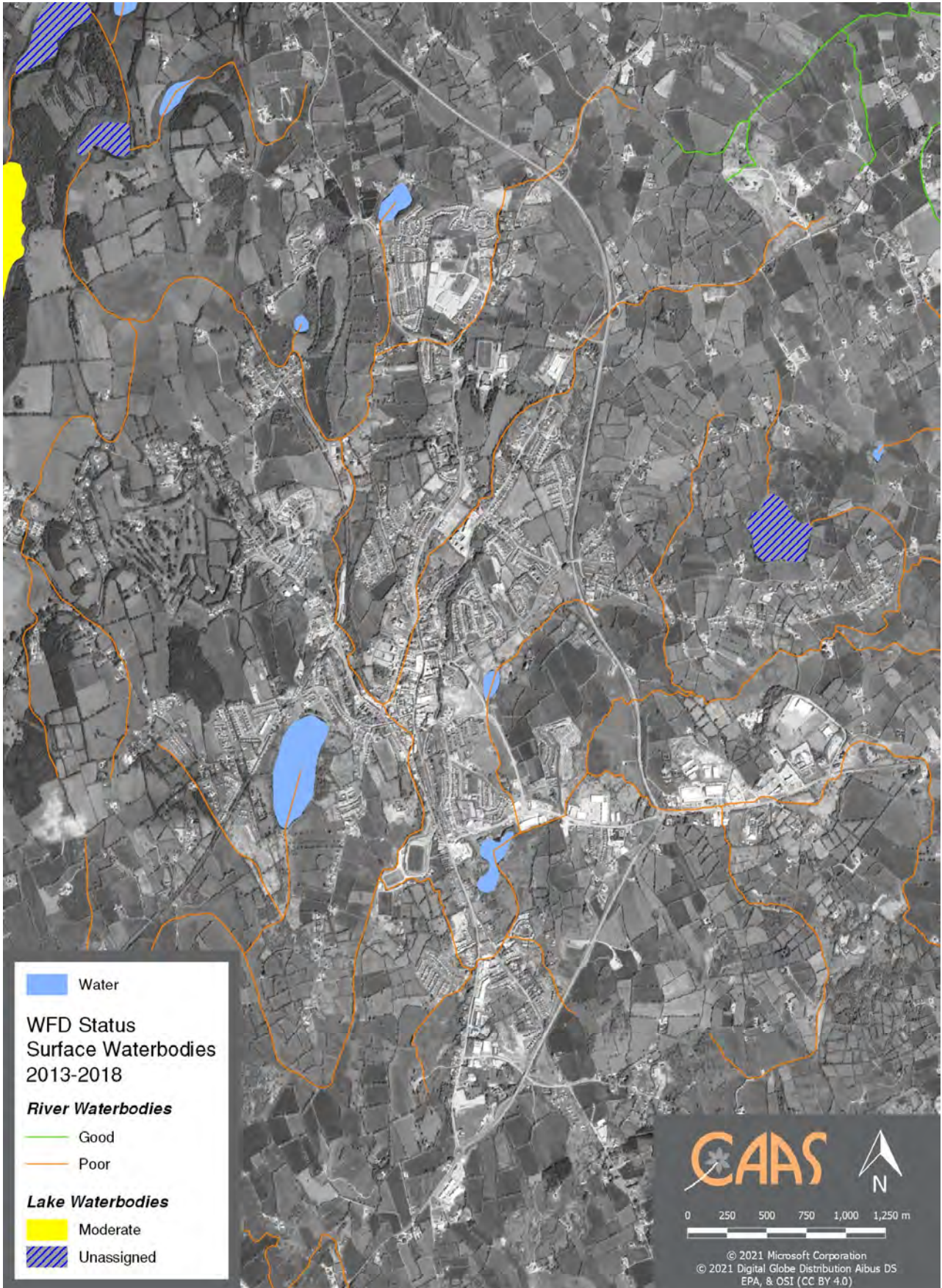
Appendix III Map 3: CORINE Land Cover 2018 within Cavan Town and Environs



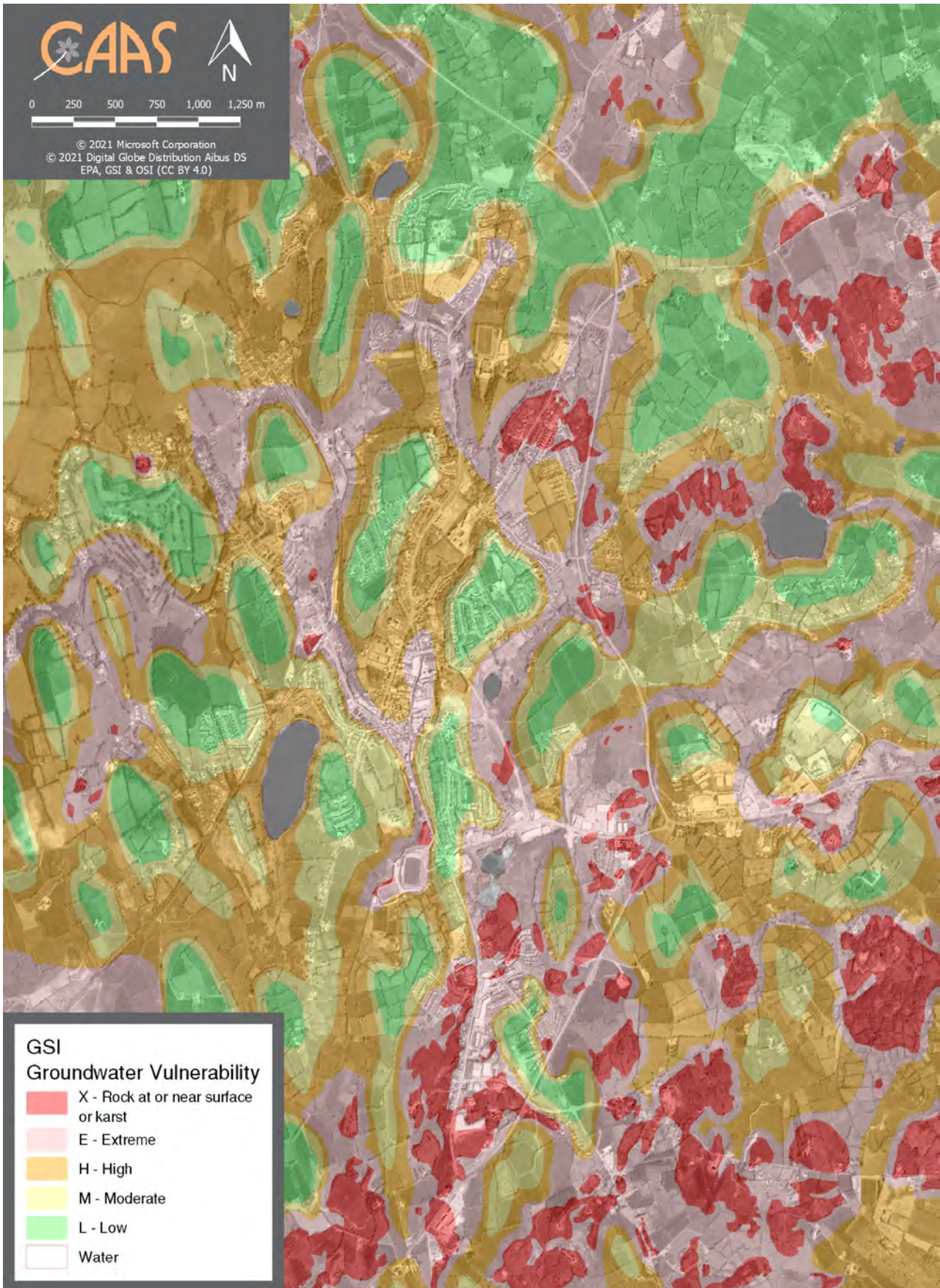
Appendix III Map 4: Areas with the potential for Annex I habitats adjacent to Cavan Town and Environs



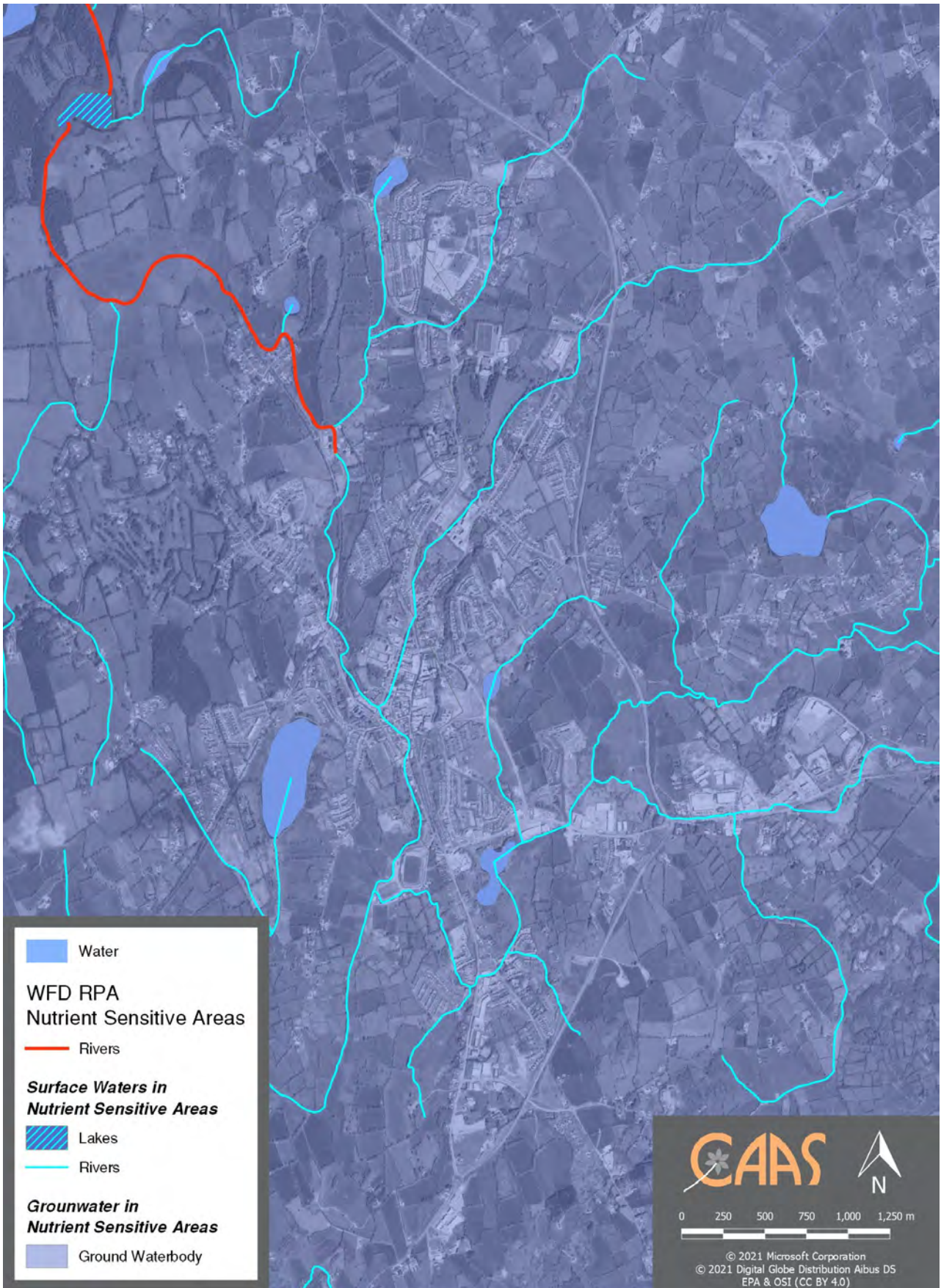
Appendix III Map 5: Soil Type within Cavan Town and Environs



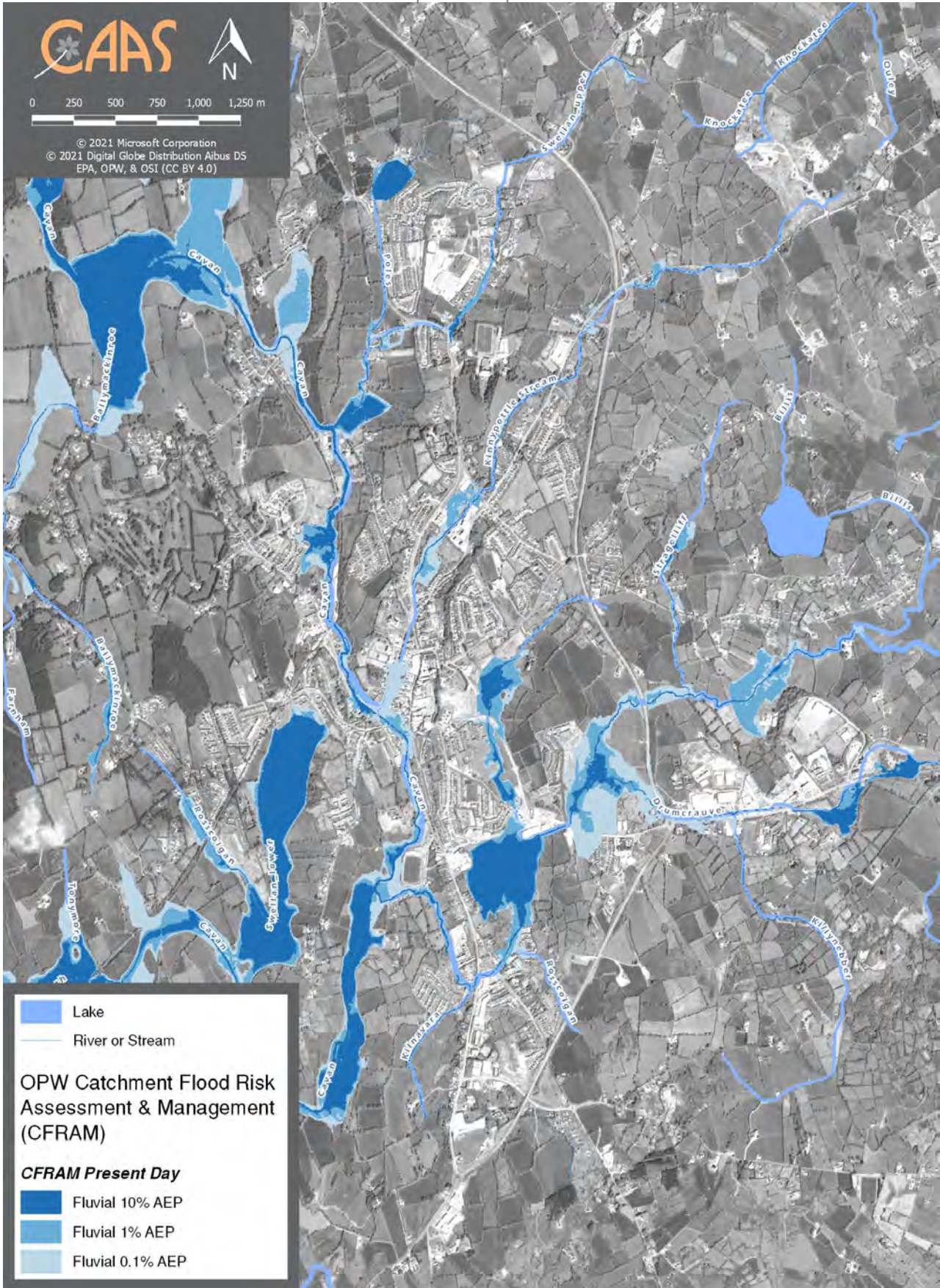
Appendix III Map 6: WFD Surface Water Status (2013-2018) within Cavan Town and Environs



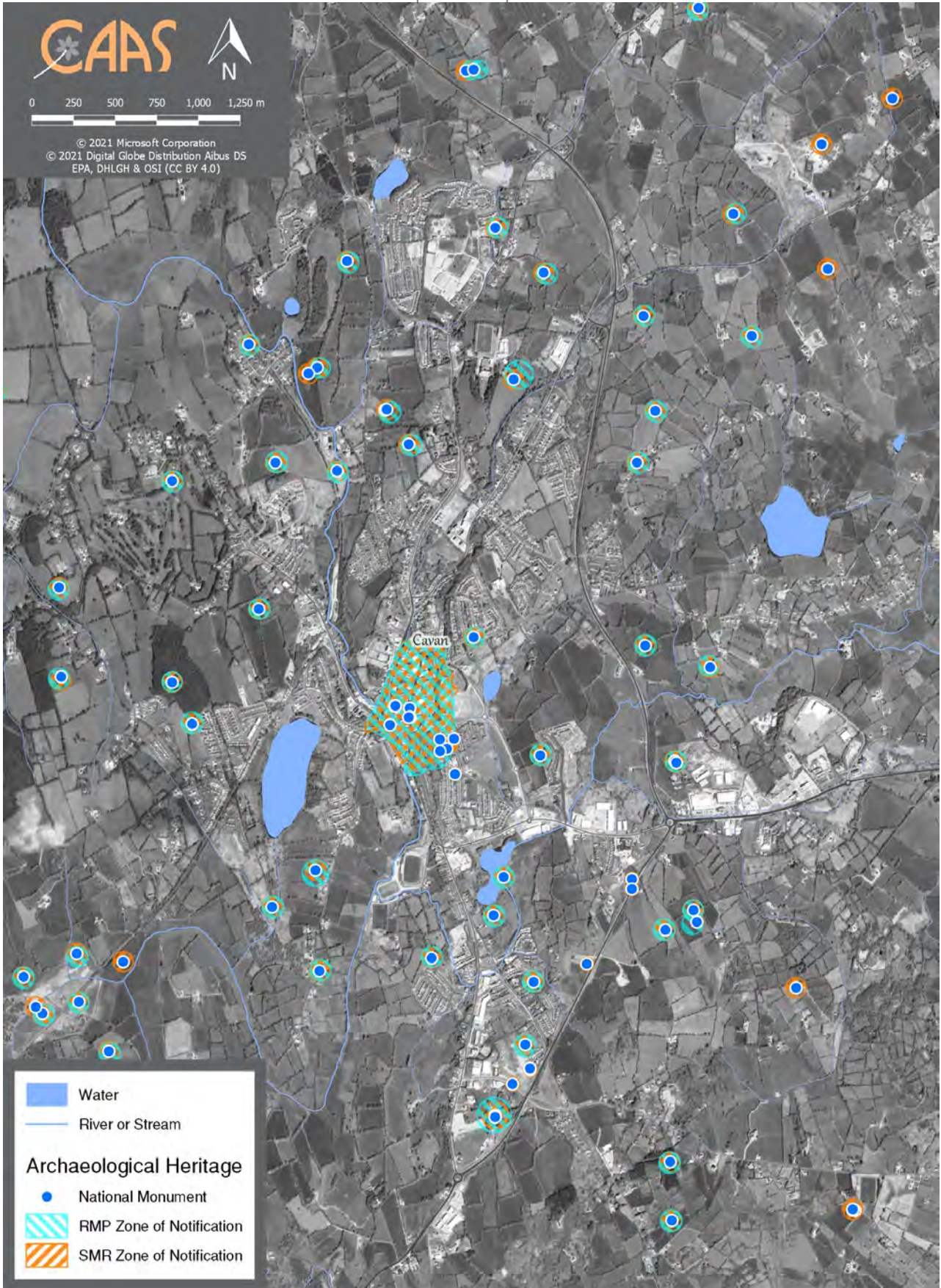
Appendix III Map 7: Groundwater Vulnerability within Cavan Town and Environs



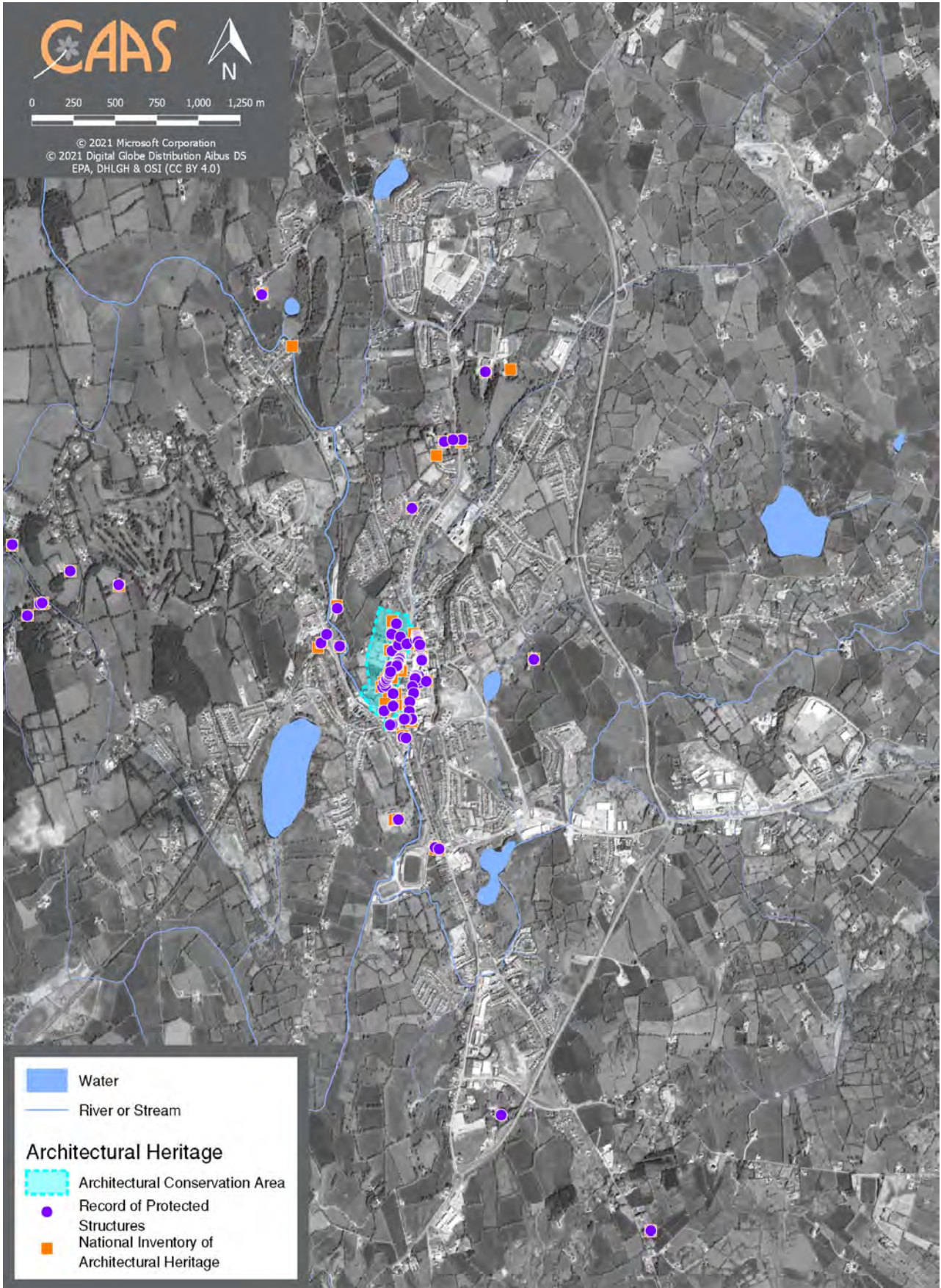
Appendix III Map 8: WFD RPA Nutrient Sensitive Areas within Cavan Town and Environs



Appendix III Map 9: OPW PFRA Mapping for Cavan Town and Environs



Appendix III Map 10: Archaeological Heritage within Cavan Town and Environs



Appendix III Map 11: Architectural Heritage within Cavan Town and Environs

Appendix IV SEA Screening Report

STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING REPORT

FOR
PROPOSED MATERIAL ALTERATIONS
TO THE
DRAFT CAVAN
COUNTY DEVELOPMENT PLAN 2022-2028
INCORPORATING THE DRAFT CAVAN TOWN
LOCAL AREA PLAN 2022-2028

for: Cavan County Council

Courthouse
Farnham
Cavan Town



Comhairle Contae an Chabháin
Cavan County Council

by: CAAS Ltd.

1st Floor
24-26 Ormond Quay Upper
Dublin



FEBRUARY 2022

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Section 1 Introduction and Background

1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Screening Report for the Proposed Material Alterations to the Draft Cavan County Development Plan (CDP) 2022-2028, incorporating the Draft Cavan Town Local Area Plan 2022-2028, hereafter referred to as the “Draft Plan”.

SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it. The SEA Directive¹ requires, inter alia, that SEA is undertaken for certain plans, programmes or alterations to these. Screening is the process for deciding whether a particular plan - or alteration to a plan -, other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would thus warrant SEA.

The purpose of this report is to inform whether or not to undertake SEA on the Proposed Material Alterations to the Cavan CDP. Requirements in relation to the screening of Proposed Material Alterations to CDPs are provided under Section 12 (7) of the Planning and Development Act 2000 as amended.

This report should be read in conjunction with the CDP and all other associated documents including the:

- Proposed Material Alterations to the Draft Cavan CDP 2022-2028;
- Appropriate Assessment (AA) Natura Impact Report for Proposed Material Alterations to the Draft Cavan CDP 2022-2028;
- SEA Environmental Report for the Draft Cavan CDP 2022-2028; and
- AA Natura Impact Report for the Draft Cavan CDP 2022-2028.

1.2 Process so far

The CDP has been progressed to date in compliance with Section 12 of the Planning and Development Act 2000 as amended.

SEA² was undertaken on and informed the CDP in order to comply with the SEA Directive and transposing Regulations – the SEA Environmental Report that accompanied the CDP on public display contains the findings of the assessment.

AA³ was also undertaken on the CDP (informing both the CDP and the SEA) in order to comply with the Habitats Directive and transposing Regulations. An AA Natura Impact Report was prepared that contains the findings of this assessment.

The CDP associated SEA and AA documents were placed on public display and submissions were invited. Submissions were responded to in a Chief Executive's Report and Elected Members decided upon Proposed Material Alterations to the CDP and these are the subject of this report.

¹ 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

² Strategic Environmental Assessment is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it.

³ Appropriate Assessment is an impact assessment process concerning European Sites designated on foot of habitats and species.

1.3 SEA Environmental Report (July 2021)

The SEA Environmental Report for the CDP contains the information specified in Annex I of the SEA Directive and Schedule 2B of the Planning and Development (SEA) Regulations 2004 (S.I. 436 of 2004) as amended by the Planning and Development (SEA) (Amendment) Regulations 2011 (S.I. 201 of 2011). The relevant sections of the SEA Environmental Report that address these information requirements are detailed on Table 1.1 below.

The assessment undertaken on relevant Proposed Material Alterations (the findings of which are presented later in this document) has used the information contained in the SEA Environmental Report.

Table 1.1 Information contained within the SEA Environmental Report that accompanies the County Development 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 and Appendices II and III
(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 3, 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Appendix IV Non-Technical Summary
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

Section 2 SEA Screening

2.1 Introduction

The section examines whether each Proposed Material Alteration to the CDP would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

This examination takes account of relevant criteria set out in Schedule 2A *'Criteria for determining whether a plan is likely to have significant effects on the environment'* of the Planning and Development (SEA) Regulations, as amended, (see Section 2.5).

2.2 Strategic Flood Risk Assessment

Strategic Flood Risk Assessment (SFRA) is being undertaken to inform the preparation of the Draft Plan and the Proposed Material Alterations. The SFRA process has informed this report. If they are to be adopted as part of the Plan, Proposed Material Alterations No's. 165 and 168 should be further modified to fully exclude vulnerable land uses along water courses and within Flood Zone A and B.

2.3 Appropriate Assessment

Appropriate Assessment (AA) is an impact assessment process concerning *Natura 2000*, or *European*, sites - these sites have been designated or proposed for designation by virtue of their ecological importance. The Habitats Directive⁴, its transposing Birds and Natural Habitats Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended) provide the requirement to screen for effects on European Sites. If the effects are deemed to be *significant, potentially significant or uncertain* then Stage 2 AA must be undertaken.

The County Development Plan is being subject to Stage 2 AA and a Draft Natura Impact Report was placed on public display alongside the Draft Plan. At adoption of the Plan, the Natura Impact Report will be finalised and an AA determination made by the Council.

An AA screening process has been undertaken on the Proposed Material Alterations. This process has determined that Stage 2 AA for certain Alterations is necessary. An AA Natura Impact Report contains the findings of this assessment for the Proposed Material Alterations, has informed this SEA Screening Report and accompanies the Proposed Material Alterations.

2.4 Screening Analysis of Proposed Material Alterations

The analysis of Proposed Material Alterations is undertaken considering interactions Strategic Environmental Objectives (see Table 2.1). Table 2.2 examines whether each part of the Proposed Material Alterations would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

Table 2.2 is supplemented by Table 2.3 which provides details on:

- The likely significant effects of implementing the Draft Plan, if unmitigated;
- Key mitigation measure(s) that are already contained within the Draft Plan; and
- Residual non-significant adverse effects arising from the Draft Plan.

⁴ Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

Effects encompass the full range of effects⁵, including those arising cumulatively – such as those potentially arising as a result of interactions with other plans and programmes.

The examination of Proposed Material Alterations also takes into account relevant criteria set out in Schedule 2A *'Criteria for determining whether a plan is likely to have significant effects on the environment'* of the SEA Regulations, as amended, (see Section 2.5).

Table 2.1 Strategic Environmental Objectives

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health – Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels

⁵ These include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects

SEA Screening Report for Proposed Material Alterations

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> • To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

Table 2.2 SEA Screening Analysis of Proposed Material Alterations⁶

Ref	SEA Screening Consideration
1	This alteration would further contribute towards provisions related to this sector/topic that are already contained within the Draft Plan. Taking into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development, it is determined that all potential effects arising from this Proposed Alteration: either are present already (beneficial) and will be further contributed towards; and/or will be mitigated so as not to be significant (adverse). Consequently, SEA is not required. Refer also to Table 2.3 and Section 2.5.
2	A future plan/assessment/feasibility study/ investigation of potential would not result in different environmental outcomes or effects. Consequently, SEA is not required. Was such an assessment to be followed by recommendations, such as varying the Plan, such recommendations would have to be subject to SEA and AA screening and other requirements as appropriate.
3	The update to terminology/language/wording/numbering/mapping would not change the effects arising from the Plan. Where the change relates to mapping, the implications of the change may have been considered under other related Alterations. As such, this alteration would not be considered as being likely to result in significant environmental effects. Consequently, SEA is not required.
4	This alteration relates to Plan text that sets the context for, summarises and/or provides clarification to Plan provisions. It does not interact with existing Plan provisions to an extent that it would have additional significant environmental effects. Consequently, SEA is not required.
5	This alteration adds more detail but would not have the potential to result in significant environmental effects. Consequently, SEA is not required.
6	This alteration provides consistency with other parts of the Plan and/or with the wider planning and policy framework. It would not interact with Plan provisions to the extent that it would have environmental effects. Consequently, SEA is not required.
7	Removal of this provision would remove the potential for any environmental effects; however, removal of the provision would not be likely to result in any environmental effects. Consequently, SEA is not required.
8	These alterations relate to supporting documents but would not change Plan provisions. Consequently, SEA is not required.
9	Taking into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development (including those measures to contribute towards the protection of European sites), there is no potential for effects on the integrity of any European site to arise from this Proposed Material Alteration. However, the AA screening process takes into account the need to undertake Stage 2 AA when mitigation is being proposed. As this alteration could be considered mitigation, in relation to the Plan elements that could potentially affect the integrity of European sites under the Plan, further to that already included in the Draft Plan (see Table 2.3), with the objective of protecting the integrity of European Sites brought to Stage 2 under the ongoing AA being undertaken alongside the preparation of the Plan, it would be prudent to undertake Stage 2 AA. Consequently, SEA is advised as prudent.
10	As this alteration could potentially impact upon the protection of a European site, Stage 2 AA is required. Consequently, SEA is advised as prudent.
11	There is no planning justification for this alteration, it would not provide the most evidence-based framework for development and has the potential to undermine sustainable development and proper planning. Taking this into account, SEA is required.

No.	SEA Screening Consideration Ref. – see above	No.	SEA Screening Consideration Ref. – see above
1	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	110	9
2	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	111	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
3	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	112	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
4	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	113	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
5	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	114	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
6	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	115	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
7	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	116	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
8	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	117	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
9	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	118	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
10	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	119	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
11	11 - see other land use zoning amendments with Ref. "11" also	120	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
12	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	121	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
13	9	122	10
14	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	123	9
15	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	124	9
16	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	125	9
17	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	126	9
18	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	127	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
19	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	128	9
20	9	129	9
21	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	130	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
22	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	131	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
23	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	132	9
24	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	133	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
25	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	134	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
26	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	135	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
27	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	136	9
28	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	137	9
29	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	138	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
30	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	139	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
31	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	140	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
32	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	141	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
33	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	142	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
34	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	143	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
35	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	144	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
36	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	145	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
37	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	146	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
38	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	147	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
39	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	148	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
40	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	149	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
41	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	150	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required

⁶ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

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No.	SEA Screening Consideration Ref. – see above	No.	SEA Screening Consideration Ref. – see above
105	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	214	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
106	9	215	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
107	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	216	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
108	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	217	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required
109	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required	218	Selection of SEA Screening Considerations from Ref. 1 to 8 - SEA not required

Table 2.3 Detail of effects⁷, if unmitigated, mitigation measures for potential effects and residual adverse effects

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Northern and Western RSES, adjacent Development Plans and other plans and programmes.			Mitigation Measures from the Draft Plan, including:
	Positive/Neutral Effects, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects, following mitigation	
Various - see below	<ul style="list-style-type: none"> Various - see below 	Various - see below	<ul style="list-style-type: none"> Various - see below 	<p>Core Strategy - Ecosystems Services Approach and Natural Capital In preparing the Draft Plan and developing policy objectives, the Council have followed these Ecosystem Services⁸ Approach principles:</p> <ol style="list-style-type: none"> Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function. Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation, resources for food, fibre or fuel, or for recreation, culture and quality of life. Involving people - those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them. Public consultation has informed the preparation of the Draft Plan which will be further refined before adoption, taking into account submissions/observations made on the Draft Plan during public display. <p>The Council shall promote an Ecosystem Services Approach, following the above principles, in its decision-making processes, including those relating to the preparation of statutory land use plans. In recognition of the need to manage natural capital⁹, provisions have been integrated into the Plan that will contribute towards management of air quality, noise pollution, light pollution, water quality and integrated river basin management.</p> <p>United Nations Sustainability Goals Contribute, as practicable, towards achievement of the 17 Sustainable Development Goals of the United Nations' 2030 Agenda for Sustainable Development, which came into force in 2016.</p> <p>Various other Objectives GR 09 New roads and other transport infrastructure projects that are not already provided for by existing plans/programmes or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environment Report and the objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Road Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage1 – Router Corridor Identification, Evaluation and Sections; and Stage 2 – Route Identification, Evaluation and Selection. RCWM-05 All relevant development proposals shall include a Construction Environmental Management Plan (CEMP) with planning application documentation¹⁰. GE 08 Where undergrounding and/or overgrounding of cables is being pursued, proposals should demonstrate that environmental impacts including the following are minimise:</p> <ul style="list-style-type: none"> - Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties). - Short to medium term impacts on the landscape where, for example, hedgerows are encountered; - Impacts on underground archaeology; - Impacts on soil structure and drainage; - Impacts on surface waters as a result of sedimentation and - Visual impacts.

⁷ Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, adjacent Development Plans and lower-tier land use plans.

⁸ Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing

⁹ Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)

¹⁰ Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:

- location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse;
- location of areas for construction site offices and staff facilities;
- details of site security fencing and hoardings;
- details of on-site car parking facilities for site workers during the course of construction;
- details of the timing and routing of construction traffic to and from the construction site and associated directional signage;
- measures to obviate queuing of construction traffic on the adjoining road network;
- measures to prevent the spillage or deposit of clay, rubble or other debris;
- 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;
- details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
- 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);
- disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government;
- 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;
- details of a water quality monitoring and sampling plan;
- if peat is encountered - a peat storage, handling and reinstatement management plan;
- measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed);
- appointment of an ecological clerk of works at site investigation, preparation and construction phases; and
- details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bats.

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<p>Biodiversity and Flora and Fauna</p>	<ul style="list-style-type: none"> Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere. Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna. 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. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> Loss of/damage to biodiversity in designated sites (including European Sites, Wildlife Sites and Areas of Special Scientific Interest) 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 such as birds and bats. 	<ul style="list-style-type: none"> 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). 	<p>Lighting Development Objectives</p> <p>LP 01 Control lighting in urban and rural areas and in particular sensitive locations, in order to minimise impacts on residential amenity, habitats and species of importance.</p> <p>LP 03 Ornamental lighting of public buildings, bridges, monuments and public spaces must not fall beyond the area intended or directed skywards. Architecturally sensitive tones such as passive, warm coloured lights should be considered before blue or rich white lights and only used where necessary.</p> <p>Natural Heritage Development Objectives</p> <p>NH1 Conserve, protect and manage the County's natural heritage assets for future generations while encouraging appreciation, understanding and enjoyment of the amenity value for the present generation.</p> <p>NH2 Maximise the social, economic and environmental benefits that may be derived from the conservation and management of Cavan's Natural Heritage and green infrastructure.</p> <p>NH3 Support the implementation of relevant actions in the National Biodiversity Plan, the All Ireland Pollinator Plan and the National Peatlands Strategy.</p> <p>NH4 Implement, in partnership with Cavan County Heritage Forum, relevant stakeholders and the wider community, Cavan County Heritage and Biodiversity Plans and any revisions thereof.</p> <p>NH5 Integrate biodiversity consideration into all Cavan County Council activities through the County Biodiversity Action Plan process.</p> <p>NH6 Ensure the protection of species of flora and fauna afforded legal protection under Irish and European Legislation.</p> <p>NH7 Assess the impact on biodiversity of proposals for large developments, particularly those on greenfield sites, or in environmentally sensitive areas. Such developments must include measures for the enhancement and protection of biodiversity.</p> <p>NH8 Promote the conservation of biodiversity outside of designated areas, including features such as wetlands, woodlands, hedgerows and uplands.</p> <p>Development Objectives for Designated Sites</p> <p>NHDS1 Protect and conserve Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas and proposed Natural Heritage Areas.</p> <p>NHDS2 Ensure that no plans, programmes or projects giving rise to significant cumulative, direct, indirect or secondary impacts on European Sites arising from their size or scale, land take, proximity, resource requirements, emissions, transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted (either individually or in combination with other plans, programmes, or projects).</p> <p>NHDS3 Ensure that any plan or project that could have an adverse impact on a NHA, pNHA, SAC, SPA, SPA (either by themselves or in combination with other plans and projects) or upon the conservation objectives of the site or would result in the deterioration of any habitat or any species reliant on that habitat will not be permitted.</p> <p>NHDS4 Ensure an Appropriate Assessment (AA) in accordance with Article 6(3) and Article 6(4) of the Habitats Directive, and in accordance with the Department of the Environment, Heritage and Local Government Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009 and relevant EPA and European Commission guidance documents, is carried out in respect of any Plan or Project likely to have significant effect on a Natura 2000 site(s), either individually or in combination.</p> <p>NHDS5 Require an ecological appraisal for development not directly connected with or necessary to the management of Natura Sites, or a proposed Natura Site and which are likely to have significant effects on that site either individually or cumulatively.</p> <p>NHDS6 Support the development of a Strategic Habitat Map for the Cullcagh Lakelands UNESCO Global Geopark in consultation with National Parks and Wildlife Service and relevant stakeholders.</p> <p>NHDS7 Promote the maintenance and as appropriate, achievement of favourable conservation status of habitats and species and to improve the ecological coherence of the Natura 2000 network, by maintaining and where appropriate, developing features in the landscape which are of major importance for wild fauna and flora.</p> <p>NHDS8 Ensure that new development proposals affecting designated sites have regard to the sensitivities identified in the SEA Environmental Report prepared in respect of this plan.</p> <p>NHDS9 Have regard to the views of the National Parks and Wildlife Service in respect of proposed development where such development may have an impact on a designated National or European site or proposed site for designation.</p> <p>NHDS10 Consult with National Parks and Wildlife Service (NPWS) in regard to any developments (those requiring planning permission and those not requiring planning permission) which the council proposes to carry out within pNHAs, NHAs, SACs, SPAs, SPAs and other important ecological sites.</p> <p>NHDS11 Maintain the conservation value of Council owned land within NHAs and pNHAs and promote the conservation value of Council owned land adjoining NHAs.</p> <p>NHDS12 Continue to undertake surveys and collect data that will assist Cavan County Council in building its knowledge base and meeting its obligations under Article 6 of the Habitat Directives.</p> <p>NHDS 13 Projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) 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 not be permitted 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.</p> <p>NHDS 14 Contribute towards the protection and enhancement of biodiversity and ecological connectivity where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones.</p> <p>Development Objectives for Non- Designated Sites</p> <p>NHND1 Support the protection of non-designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve biological diversity.</p> <p>NHND2 Conserve the existing wide range of flora, fauna and wildlife habitats in the county through the preservation of ecological corridors and networks vital to the migration, dispersal and genetic exchange of wild species. To designate County Biodiversity Sites within the lifetime of this plan and to protect the ecological integrity of these sites.</p> <p>NHND3 Implement the actions of Cavan County Biodiversity Plan and any subsequent revisions in fulfilment of the requirements of the National Biodiversity Plan.</p> <p>NHND4 Continue habitat mapping of the county to enable planning for the future development in a sensitive and sustainable manner and this mapping to inform the development management policy.</p> <p>Development Objectives for Invasive Species</p> <p>IN1 Support initiatives, which reduce the risk of invasions, help control and manage new and established invasive species, monitor impacts and raise public awareness.</p> <p>IN2 Encourage the use of native species in amenity planting and stocking and related community actions to reduce the introduction and spread of non-native species.</p> <p>IN3 Prevent the spread of invasive species within the plan area, including requiring landowners and developers to adhere to best practice guidance in relation to the control of invasive species.</p> <p>IN4 Ensure proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, the applicant will be required to submit a control and management programme for the particular invasive species as part of the planning</p>
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			<p>process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I 4777/2011)</p> <p>IN5 Support 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.</p> <p>Development Objectives for Wetlands</p> <p>WL 1 Development that would negatively impact upon any wetland including fragmentation or degradation will be resisted in the County.</p> <p>WL 2 Review and update the 2008 Wetlands Survey for County Cavan with a view to mapping the extent and condition of wetland sites in the county as a comprehensive GIS Layer. This review will also identify information gaps and inform future wetland policy.</p> <p>WL3 Where it is intended to fill or reclaim a wetland area, an ecological impact assessment will be required.</p> <p>WL4 Protect wetlands, floodplains and watercourses for biodiversity and flood protection value.</p> <p>WL5 Ensure land zonings carefully consider appropriate riparian setback distances that support high ecological status of water bodies, the conservation of biodiversity, healthy ecosystems and buffer zones from flood plains.</p> <p>WL6 Implement 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 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.</p> <p>Development Objectives for Woodlands, Trees, Hedgerows and Stonewalls</p> <p>WTHS1 Continue to co-operate with relevant stakeholders to improve public access to State forests for amenity purposes and consider development which will enhance the amenity provided by existing trees and woodlands.</p> <p>WTHS2 Promote awareness, understanding and best practice in the management of Cavan's woodland, tree, hedgerow and stone wall resource.</p> <p>WTHS3 Encourage the retention of mature trees and the use of tree surgery rather than felling where possible when undertaking, approving or authorising development.</p> <p>WTHS4 Protect Champion and Heritage Trees where identified on the Tree Register of Ireland and Heritage Tree Database, when undertaking, approving, or authorising development.</p> <p>WTHS5 Encourage the use of native species wherever possible in Cavan County Council's own landscaping work, and on Council property.</p> <p>WTHS6 Promote and encourage planting of native hedgerow species of local provenance.</p> <p>WTHS7 Encourage the retention of hedgerows and stonewalls and other distinctive boundary treatments in rural areas and prevent loss and fragmentation, where possible. Where removal of a hedgerow or stone wall is unavoidable, mitigation by provision of the same type of boundary will be required.</p> <p>WTHS8 Carry out a review of the Cavan Hedgerow Survey undertaken in 2006 during the lifetime of this plan.</p> <p>Landscape Character/ Natural Heritage Climate Change Development Objectives</p> <p>LCC 01 Within the lifetime of the plan, undertake a survey and vector mapping exercise to identify exemplar wetlands, bogs, individual trees and/or stands of trees and/or woodlands throughout the county worthy of protection and preservation.</p> <p>LCC 02 Encourage the potential community woodlands areas in urban/urban fringe areas and the development of community woodlands throughout rural Cavan.</p> <p>LCC 03 Promote the use in public spaces of hot water, foam stream, flame weeding and/or concentrated vinegar in favour of glyphosate weedkillers.</p> <p>LCC 04 Prepare a Peatland Strategy that shall encourage the rewilding, restoration and protection of peat bogs after turf cutting and/or peat extraction has ceased.</p> <p>LCC 05 Support the National Ambient Air Quality Monitoring Programme 2017 – 2022.</p> <p>LCC06 Promote the roll-out of renewables and stringent protection and enhancement of carbon pools, such as forests, peatlands and permanent grasslands.</p> <p>LCC 07 Explore the opportunity of engaging the services of a full-time Ecologist on a shared basis amongst neighbouring Local Authorities.</p> <p>LCC 08 Install and promote the installation of bird, bat, and owl boxes, and bee bricks and insect hotels or equivalent, at all relevant locations and developments, where possible.</p> <p>LCC 09 Actively participate and seek to adopt recommendations originating out of the Climate Action Regional Office (CARO) and Northern and Western Climate Action Region.</p> <p>LCC 10 Fracking and the industrial extraction of fossil fuels will not be encouraged within Cavan 's functional area.</p> <p>LCC 11 Develop a strategy to support an active native Tree Planting programme in the context of climate adaption.</p> <p>Various Other Objectives</p> <p>LW 04 Facilitate increased access to Cavan's waterways, from towns and villages where visitor services are located, with an emphasis on providing a strong visitor experience associated with the lakes and waterways and their heritage and amenity value, including trails, bird hides, and water sports facilities, subject to the protection of environmentally sensitive areas and the requirements of the Habitats Directive.</p> <p>T 09 Ensure all tourism developments shall integrate climate change adaptation, the enhancement of nature and biodiversity measures into their activities, plans and proposals.</p> <p>CC 10 Support collaboration between local authorities and relevant stakeholders regarding integrated peatland management and support for rehabilitation and/or re-wetting of suitable peatland habitats, in particular the Geopark and Cullcagh Carbon sequestration potential.</p> <p>Tourism Development Objectives</p> <p>T 01 Promote the development and strengthening of the overall value of Cavan as a tourist destination by encouraging the enhancement and development of sustainable and high-quality visitor attractions, activities and infrastructure, enabling an increase in the overall capacity and long-term development of the county's tourism industry, subject to appropriate siting and design criteria and the protection of environmentally sensitive areas.</p> <p>T 02 Engage and collaborate with key stakeholders, relevant agencies, sectoral representatives and local communities to develop the tourism sector in Cavan, to ensure that the economic potential of the tourism sector is secured for the local economy.</p> <p>T 03 Support the implementation of the County's Tourism Strategy in line with national and regional policy, tourism trends and identified challenges, in collaboration with Fáilte Ireland, Waterways Ireland, tourism businesses and communities and other supporting agencies.</p> <p>T 04 Continue to work closely with Fáilte Ireland to maximise the benefit of national and regional initiatives for the county, with a particular emphasis on initiatives which will increase the economic benefit from tourism, support local business development and encourage new enterprise opportunities.</p> <p>T 05 Utilise the county's natural and heritage resources to foster the development of tourism as a viable sector of the economy in a sustainable manner which complements the scale, quality and unique features of the location and county.</p> <p>T 06 Protect and conserve the natural, built and cultural heritage features which add value to the visitor experience in Cavan and seek to restrict developments which would damage or detract from the quality of scenic areas and identified natural and cultural heritage assets.</p> <p>T 07 Support actions to increase access to state and semi-state lands such as National Parks, Forest Parks, Waterways, together with Monuments and Historic Properties, for recreation and tourism purposes, subject to the requirements of the Habitats Directive, National Monuments Act and other provisions and policies to protect and safeguard these resources and subject to the ability of local infrastructure to support the resulting increased tourism.</p> <p>LW 04 Facilitate increased access to Cavan's waterways, from towns and villages where visitor services are located, with an emphasis on providing a strong visitor experience associated with the lakes and waterways and their heritage and amenity value, including trails, bird hides, and water sports facilities, subject to the protection of</p>
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				<p>environmentally sensitive areas and the requirements of the Habitats Directive.</p> <p>LW 05 Support the provision of infrastructure to enable increased tourism activity associated with Cavan's waterways, including boating, marina/berthing, kayaking, angling, blueways and harbour amenities while ensuring that such provision does not negatively impact on sensitive environments and subject to the requirements of the Birds and Habitats Directives.</p> <p>LW 07 Support the provision of walking and cycling links between lakes, rivers, bogs and nearby towns, villages and visitor attractions, provided such developments do not negatively impact on sensitive environments.</p> <p>GCW 09 Promote the principles of 'Leave no Trace' in all trail information panels, promotional materials and events and use all statutory procedures to deter negative environmental impact resulting from use of our trails and outdoor recreation amenities.</p> <p>TC 03 Support opportunities for increased tourism within limits of existing infrastructure and sensitive habitats.</p> <p>TC 07 Support, implement and require best-practice environmental management and climate proofing of tourism related developments and activities, such as accommodation, restaurants, activity providers, festivals and events and tourism enterprises, to include zero climate impact, energy efficiency, waste management, and recycling.</p> <p>HHAS 03 Support enhanced access to state, semi-state and private lands such as bogs, forests, waterways, together with National Monuments and Historic Properties, for recreation and tourism purposes. Access should be planned and managed in a sustainable manner that protects heritage, environmental sensitivities, ecological corridors, and the ability of local infrastructure to support increased tourism.</p> <p>T 10 Monitor and manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.</p>
<p>Population and Human Health</p>	<ul style="list-style-type: none"> Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere. Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere. Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water. 	<ul style="list-style-type: none"> Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	<ul style="list-style-type: none"> Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below. 	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>Air Quality Development Objectives</p> <p>AQ 01 Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/5/0/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards, as set out in the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) (or any updated/superseding documents).</p> <p>Noise Development Objectives</p> <p>N 01 Support the implementation of the Noise Directive 2002/49/EC and all associated Environmental Noise Regulations 2006.</p> <p>N 02 Require all developments to be designed and operated in a manner that will minimise and contain noise levels.</p> <p>Human Health Development Objectives</p> <p>HH 01 Ensure new developments will not have significant adverse effects on the amenities of an area through pollution by noise, fumes, odours, dust, grit or vibration or cause pollution of air, water and or soil unless mitigation measures eliminate adverse environmental impacts or reduce them to an acceptable operating level.</p> <p>HH 02 Ensure the implementation of the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding regulations that may be published within the lifetime of this Plan).</p>
<p>Soil</p>	<ul style="list-style-type: none"> Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere. Contribution towards the protection of the environment from contamination the highest standards 	<ul style="list-style-type: none"> Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank erosion. 	<ul style="list-style-type: none"> Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change. 	<p>Also refer to measures under other environmental components including Water.</p> <p>Development Objectives for Geological Heritage</p> <p>GH1 Protect and enhance the geological heritage of the Cavan Geological Survey</p> <p>GH2 Support the implementation of recommendations in the Geological Audit of Cavan</p> <p>GH3 Provide safe and sustainable access to geological sites where appropriate and subject to requirements of Article 6 of the Habitat's Directive.</p> <p>GH4 Consult Geological Survey of Ireland (GSI) when undertaking, authorising developments likely to impact on the County Geological Sites or involve significant ground excavations.</p> <p>GH5 Continue to promote the unique geological heritage of the Cullcagh Lakelands Global Geopark (UNESCO Geopark). Individual notable sites within the Cullcagh Lakelands Global Geopark include Cullcagh Mountain and Mid-Cavan Drumlinised Ribbed Moraines. These sites should be valued for their scientific and educational value to the community.</p> <p>GH6 Have regard to the geological and geomorphological heritage values of County Cavan geological heritage sites and to avoid inappropriate development, through consultation with the Geological Survey of Ireland.</p> <p>Development Objectives for Marble Arch Caves, UNESCO Global Geopark</p> <p>GP1 Conserve and manage the geological resources of a discrete area to develop sustainable tourism, enterprise and community life.</p> <p>GP2 Build on the existing progress and achievements of the Cullcagh Lakelands UNESCO Global Geopark in supporting the ten-year Development Plan 2020-2030.</p> <p>GP3 Support the development of geotourism and the recreational potential of Cavan Burren, the Shannon Pot, Killykeen, Lough Oughter and Associated Loughs, Cullcagh and other Geopark sites through increased social use of the landscape, with attendant conservation, economic, social and community benefits within the region.</p>

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	<p>of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.</p>			<p>GP4 Support the continuing development of strategic walking routes, trails and other countryside recreational opportunities within the Geopark such as the cross-border 'Smuggler's Route'.</p> <p>GP5 Continue to support the CANN cross-border environmental project restoring blanket bog habitat on Cuilcagh summit.</p> <p>GP6 Enhance the geodiversity, biodiversity and natural environments of the region including additional measures to conserve geosites and natural habitats where appropriate.</p> <p>GP7 Develop knowledge and understanding of geology, related Earth Sciences, endangered habitats and associated environmental issues through education and research programmes.</p> <p>GP8 Encourage enquiry through fieldwork and inspire scientific research through education and research programmes.</p> <p>GP9 Recognise the strategic location of Blacklion at the heart of the Geopark and other Geopark towns, villages and communities and seek to promote the development of appropriate ancillary facilities like interpretation, accommodation and social outlets.</p> <p>GP10 Support Swanlinbar and other Geopark towns, villages and communities as hubs for appropriate outdoor recreational activities.</p> <p>Waste Management Development Objectives</p> <p>WM 14 Treatment and/or management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p>
<p>Water</p>	<ul style="list-style-type: none"> Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the County's settlements) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere. Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. Contribution towards flood risk management and appropriate drainage. 	<ul style="list-style-type: none"> Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	<ul style="list-style-type: none"> Any increased loadings as a result of development to comply with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan. 	<p>Also refer to measures under other environmental components including Soil and Material Assets and various settlement specific measures provided for under Chapter 2 Settlement Strategy.</p> <p>Groundwater Development Objectives</p> <p>GW 01 Ensure that groundwater is protected by ensuring compliance with the following:</p> <ul style="list-style-type: none"> The appropriate control of development in areas of high groundwater vulnerability. Implementation of the Programme of Measures as required in the River Basin Management Plans Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010) Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 610 OF 2010, which give effect to several EU Directives including in relation to protection of waters against pollution from agricultural sources ('the Nitrates Directive'), dangerous substances in water and protection of groundwater. <p>GW 02 Protect ground water resources and abstraction points, and as ensures such sources and their zones of contribution are protected and safeguarded in the interests of common good and public health.</p> <p>GW 03 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>GW 04 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). The European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same, to have cognisance of, where relevant, the EUs Common Implementation Strategy Guidance Document No. 20 and No. 36 which provide guidance on exceptions to the environmental objectives of the Water Framework Directive).</p> <p>GW 05 In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018 (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>GW 06 Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021, and any subsequent local or regional plans.</p> <p>GW 07 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>GW 08 Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.</p> <p>GW 09 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>GW 10 Protect both ground and surface water resources including taking account of the impacts of climate change, and to support Irish Water in the development and implementation of Drinking Water Safety Plans and the National Water Resources Plan.</p> <p>GW 11 Promote water conservation and demand management measures among all water users and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements.</p> <p>GW 12 Promote measures to prevent siltation of water courses from developments including planting and clear felling of commercial forests.</p> <p>GW 13 Promote measures to prevent acidification of water courses.</p> <p>Water Development Objectives</p> <p>W 01 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>W 02 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). THE European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same).</p> <p>W 03 In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018' (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>W 04 Ensure that in assessing applications for development, consideration is GIVEN to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.</p> <p>W 05 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>W 06 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the</p>

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				<p>requirements of the Water Framework Directive.</p> <p>Agri-Food Development Objectives</p> <p>AF 06 Support agricultural development as a contributory means of maintaining population and sustaining the rural economy, whilst maintaining and enhancing the standing of the rural environment through application of the EU Water Framework Directive and EU Habitats Directive.</p> <p>AF 09 Facilitate the development of environmentally sustainable agricultural activities, whereby natural waters and watercourses, wildlife habitats, conservation areas and areas of ecological importance and other environmental assets are protected from the threat of pollution, and where development does not impinge on the visual amenity of the countryside.</p> <p>Agricultural Buildings and Structures Development Objectives</p> <p>ABS 01 Facilitate the development of environmentally sustainable agricultural activities, whereby watercourses, habitats, areas of ecological importance and environmental assets are protected and development does not impinge on the visual amenity of the countryside.</p> <p>Forestry Development Objectives</p> <p>F 01 Encourage the development of a well-managed sustainable forestry sector, which is compatible with the protection of the environment including the avoidance of likely significant effects on European Sites (SACs and SPAs); and is planted, managed and harvested in accordance with the 'Forest Service Guidelines for Landscape, Forest Harvesting and Environmental, Archaeology, Biodiversity and Water Quality'.</p> <p>F 02 Promote forestry development of appropriate scale and character while ensuring that such development does not have a negative impact on the residential amenity or the countryside, (including public access/rights of way, traditional walking routes and recreational facilities), or cause pollution or degradation of wildlife habitats, natural waters or areas of ecological importance.</p> <p>Horticulture Development Objectives</p> <p>H 01 Encourage the development of environmentally sustainable horticultural practices, to ensure that development does not impinge on the visual amenity of the countryside and that watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution.</p> <p>Water Quality and Groundwater Policy Objectives</p> <p>WQG 01 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>WQG 02 Collaborate with Irish Water in contributing towards compliance with the S.I. No. 122/2014 - European Union (Drinking Water) Regulations 2014 and any regulations made thereunder. and compliance of water supplies with the parameters identified in these Regulations.</p> <p>WQG 03 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), THE European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same).</p> <p>WQG 04 In conjunction with Irish Water, have regard to the EPA 2020 'Drinking Water Quality in Public Supplies 2019' (and any subsequent update) in the establishment and maintenance of water sources in the County in the establishment and maintenance of water sources in the County.</p> <p>WQG 05 In conjunction with Irish Water, support recommendations made by the EPA arising from any failures to meet drinking water standards and any enlistment on the EPA's Remedial Action List.</p> <p>WQG 06 Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans.</p> <p>WQG 07 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>WQG 08 Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.</p> <p>WQG 09 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>Various Other Objectives</p> <p>IW1 Protect and enhance the natural heritage and landscape character of the County's Waterways and to maintain them free from inappropriate development and to provide for public access, where feasible, acknowledging the existence of contiguous Natura 2000 sites.</p> <p>IW2 Protect the biodiversity of rivers, streams and other water courses and maintain them in an open state and to discourage the culverting or realignment thereof.</p> <p>IW3 Consult with, as appropriate, the Inland Fisheries Ireland in relation to any development that could have a potential impact on the aquatic ecosystems and associated riparian habitats.</p> <p>IW4 Consult with Waterways Ireland and the National Parks and Wildlife Service, the DECLG and the Inland Waterways Association on the development proposals that may affect inland waterways, rivers, lakes, canals or watercourses.</p> <p>IW5 Ensure that the County's watercourses are retained for their biodiversity and flood protection values and conserve and enhance, where possible, the wildlife habitats of the county's rivers and riparian zones, lakes, canals and streams which occur outside of designated areas to provide for a network of habitats and biodiversity corridors throughout the county.</p> <p>CP12 Encourage the use of materials and engineering solutions that optimise natural surface water drainage as part of Sustainable Urban Drainage Systems (SuDS) associated with large scale car parks.</p> <p>GED 02 Engage with all relevant government stakeholders, enterprise agencies and sectoral representatives in pursuing green approaches to economic development, and actively collaborate with key industry and educational bodies to promote Cavan based initiatives the economic sectors.</p> <p>RIC 21 Require the incorporation of Sustainable Drainage Schemes (SuDS) for all future developments with an identified need.</p> <p>LW 05 Support the provision of infrastructure to enable increased tourism activity associated with Cavan's waterways, including boating, marina/berthing, kayaking, angling, blueways and harbour amenities while ensuring that such provision does not negatively impact on sensitive environments and subject to the requirements of the Birds and Habitats Directives.</p> <p>NH8 Promote the conservation of biodiversity outside of designated areas, including features such as wetlands, woodlands, hedgerows and uplands.</p> <p>WL4 Protect wetlands, floodplains and watercourses for biodiversity and flood protection value.</p> <p>WLS5 Ensure land zonings carefully consider appropriate riparian setback distances that support high ecological status of water bodies, the conservation of biodiversity, healthy ecosystems and buffer zones from flood plains.</p>
<p>Material Assets</p>	<ul style="list-style-type: none"> Contribution towards appropriate provision of infrastructure and 	<ul style="list-style-type: none"> Failure to provide adequate and 	<ul style="list-style-type: none"> Exceedance of capacity in 	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions and various settlement specific measures provided for under Chapter 2 Settlement Strategy.</p>

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	<p>services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere.</p> <ul style="list-style-type: none"> Contribution towards compliance with national and regional water services and waste management policies. Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency. 	<p>appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).</p> <ul style="list-style-type: none"> Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. Interactions between agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter. 	<p>critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan.</p> <ul style="list-style-type: none"> Residual wastes to be disposed of in line with higher-level waste management policies. Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework. 	<p>LUR 09 Require all major developments to submit Traffic Impact Assessments and Mobility Management Plans.</p> <p>Groundwater Development Objectives</p> <p>GW 01 Ensure that groundwater is protected by ensuring compliance with the following:</p> <ul style="list-style-type: none"> The appropriate control of development in areas of high groundwater vulnerability. Implementation of the Programme of Measures as required in the River Basin Management Plans Licensing of discharges of effluent to groundwater, having particular regard to the requirements of the EC Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010) Implementation of the EC (Good Agricultural Practice for Protection of Waters) Regulations (S.I. No. 610 OF 2010, which give effect to several EU Directives including in relation to protection of waters against pollution from agricultural sources ('the Nitrates Directive'), dangerous substances in water and protection of groundwater. <p>GW 02 Protect ground water resources and abstraction points, and as ensures such sources and their zones of contribution are protected and safeguarded in the interests of common good and public health.</p> <p>GW 03 Support the implementation of the relevant recommendations and measures outlined in the relevant River Basin Management Plan 2022-2027, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.</p> <p>GW 04 Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater and associated habitat and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC). The European Union (Water policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same, to have cognisance of, where relevant, the EUs Common Implementation Strategy Guidance Document No. 20 and No. 36 which provide guidance on exceptions to the environmental objectives of the Water Framework Directive).</p> <p>GW 05 In conjunction with Irish Water, have regard to the EPA 2019 publication 'Drinking Water Report for Public Water Supplies 2018 (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>GW 06 Ensure that in assessing applications for development, that consideration is given to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021, and any subsequent local or regional plans.</p> <p>GW 07 Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.</p> <p>GW 08 Discourage the over concentration of individual septic tanks and treatment plans to minimise the risk of groundwater pollution.</p> <p>GW 09 Support the preparation of Drinking Water Protection Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.</p> <p>GW 10 Protect both ground and surface water resources including taking account of the impacts of climate change, and to support Irish Water in the development and implementation of Drinking Water Safety Plans and the National Water Resources Plan.</p> <p>GW 11 Promote water conservation and demand management measures among all water users and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements.</p> <p>GW 12 Promote measures to prevent siltation of water courses from developments including planting and clear felling of commercial forests.</p> <p>GW 13 Promote measures to prevent acidification of water courses.</p> <p>Foul Drainage and Wastewater Development Objective</p> <p>FDW 01 Collaborate with Irish Water in contributing towards compliance with the relevant provisions of the Urban Wastewater Treatment Regulations 2001 and 2004 and the Waste Water Discharge (Authorisation) Regulations 2007, as amended</p> <p>FDW 02 Ensure that development will only be permitted in instances where there is sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) of wastewater.</p> <p>FDW 03 Liaise with and work in conjunction with Irish Water during the lifetime of the plan for the provision, extension and upgrading of wastewater collection and treatment systems in all towns and villages and Rural Community Nodes of the County, to serve existing populations and facilitate sustainable development of the County, in accordance with the requirements of the Settlement Strategy and associated Core Strategy.</p> <p>FDW 04 Support strategic wastewater treatment infrastructure investment and provide for the separation of foul and surface networks to accommodate future growth in the County</p> <p>FDW 05 Ensure new developments provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm.</p> <p>FDW 06 Incorporate the requirement for Sustainable Urban Drainage Systems where appropriate in local authority projects and private development sites.</p> <p>FDW 07 Prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection for foul water. Support the Assessment of the need for upgrades of drainage systems, including separation of sewer and surface water required to reduce risk of capacity pressure on drainage systems.</p> <p>FDW 08 Ensure all new developments connect to the public wastewater infrastructure, where available, and to encourage existing developments that are in close proximity to a public sewer to connect to that sewer, subject to connection agreements with Irish Water.</p> <p>FDW 09 Protect against development proposals, involving individual treatment systems, which would increase effluent loading within existing housing clusters located within areas of high groundwater vulnerability.</p> <p>FDW 10 Ensure that private wastewater treatment plants, where permitted, are operated in compliance with EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), or any updates thereafter.</p> <p>FDW 12 Incorporate considerations of the impact of climate change into proposals submitted under the OPW Minor Works Programme.</p> <p>FDW 13 Support appropriate options for the extraction of energy and other resources from sewerage sludge in the County.</p> <p>FDW 14 Support the servicing of rural villages (serviced sites) to provide an alternative to one-off housing in the countryside in line with the Regional Spatial and Economic Strategy.</p> <p>FDW 15 Support the development of group water supplies and public drinking water supplies throughout the county.</p> <p>FDW 16 Liaise with Irish Water with regard to the installation of a wastewater treatment facility in Miltown.</p> <p>FDW 17 Ensure new developments provide adequate storm water infrastructure in order to accommodate the planned levels of growth and ensure there is appropriate flood management measures implemented to protect property and infrastructure.</p> <p>FDW18 Support Irish Water in the promotion of effective management of trade discharges to sewers in order to maximise the capacity of existing sewer networks and minimise detrimental impacts on sewerage treatment works.</p>
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				<p>Waste Management Development Objectives</p> <p>WM 01 Support the implementation of the Connacht-Ulster Region Waste Management Plan 2015-2021 and any updates made thereto.</p> <p>WM 02 Implement EU and national waste and related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.</p> <p>WM 03 Prioritise waste prevention through behavioural change activities to decouple economic growth and resource use.</p> <p>WM 04 Encourage the transition from a waste management economy to a green circular economy to enhance employment and increase the value recovery and recirculation of resources</p> <p>WM 05 Promote sustainable waste management treatment in keeping with the waste hierarchy and the move towards a circular economy and greater self sufficiency.</p> <p>WM 06 Encourage and support waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste.</p> <p>WM 07 Facilitate the transition from a waste management economy to a green circular economy to increase the value recovery and recirculation of resources.</p> <p>WM 08 Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.</p> <p>WM 09 Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives, that will lead to local sustainable waste management practices.</p> <p>WM 10 Ensure that the Council fulfils its duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No. 524 of 2008) including those in relation to the identification and registration of closed landfills.</p> <p>WM 11 Encourage and promote technologies, for example anaerobic digestion, that will contribute positively and grow the Circular and Bio-economy to promote sustainable rural and urban economic development, as part of the overall aim of transiting to a low carbon economy with reduced green house gases.</p> <p>WM 12 Ensure that the local authority is cognisant of targets under EU Circular Economy proposals, landfill capacity limitations and proper management of soil, stone and C&D materials</p> <p>WM 13 To require developers to prepare construction and demolition waste management plans for new construction projects over certain thresholds which shall meet the relevant recycling/recovery targets for such waste in accordance with the national legislation and national and regional waste management policy.</p> <p>WM 14 Treatment and/or management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p> <p>Wastewater Treatment in Rural Areas Development Objectives</p> <p>WTR 01 Ensure proposals involving the installation of an on site wastewater treatment system are in accordance with the requirements of the 'EPA Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses,' (2009) or any subsequent Code of Practice which supersedes it.</p> <p>WTR 02 Ensure proposals shall be accompanied by a Site Characterisation Form which has been properly completed by a suitably qualified person.</p> <p>WTR 03 Proposals for significant extensions will be required to ensure that existing effluent treatment systems are adequate to cater for any additional loading that may result from the extension.</p> <p>WTR 04 Ensure that private wastewater treatment plants, where permitted, are operated in compliance with EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), as may be amended.</p> <p>WTR 05 Protect against development proposals, involving individual treatment systems, which would increase effluent loading within existing housing clusters located within areas of high groundwater vulnerability.</p> <p>Private Wells Development Objectives</p> <p>PW 01 Support householders, through advice and guidance, to ensure that private wells are to acceptable drinking water standards.</p> <p>Environment, Water and Waste Water Climate Context and Development Objectives</p> <p>EW 01 Require in accordance with the Department of the Environment, Heritage and Local Government's 'Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects (2006), the submission of a Construction and Demolition Waste Management Plan (CDWMP) for any project in excess of:</p> <ul style="list-style-type: none"> - aggregate floor area in excess of 1250 sq. m; - demolition or refurbishment of 100 m3 of Construction of Demolition waste; or - civil engineering projects in excess of 500 m3 of waste. <p>Fisheries</p> <p>LW 02 Continue to engage with Inland Fisheries Ireland on the delivery of the National Strategy for Angling Development in Cavan</p> <p>LW 05 Support the provision of infrastructure to enable increased tourism activity associated with Cavan's waterways, including boating, marina/berthing, kayaking, angling, blueways and harbour amenities while ensuring that such provision does not negatively impact on sensitive environments and subject to the requirements of the Birds and Habitats Directives.</p>
<p>Air and Climatic Factors</p>	<ul style="list-style-type: none"> • Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the County's settlements) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere. • In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: <ul style="list-style-type: none"> ○ Sustainable compact 	<ul style="list-style-type: none"> • Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. • Potential conflicts between transport emissions, including those from cars, and air quality. • Potential conflicts between increased frequency of noise 	<ul style="list-style-type: none"> • 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 compact growth and sustainable mobility. • Interactions between noise emissions and 	<p>Also refer to detailed measures for Climate Action to Section 8.5 of the SEA Environmental Report.</p> <p>Air Quality Development Objectives</p> <p>AQ 01 Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/5/0/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards, as set out in the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) (or any updated/superseding documents).</p> <p>Noise Development Objectives</p> <p>N 01 Support the implementation of the Noise Directive 2002/49/EC and all associated Environmental Noise Regulations 2006.</p> <p>N 02 Require all developments to be designed and operated in a manner that will minimise and contain noise levels.</p> <p>Human Health Development Objectives</p> <p>HH 01 Ensure new developments will not have significant adverse effects on the amenities of an area through pollution by noise, fumes, odours, dust, grit or vibration or cause pollution of air, water and or soil unless mitigation measures eliminate adverse environmental impacts or reduce them to an acceptable operating level.</p>

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	<ul style="list-style-type: none"> growth; Sustainable mobility, including walking, cycling and public transport; Drainage, flood risk management and resilience; Sectors including agriculture, forestry, energy and buildings; and Sustainable design, energy efficiency and green infrastructure. 	<p>emissions and protection of sensitive receptors.</p> <ul style="list-style-type: none"> Potential conflicts with climate adaptation measures including those relating to flood risk management. 	<p>sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised.</p>	
<p>Cultural Heritage</p>	<ul style="list-style-type: none"> Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within existing settlements. Contributes towards protection of cultural heritage within existing settlements by facilitating brownfield development and regeneration. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology¹¹ and protected architecture¹² arising from construction and operation activities. 	<ul style="list-style-type: none"> Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	<p>BCHPO 01 Undertake to preserve, conserve, enhance and promote understanding of the cultural heritage of County Cavan by:</p> <ul style="list-style-type: none"> Making heritage more accessible to all citizens of Cavan Promoting heritage learning and its value as an educational resource Developing heritage-based tourism products by facilitating the development of infrastructure both hard and soft, heritage events and festivals Supporting the development and implementation of Cavan Heritage Plan 2021-2026 (currently in development). <p>Protected Structures Development Objectives</p> <p>RPS1 Protect, conserve and manage the built heritage of County Cavan and to encourage sensitive and sustainable development to ensure its preservation for future generations.</p> <p>RPS2 Review and update the Record of Protected Structures on an on-going basis.</p> <p>RPS3 Positively consider proposals to improve, alter, extend or change use of Protected Structures so as to render them viable for modern use, subject to suitably qualified Conservation Architects and / or other relevant experts, suitable design materials and construction methods.</p> <p>RPS4 Quality contemporary and innovative designs will be supported. These designs should not detract from the historic fabric of a Protected Structure.</p> <p>RPS5 Ensure all development works on or at the sites of Protected Structures, including site works necessary are carried out using best heritage practice for the protection and preservation of those aspects or features of the structures /site that render it worthy of protection. The form and structural integrity of Protected Structures should be retained as part of any redevelopment proposal and the relationship between the Protected Structure and any complex of adjoining buildings, designed landscape features, or designed views and vistas from to the structure should be considered.</p> <p>RPS6 Support the re-introduction of traditional features on Protected Structures where there is evidence that such features previously existed.</p> <p>RPS7 Applications for works to Protected Structures will be assessed in accordance with the Architectural Heritage Protection Guidelines 2011. Works should ensure that the special character and integrity of the Protected Structure is preserved.</p> <p>RPS8 Resist the demolition and inappropriate alteration of Protected Structures.</p> <p>RPS9 Support the rehabilitation, renovation and re-use of existing Protected Structures for their own economic benefit and that area in which they are located.</p> <p>RPS10 Proposals for large scale developments and infrastructure projects should consider the impacts on the architectural heritage and seek to avoid them. The extent, route, services and signage for such projects should be sited at a distance from Protected Structures, outside the boundaries of designed historic landscapes, and not interrupt specifically designed vistas. Where this is not possible the visual impact must be minimised through appropriate mitigation measures such as high-quality design and/or use of screen planting.</p> <p>RPS11 Carry out an audit of Protected Structures within the council's ownership and devise a management / maintenance plan for these structures.</p> <p>RPS12 Identify Protected Structures in council ownership that are under threat directly or indirectly through climate change.</p> <p>RPS13 Seek to integrate climate adaptation measures into future conservation and management plans for Protected Structures.</p> <p>RPS14 Support owners / occupiers of Protected Structures seeking to upgrade energy efficiency and climate resilience measures. Works to upgrade the environmental performance and the implementation of measures to address the impacts of climate change will be encouraged to ensure the sustainability of Protected Structures and buildings sited within an ACA. Such works should not adversely impact the special character of a structure.</p> <p>RPS15 Support schemes which encourage the conservation of Protected Structures e.g. Built Heritage Investment Scheme, Historic Structures Fund, Historic Towns Initiative.</p> <p>Architectural Conservation Areas Development Objectives</p> <p>ACA1 Ensure that all development proposals within the boundaries of the ACA will enhance rather than detract from the historic and architectural character and settings of the buildings within the ACA. Proposals within ACAs should be in accordance with Statement of Characters prepared for ACAs.</p> <p>ACA2 Avoid the removal of structures and distinctive elements (such as boundary treatments, street furniture, paving and landscaping) that positively contribute to the character of Architectural Conservation Areas.</p> <p>ACA3 Ensure that Architectural Conservation Areas (ACAs), including any associated public realm area, are protected and ensure that any new development or alteration of a building within or adjoining an ACA positively enhances the character of the area and is appropriate in terms of plot size, proposed design, including: scale, mass, height, proportions, density, layout, materials, plot ratio and building lines. Planning permission will not normally be approved for developments that are not consistent with and complementary to the character of the ACA.</p> <p>ACA4 Support and promote best practice conservation in works to Protected Structures and buildings within ACAs and to encourage the use of tradespeople, professionals trained in the use of traditional skills, materials, and building techniques.</p> <p>ACA5 Protect and enhance the special character of the public domain of an ACA. Features of the public domain including traffic and parking infrastructure, signage, public utilities, street furniture, and street lighting must be appropriately designed to enhance and preserve the character of the ACA.</p> <p>ACA6 Encourage the rehabilitation and reuse of derelict and vacant sites within an ACA.</p> <p>Vernacular Buildings and Structures Development Objectives</p>

¹¹ Archaeological heritage encompasses designated and unknown archaeological heritage including entries to the Record of Monuments and Places, underwater archaeology, entries to the Northern Ireland Sites and Monuments Record and Northern Ireland Areas of Significant Archaeological Interest and Archaeological Potential. Also encompassed are intervisibility and interrelationships between archaeological heritage within the wider landscape, including cross-border intervisibility and interrelationships.

¹² Architectural heritage encompasses that which is designated or included within the National Inventory of Architectural Heritage (NIAH), NIAH Historic Gardens and Designed Landscapes, Records of Protected Structures and Northern Ireland's Listed Buildings and Northern Ireland's Historic Parks, Gardens and Demesnes. Also encompassed are intervisibility and interrelationships between architectural heritage within the wider landscape, including cross-border intervisibility and interrelationships.

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				<p>VA1 Encourage the retention, rehabilitation and reuse of older buildings that are not Protected Structures in recognition of their contribution both individually and collectively to the unique character, heritage and identity of local areas and the County.</p> <p>VA2 Seek the retention of original and early fabric of older buildings, including windows, doors, roof material, glazing and render or external finishes. The Planning Authority will encourage reinstatement of known original or early features where possible.</p> <p>VA3 Protect vernacular architecture, such as thatched cottages, farm buildings and old school-houses in County Cavan for the benefit of future generations.</p> <p>Historical Shop Fronts Development Objective</p> <p>HSF1 Seek the repair and retention of traditional timber and/or rendered shop fronts and pub fronts, including, where appropriate, those that may not be Protected Structures.</p> <p>Industrial Heritage Development Objectives</p> <p>IH1 Utilise the information provided within Cavan Industrial Heritage Survey when assessing development proposals for industrial heritage sites.</p> <p>IH2 Support the retention and appropriate repair/maintenance of historic bridges and other significant industrial heritage sites.</p> <p>IH3 Protect our industrial architecture and encourage appropriate new uses for vacant structures.</p> <p>Historic Gardens, Demesnes and Country Estates Development Objectives</p> <p>HG1 Utilise existing surveys to identify and evaluate the surviving historic designed landscapes in Cavan and promote the conservation of their essential character, both built and natural.</p> <p>HG2 Ensure that proposals for development within historic designed landscapes include an appraisal of the designed landscape, including an ecological assessment, prior to the initial design of any development, in order for this evaluation to inform the design which must be sensitive to and respect the built heritage elements and green space values of the site.</p> <p>Language Heritage Development Objectives</p> <p>LH1 Preserve historic place and street names and ensure that new street names reflect appropriate local historical or cultural features in the area.</p> <p>LH2 Encourage the naming of new residential developments in bi-lingual format.</p> <p>LH3 Ensure that the naming of mixed residential and mixed used schemes reflect local history, townlands, folklore and/or place names or cultural features.</p> <p>LH4 Support the use of the Irish language on shopfronts.</p> <p>Archaeological Heritage Development Objectives</p> <p>AH1 Protect and safeguard the county's archaeological resource and ensure the sympathetic enhancement of archaeological heritage. Applications will be referred to the Department of Housing, Local Government and Heritage by the Planning Authority in its capacity of being charged with the implementation of the National Monuments Acts.</p> <p>AH2 Protect and enhance archaeological sites and monuments, their settings and zones of archaeological potential that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are the subject of Preservation Orders or have been registered in the Register of Historic Monuments. Ensure the protection of sites which have been identified subsequent to the publication of the Record of Monuments and Places.</p> <p>AH3 Development adjacent to or near an archaeological site or monument should not interfere with the character of the site, or its setting. Proposed developments should be sited to ensure minimal impact on the site or monument. Development which has a negative impact on a site or monument will not be permitted.</p> <p>AH4 Seek to promote best practice for archaeological excavation ensuring that they are undertaken according to best practice as outlined by the National Monuments Service, Department of Housing, Local Government and Heritage, The National Museum and the Institute of Archaeologists of Ireland.</p> <p>AH5 Encourage the dissemination of findings from archaeological investigations and excavations through the publication of archaeological reports.</p> <p>AH6 Support the growth of cultural tourism within the county, including the potential for niche heritage-tourism products by facilitating the development of heritage events and infrastructure such as heritage trails, walkways and cycleways.</p> <p>AH7 Seek funding to prepare and implement a Conservation Management Plan for Clough Oughter Castle in consultation with the OPW and the National Monuments Service.</p> <p>AH8 Continue to support the development of sustainable heritage-based tourism initiatives in the UNESCO Cuilcagh Lakelands Geopark subject to archaeological and ecological assessment.</p> <p>AH9 Facilitate appropriate guidance in relation to the protection of the archaeological heritage and implications of a proposed development.</p> <p>AH10 Promote public awareness of the rich archaeological heritage of the county.</p> <p>AH11 Secure the preservation of sites and features of historical and archaeological interest. The preservation in-situ of archaeological monuments and sites as a preferred option.</p> <p>AH12 Where archaeological sites or monuments have to be removed as a result of development, it is essential that they be preserved by record, through archaeological excavation and recording, which is to be undertaken by a suitably qualified professional archaeologist.</p> <p>AH13 Support the appropriate management and maintenance of the county's historical burial grounds, in accordance with conservation principles and best practice guidelines. In this regard, seek to continue to support the work of the Historic Graveyards Network.</p> <p>AH14 Seek to co-operate with other agencies regarding the impact of climate change on our archaeological heritage.</p> <p>Built and Cultural Heritage Climate Development Objectives</p> <p>BCHC 01 Adopt the principles of conservation-led regeneration by applying the Guidelines for Planning Authorities on Architectural Heritage Protection (2011).</p> <p>BCHC 02 Seek enrolment on all future Historic Towns Initiatives (HTI).</p> <p>BCHC 03 Notify owners of Protected Structures of the increased threat climate change presents, while reminding them of their continued and legal requirement to ensure the structure(s) do not become endangered through neglect, decay, damage or harm (Practical advice on basic methods of conservation should accompany the notice).</p> <p>BCHC 04 Require the proposed demolition of any structure or part thereof, as considered of merit by the Planning Authority, to be accompanied by a report from a registered / chartered professional within a related discipline justifying same, to the satisfaction of the planning authority.</p> <p>BCHC 05 Require the submission of a life-cycle cost report with all applications in excess of 500 sq. m, new build construction, unless deemed otherwise by the Planning Authority.</p> <p>BCHC 06 Require the submission of a cost benefit analysis by a chartered quantity surveyor justifying any demolition or refurbishment of 100 m3 of construction and demolition waste, or above, unless deemed otherwise by the Planning Authority.</p> <p>Development Objectives for County Heritage Sites</p> <p>CHS1 Restrict incompatible development in order to protect the amenity, scientific and historical values of these areas.</p>
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<p>Landscape</p>	<ul style="list-style-type: none"> Contributes towards protection of wider landscape and landscape designations by facilitating development within existing settlements. 	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures. 	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>Development Objectives for Landscape Character Areas</p> <p>LC1 Ensure the preservation of the unique landscape character type by having regard to the character, value and sensitivity of a landscape when determining a planning application.</p> <p>LC2 Ensure development reflects and reinforces the distinctiveness and sense of place of the landscape character areas. This should include the retention of important features or characteristics which contribute to their distinctiveness such as geology and landform, habitats, settlement patterns, historic and vernacular heritage.</p> <p>LC3 Resist development such as houses, forestry, masts, extractive operations, landfills, caravan parks and large agricultural /horticulture units which would interfere with the character of highly sensitive areas or with a view or prospect of special amenity value.</p> <p>LC4 Ensure that new development does not impinge in any significant way on the character, integrity and distinctiveness of highly sensitive areas and does not detract from the scenic value of the area such as visual harm, not in keeping elements of the landscape, causes loss or disturbance of the landscape elements contributing to the local distinctiveness, historic elements that contribute to landscape character and quality, vegetation which is characteristic of a particular landscape and visual conditions of a landscape.</p> <p>LC5 Ensure new development meets high standards of siting and design.</p> <p>LC6 Protect skylines and ridgelines from development</p> <p>LC7 Ensure necessary assessments including visual impact assessments are prepared prior to approving development in highly sensitive areas.</p> <p>LC8 Undertake a Landscape Character Assessment during the lifetime of this plan.</p> <p>Development Objectives for Areas of High Landscape Value or Special Landscape Interest</p> <p>SLPA1 Maintain the scenic and recreation value of these areas by restricting all adverse uses and negative visual impacts.</p> <p>Development Objectives for Scenic Viewing Points</p> <p>SVP1 Restrict development that would obstruct views and to minimise visual intrusion by only permitting compatible uses.</p> <p>SVP2 Ensure the location, design and visual prominence of developments are examined, including possible effects on views from the public realm toward sensitive or vulnerable landscape features.</p> <p>Development Objectives for Scenic Routes</p> <p>SR1 Regulate development that would seriously obstruct and detract from views of high scenic value from designated Scenic Routes.</p> <p>SR2 Maintain and protect the natural landscapes visual character which is recognised to be of an exceptional high amenity value. Development Objectives for Forest Parks and Other Parks</p> <p>FP1 Regulate development within Forest Parks and other Parks to maximise recreational, amenity and community uses</p> <p>Development Objectives for Major Lakes and Lake Environs</p> <p>ML&LE1 Maintain major lake and lake environment amenity value within a landscape recreational and ecological context by restricting and regulating development that would prejudice use and enjoyment of the areas, give rise to adverse visual impacts or threaten habitats through disposal of effluents.</p> <p>ML&LE2 Maintain and protect shorelines of lakes and their immediate area adjoining including skyline development on surrounding hill crests. Development Objectives for Lakeside Amenity Areas</p> <p>LAA 1 Regulate development of adjoining lands to Lakeside Amenity Areas to ensure that public use is not prejudiced by incompatible use or adverse visual impact.</p> <p>Development Objectives for Riverside Amenity Areas</p> <p>RAA1 Regulate all development on lands adjoining Riverside Amenity Areas in order to maintain their amenity value.</p> <p>Development Objectives for Inland Waterways</p> <p>IW1 Protect and enhance the natural heritage and landscape character of the County's Waterways and to maintain them free from inappropriate development and to provide for public access, where feasible, acknowledging the existence of contiguous Natura 2000 sites.</p> <p>IW2 Protect the biodiversity of rivers, streams and other water courses and maintain them in an open state and to discourage the culverting or realignment thereof.</p> <p>IW3 Consult with, as appropriate, the Inland Fisheries Ireland in relation to any development that could have a potential impact on the aquatic ecosystems and associated riparian habitats.</p> <p>IW4 Consult with Waterways Ireland and the National Parks and Wildlife Service, the DECLG and the Inland Waterways Association on the development proposals that may affect inland waterways, rivers, lakes, canals or watercourses.</p> <p>IW5 Ensure that the County's watercourses are retained for their biodiversity and flood protection values and conserve and enhance, where possible, the wildlife habitats of the county's rivers and riparian zones, lakes, canals and streams which occur outside of designated areas to provide for a network of habitats and biodiversity corridors throughout the county.</p> <p>IW6 Support the development of blueways in County Cavan.</p> <p>Landscape Character/ Natural Heritage Climate Change Development Objectives</p> <p>LCC 01 Within the lifetime of the plan, undertake a survey and vector mapping exercise to identify exemplar wetlands, bogs, individual trees and/or stands of trees and/or woodlands throughout the county worthy of protection and preservation.</p> <p>LCC 02 Encourage the potential community woodlands areas in urban/urban fringe areas and the development of community woodlands throughout rural Cavan.</p> <p>LCC 03 Promote the use in public spaces of hot water, foam stream, flame weeding and/or concentrated vinegar in favour of glyphosate weedkillers.</p> <p>LCC 04 Prepare a Peatland Strategy that shall encourage the rewilding, restoration and protection of peat bogs after turf cutting and/or peat extraction has ceased.</p> <p>LCC 05 Support the National Ambient Air Quality Monitoring Programme 2017 – 2022.</p> <p>LCC06 Promote the roll-out of renewables and stringent protection and enhancement of carbon pools, such as forests, peatlands and permanent grasslands.</p> <p>LCC 07 Explore the opportunity of engaging the services of a full-time Ecologist on a shared basis amongst neighbouring Local Authorities.</p> <p>LCC 08 Install and promote the installation of bird, bat, and owl boxes, and bee bricks and insect hotels or equivalent, at all relevant locations and developments, where possible.</p> <p>LCC 09 Actively participate and seek to adopt recommendations originating out of the Climate Action Regional Office (CARO) and Northern and Western Climate Action Region.</p> <p>LCC 10 Fracking and the industrial extraction of fossil fuels will not be encouraged within Cavan's functional area.</p> <p>LCC 11 Develop a strategy to support an active native Tree Planting programme in the context of climate adaptation.</p>
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2.5 Schedule 2A

PART 1

1. *The characteristics of the plan having regard, in particular, to: the degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources*

The Material Alterations propose a number of text and map-based changes to the Draft Cavan County Development Plan 2022-2028.

Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Table 2.4 Proposed Material Alterations Requiring SEA¹³

No.	SEA Screening Consideration Ref. – see Table 2.2	No.	SEA Screening Consideration Ref. – see Table 2.2
11	11 - see other land use zoning amendments with Ref. "11" also	125	9
13	9	126	9
20	9	128	9
73	9	129	9
76	9	132	9
86	9	136	9
90	9	137	9
98	9	154	11
100	9	165	11
102	9	168	11
106	9	177	11
110	9	184	11
122	10	185	11
123	9	204	11
124	9	212	11

Taking the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the degree to which these Proposed Material Alterations and the Draft County Development Plan set a framework for projects and other activities, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

2. *The characteristics of the plan having regard, in particular, to: the degree to which the plan influences other plans, including those in a hierarchy*

The Material Alterations are being proposed to the Draft Plan. The Draft Plan relates to the proper planning and sustainable development of County Cavan.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the degree to which these Proposed Material Alterations and the Draft County Development Plan influence other plans, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

¹³ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document. For detail on SEA Screening Ref please refer to Table 2.2.

3. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the integration of environmental considerations in particular with a view to promoting sustainable development*

The Draft Plan - to which the Proposed Material Alterations relate - has undergone SEA. This process integrated environmental considerations into the Plan and found that the Plan contributes to environmental protection and management and sustainable development.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the degree to which these Proposed Material Alterations and the Draft County Development Plan are relevant for the integration of environmental considerations with a view to promoting sustainable development, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

4. *The characteristics of the plan having regard, in particular, to: environmental problems relevant to the plan*

Environmental problems arise where there is a conflict between current environmental conditions and legislative targets.

Through its provisions relating to environmental protection and management, the Draft Plan contributes towards ensuring that environmental conditions do not get worse and, where possible, they contribute towards its amelioration.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from environmental problems relevant to these Proposed Material Alterations and the Draft County Development Plan, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

5. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste-management or water protection)*

The Draft County Development Plan relates to the land use and town planning sector and have fulfilled requirements in relation to SEA. These processes integrated considerations with regard to EU and national legislation on the environment, including those relating to the waste management and the Water Framework Directive.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the relevance of these Proposed Material Alterations and the Draft County Development Plan for the implementation of European Union legislation on the environment, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

PART 2

1. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the probability, duration, frequency and reversibility of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the cumulative nature of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

3. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the transboundary nature of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

4. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the risks to human health or the environment (e.g. due to accidents)

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

5. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

6. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the value and vulnerability of the area likely to be affected due to:

a) special natural characteristics or cultural heritage;

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

b) exceeded environmental quality standards or limit values, and;

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

c) intensive land-use.

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

7. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the effects on areas or landscapes which have a recognised national, European Union or international protection status

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

Section 3 Conclusion

Most Proposed Material Alterations are determined not to result in likely significant effects. Taking into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development, it is identified that all potential effects arising from most Proposed Alterations: either are present already (beneficial) and will be further contributed towards; or will be mitigated so as not to be significant (adverse). In addition, some alterations merely added clarifications or amended context setting text for Plan provisions and these will not result in significant environmental effects. Consequently, these Proposed Material Alterations do not require SEA.

The Proposed Material Alterations identified on Table 2.4 are advised as requiring SEA and consideration in an SEA Environmental Report.

The SEA Environmental Report prepared for the Draft Plan will be finalised in advance of adoption of the Plan. An SEA Statement will be prepared following adoption, which will detail how environmental considerations were integrated into the Plan and how consultations on the SEA and associated Plan-preparation process were taken into account. The Appropriate Assessment Natura Impact Report will be finalised in a similar manner at adoption, taking into account how environmental considerations were integrated into the Plan and how consultations were taken into account.