



LIMERICK DEVELOPMENT PLAN 2022-2028

Background Paper
**Strategic
Environmental
Assessment
Scoping Document**

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1.0 – Introduction and Background

1.1 – Introduction

Limerick City and County Council intends to commence the review of both the Limerick City Development Plan 2010 – 2016 (As Extended) and the Limerick County Development Plan 2010 – 2016 (As Extended) and initiate the preparation the Limerick Development Plan 2022 – 2028, in accordance with the Planning and Development Act 2000 (Amended). Following the amalgamation of Limerick City Council and Limerick County Council in 2014, both the City and County Development Plans, were extended and continue to govern planning policy in the respective areas, until such time as the review of the existing development plans are complete. The Limerick Development Plan 2022 – 2028 will set out an overall strategy for the proper planning and sustainable development of Limerick City and County for the plan period. It will also set out policies and objectives to guide future development in terms of social, economic, physical and environmental needs.

This Scoping Document forms part of the official Strategic Environmental Assessment (SEA) process, under S.I. 436 of 2004 as amended by S.I. 201 of 2011. The purpose of this document is to provide preliminary information on the proposed Development Plan, with a view to establishing the scope, level of detail and approach required for the SEA, which will follow. It is intended that the information contained within the report will enable meaningful consultation with statutory and non-statutory consultees in relation to the proposed Development Plan.

The review of the development plans will be carried out in accordance with the requirements of the Planning and Development Act (Amended), in addition, the Development Plan will be prepared in accordance with the hierarchy of land use plans and spatial plans and must comply with the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Southern Region. These plans contain higher level policy and objectives, which will in turn steer the development of Limerick and the Development Plan will guide lower level plans, such as Local Area Plans.

Strategic Environmental Assessment (SEA) is a process for evaluating, at the earliest stage, the environmental consequences of implementing plans/programmes at a national, regional and local level. The purpose is to ensure that the environmental consequences of plans and programmes are assessed both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental impacts of the proposed plan or programme and to be kept informed during the decision making process. The SEA process will take account of the Council's obligation to comply with all environmental legislation to assist the plan, in its aim of providing policy guidance for the sustainable development of the City and County of Limerick.

Another important aspect of development review process is to consider planning guidelines, which are produced under Section 28 of the Planning and Development Act 2000 (Amended). These guidance documents have to be taken into account by the Planning Authority in the performance of their functions. These cover many aspects of planning, from rural housing to landscape, however, for SEA scoping, two guidance documents are of

particular importance. The first is the Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities. This document was published in November 2004 and its purpose is to assist planning authorities in the preparation of SEA, i.e. “assessment of the effects of certain plans and programmes on the environment” (DEHLG, 2004). The other important Section 28 guidance document is the Development Plan Guidelines (2007). These state that “matters such as the environmental carrying capacity for various types of development in different areas should be a leading consideration in determining both development opportunities and development limitations”.

In considering, the relationship with legislation and other plans and programmes, it is important to note that other plans exist for sectors, other than planning. Existing plans and programmes for a range of sectors (e.g. waste management, transport, energy and water management) exist at a range of levels in the country (e.g. national, river basin district, regional and county) and already have been subject to more specific higher tier Strategic Environmental Assessment and Appropriate Assessment. These studies will help inform the SEA process for the plan.

This Scoping Document is one of the initial stages of the Strategic Environmental Assessment (SEA) process under Statutory Instrument No. 436 of 2004, which has been amended by Statutory Instrument 201 of 2011 - Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations, which states that a full SEA is a mandatory requirement in respect of the following:

- Development Plans, where the population or target population of the area is 10,000 persons or more; or
- Development Plans, where the planning authority determines that the plan would be likely to have significant effects on the environment.

As the population of Limerick City and County is 194,899 (Census 2016), the threshold has been exceeded and a Strategic Environmental Assessment (SEA) is required by the Planning and Development (SEA) Regulations (as amended).

The SEA process for the review of the development plan will comprise of the following steps:

- Scoping – (Current Stage) Consultation with the defined statutory bodies on the scope and level of detail to be considered in the assessment – the SEA process will commence at this stage and not screening, as a full SEA for the review of the Limerick Development Plans is statutorily required;
- Environmental Report – an assessment of the likely significant impacts on the environment as a result of the Development Plan;
- Consultation – through the stages of the statutory Development Plan process;
- Evaluation – Consideration of submissions and observations made on the draft plan and environmental report, through the statutory process;
- Prepare and issue of Strategic Environmental Assessment Statement, which will outline how the environmental considerations will be integrated into the Development Plan.

The purpose of this scoping document is to gauge the scope of assessment, that is required in the SEA process and invite submissions from the Environmental Authorities and other interested parties on the proposed Limerick Development Plan. The Environmental Authorities are identified in the Planning and Development Act 2000 (Amended)

- 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.

The adjoining Local Authorities will also be consulted as part of the process, including: Clare County Council; Kerry County Council; Cork County Council, Cork City Council and Tipperary County Council. In addition to the adjoining Local Authorities and the statutory consultees, Limerick City and County Council will consult with the Climate Action Regional Office (CARO) for the Atlantic Seaboard South region. Their submissions, when received, will inform both the Development Plan policies and objectives and the associated Environmental Report which will follow.

The Environmental Report, the central part of the SEA process, is an assessment of the likely environmental effects of the implementation of the proposed Limerick Development Plan. Part of the Environmental Report will consist of a Strategic Flood Risk Assessment (SFRA). This is an examination of the risks of flooding and its implications for land use planning. This will help inform both the zoning and policy content of the proposed Development Plan.

In parallel with the SEA process, an Appropriate Assessment (AA) process will be carried out for the plan. Appropriate Assessment is a detailed assessment of the effects of the proposed Limerick Development Plan, alone and in combination with other plans and projects, on sites of European importance for nature conservation, such as Special Protection Areas and Special Areas of Conservation. There will be cross-referencing between the AA process and the Environmental Report and the conclusions of both, will inform the content of the Development Plan.

1.2 – Overview of the Development Plan, Strategic Environmental Assessment and Appropriate Assessment Processes

Figure 1.0 below outlines in visual form the Plan-preparation, SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. The three process are integral to the plan making process and will inform the policies and objectives, to be incorporated into the plan, while having regard to the environmental consequences of implementation of the plan.

The Local Authority is at the initial stage of the proposed Development Plan preparation, which will involve the preparation of a number of background papers on key issues, as well as an Issues public consultation document, which will invite consultation from the public and stakeholders on the high level strategic issues, for inclusion in the proposed development plan.

Following receipt of submissions from both the public at the Issues stage and the Environmental Authorities, an Environmental Report will be prepared, which will accompany the proposed Draft Plan on public display, as part of the required statutory public consultation. As outlined above, the findings of the AA processes, will be included in the Environmental Report, as will the Strategic Flood Risk Assessment, which will be part of the Environmental Report.

Submissions will be summarised in the Chief Executives report on public consultation, together with the responses of the Planning Authority. Changes will be made to the SEA and AA documentation and the proposed draft plan, where relevant. Any proposed Material Alterations to the draft plan will be screened for the need to undergo SEA and AA and where necessary such further assessments will be carried out, at the relevant stage.

The adoption of the Development Plan is a reserved function, in which the Elected Members of the Local Authority make the Development Plan. Extensive consultation, will also take place with the Elected Members of Limerick City and County Council, as part of the development Plan review process.

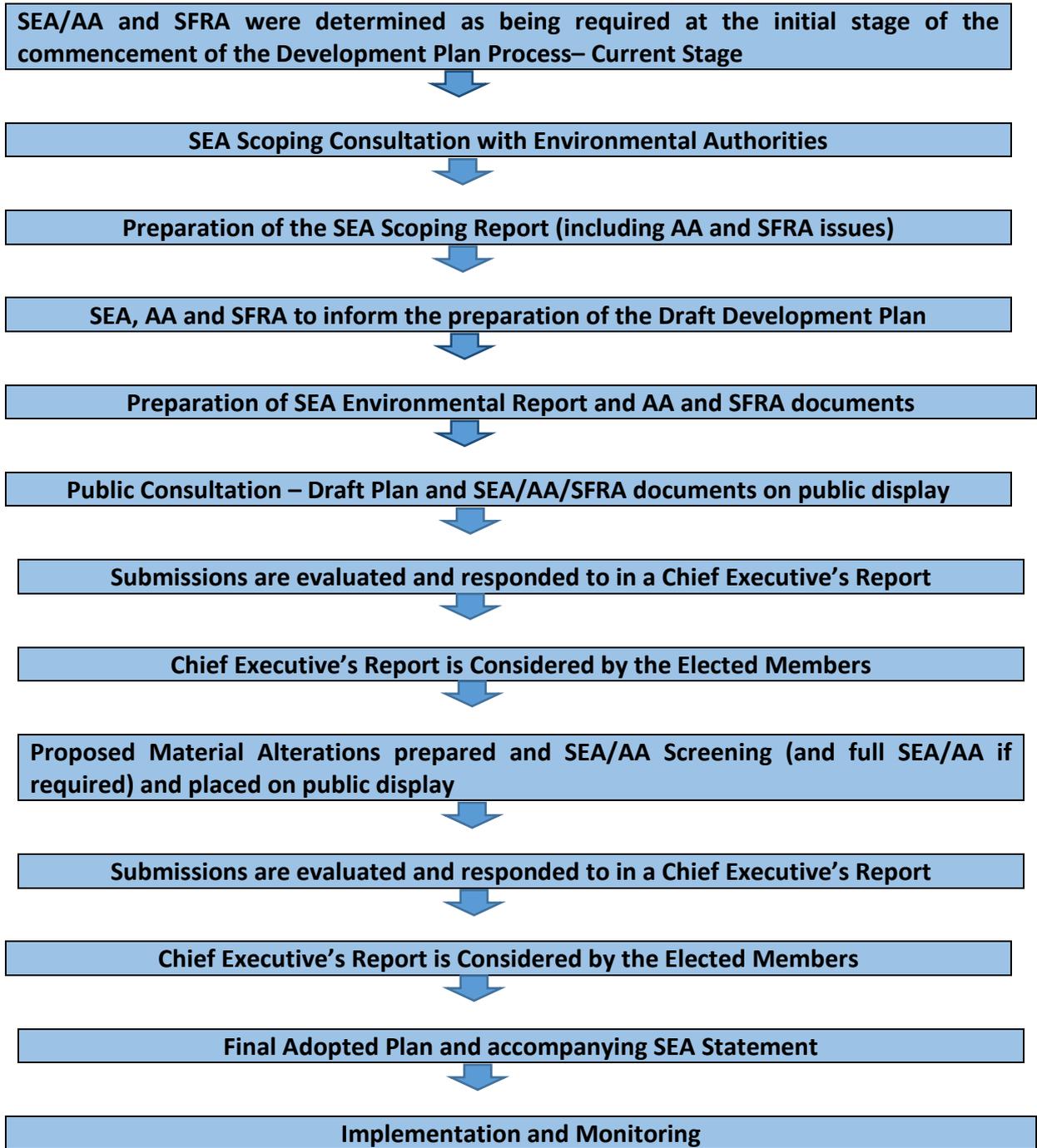


Figure 1 – Overview of the SEA Process in the Review and Preparation of the Limerick Development Plan (including AA and SFRA processes)

1.3 – Legislative background to Environmental and Ecological assessment for the draft Plan

1.3.1 – Legislative Context for Strategic Environmental Assessment

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 SEA Directive, introduced the requirement, which SEA be carried out on plans and programmes, which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21st July 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (SI No. 201 of 2011). The importance of Section 28 guidance has earlier been indicated and is reemphasised here. The SEA guidance will play a central role in the SEA process for the Limerick Development Plan.

1.3.2 – Appropriate Assessment/Habitats Directive Assessment

Appropriate Assessment (AA), will be undertaken alongside the preparation and adoption of the Development Plan. AA is an ecological assessment process, concerning European Sites (which collectively comprise the Natura 2000 network). These sites have been designated or proposed for designation because of their ecological significance at a European Level. Natura 2000 sites comprise of Special Areas of Conservation and Special Protection Areas.

The Habitats Directive (which calls for the conservation of natural habitats, flora and fauna) requires that plans and programmes undergo an assessment process, to establish the likely or potential effects arising from implementation of the proposed Plan. The first part of the process is screening for the significance of possible effects. If the effects are deemed to be significant, potentially significant or uncertain, then the Plan must move to the next stage of the process and undergo full assessment which will be the production of a Natura Impact Assessment (NIA), i.e. Stage 2 of the AA process. Given the scale of the Development Plan, covering, as it does an entire city and county, it is considered necessary to proceed directly to the preparation of a Natura Impact Assessment. Subsequent changes to the draft plan, during its preparation will be screened to assess the environmental significance of the suggested changes.

The Strategic Environmental Assessment and Appropriate Assessment processes will facilitate the integration of environmental considerations into the proposed development plan.

1.3.3 – Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) will also be undertaken, as part of the Environmental Report. This, as outlined above, will inform the contents of the draft Plan, including planning policies and land use zoning. The SFRA will provide an assessment of the flood risk, within the city and county and will inform land use decisions for the development plan and will guide the content of policies and objectives of the development plan.

The requirement for SFRA is identified in the ‘The Planning System and Flood Risk Management Guidelines for Planning Authorities’ (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009), to inform the proposed development plan making process. It is anticipated that the SFRA, will also inform part of the green infrastructure element of the draft Development Plan and will inform the Climate Adaptation objectives, which will be referred to later in this scoping document.

1.3.4 – Purpose of the SEA and AA Processes

The findings of the SEA and AA processes will identify key environmental and ecological issues, which will be addressed in the proposed draft Plan. While the AA process, in the main, will concentrate on Natura 2000 sites and the possible effects of the plan on those sites, the SEA can examine more general environmental and wildlife issues and will cover a wider range of issues than would be considered in the AA process. The issues examined will be influenced by the responses of both the Environmental Authorities and the public, based on their submissions to the initial stages of the process.

1.3.5 – Scoping and consultations with Environmental Authorities

As part of the SEA scoping process, environmental authorities specified under the Planning and Development Regulations, (as amended), will be engaged and consulted. Their responses to the scoping exercise will help decide the “scope and level of detail, to be included in the Environmental Report” (SEA guidelines 2004). To be effective, the scoping exercise needs to be carried out as early as possible and for this reason is carried out at the commencement of the plan process. The scoping may also help to inform preliminary Environmental Protection Objectives (EPOs), the purpose of which is to clearly identify environmental issues, which “are relevant to the plan” and to put in place objectives, which will inform the preparation of the plan (DEHLG 2004).

The SEA guidance also refers to transboundary consultations and though they mean consultation across international boundaries, in the case of Limerick, consultations will take place with neighbouring Local Authorities. Given the importance of climate action, the Climate Action Regional Office (CARO) for the Atlantic Seaboard South, will also be included in the consultation.

The consultation list is as follows:

- Environmental Protection Agency;
- Department of Housing, Planning and Local Government;
- Department of Culture, Heritage, and the Gaeltacht;

- Department of Communications, Climate Action and Environment;
- Department of Agriculture, Food and the Marine;

Also consulted will be adjoining Local Authorities outlined above.

1.3.4 – Context of the Draft Plan

To place any submissions into context, it is important to place Limerick and the proposed Development Plan in context. Limerick City and County Council serves a population of 194,899, based on Census 2016 figures, and has a geographical area of 2,790 km². Limerick City is the largest urban area in the Midwest and serves as the economic driver of the region. The City and Suburbs as defined by the Central Statistics Office has a population of 94,192 (Census 2016), which includes a portion in County Clare. Today, as Ireland's third largest city, Limerick has already experienced successful economic and cultural rejuvenation. From record levels of high unemployment and emigration a decade ago, Limerick is now an exemplar in recovery and is primed to take its place among some of the most dynamic emerging cities of Europe.

Limerick has significant competitive advantages, including its pivotal central location in relation to other cities, its national and international trade connections through Shannon International Airport and Shannon Foynes Port, tourism connectivity as a Wild Atlantic Way Gateway City and a significant third level education and skills role, including a world class third level education facilities.

The Limerick County Development Plan 2010 – 2016 (as extended) identifies 80 other settlements, including towns and villages in the county, (See Figure 1 below). The Limerick City Development Plan 2010 – 2016 (as extended) is the current planning policy document covering Limerick City. The River Shannon and its estuary forms the northern boundary of the County. The estuary extends from Limerick towards the sea and is almost 100km in length (Shannon Integrated Framework Plan). Limerick is mainly drained by the catchments of the Rivers Shannon, Mague and Feale. The two latter rivers flow northwards and drain into the Shannon estuary. The ESB operates the country's largest hydropower scheme on the River Shannon at Ardnacrusha in Clare, a short distance upstream of Limerick City (ESB 2017).

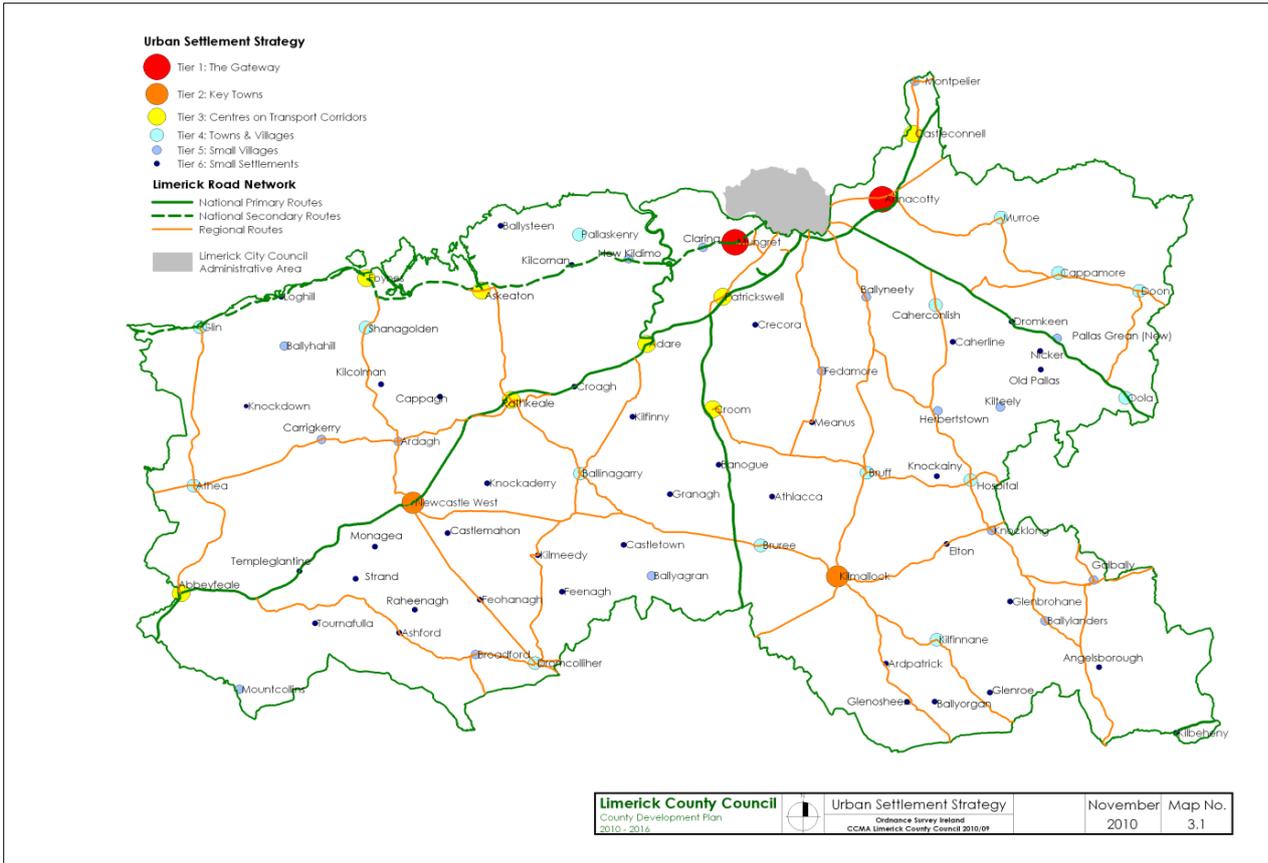


Figure 2 – Limerick County Development Plan 2010 – 2016 (as extended) Existing Settlement Hierarchy

At the time of preparation of this Issues Paper, there is uncertainty of the scale of impact that the COVID-19 virus will have on the global, European or Irish economy, but the consensus is that it will be substantial. It is also likely to impact on society in a wide variety of ways and may change the way we go about our daily lives. The preparation of the Limerick Development Plan will have to take account of these changing circumstances, which may impact on the policies and objectives, which are now required.

Limerick City and County has undergone significant transformation over the last decade. The Development Plan must consider how best to plan for future growth, which is proposed in the National Planning Framework for Limerick City and County, while facilitating and enabling the wellbeing of all of its communities and citizens to grow and live together in harmony. Key to this will be planning for a diverse city and county, that is inclusive and built on mutual respect, cultural understanding and equality, all driven by strong and enabled communities.

2.0 – Details on the process in making and possible content of the Draft Plan

2.1 – Introduction

The proposed Limerick Development Plan 2022 – 2028 will be prepared over a 99 week period, beginning on the 15th August 2020, with the publication of a notice in local press. This is the statutory time period for the preparation of a Development Plan. The Plan will provide a six-year framework for the land use planning of the City and County of Limerick, while taking into account, the conservation and protection of the built and natural environment. It will set out an overall the strategy for the proper planning and development of Limerick in terms of social, cultural, economic and physical development and will consist of a written statement supported by mapping and other appendices, indicating the development objectives for the functional area of the plan. At various stages in the plan making process, the proposed plan will be placed on public display and submissions from the public and other organisations and bodies will be invited.

The Plan is an important policy document, not least, because it will be the first development plan for city and county as a whole, following the amalgamation of both Local Authorities in June 2014. It will provide the policy to support and guide housing, transport systems, economic development and social, community and educational facilities, while protecting natural and built heritage. The Plan will be set within the context of the strategic framework of and be guided by the National Planning Framework and the Regional Spatial and Economic Strategy for Southern Region. It will also be guided by climate change considerations, as indicated by guidance and legislation at national level, regional and local level.

2.2 – Legislative Context in which, the Development Plan will be prepared

Strategic Environmental Assessment is a process for evaluating the environmental consequences of implementing a plan, programme or strategy prepared or reviewed by authorities at a national, regional or local level. In this case it is the Development Plan review, which is being carried out by the Forward/Strategic Planning Section of Limerick City and County Council. The purpose is to ensure that the environmental consequences of the plans review are assessed, both during their preparation and prior to adoption. The SEA process also gives interested parties an opportunity to comment on the environmental impacts of the proposed plan or programme and to be kept informed during the decision making process.

Legally, the SEA Directive (2001/42/EC) was transposed into Irish regulations and associated amendments to provide the legislative framework for SEA in Ireland.

The requirements for SEA in Ireland are set out in the national Regulations, S.I. No. 435 of 2004 European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 and **S.I. No. 436 of 2004** Planning and Development (Strategic Environmental Assessment) Regulations 2004 as amended by S.I. No. 200 of 2011 European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment)

Regulations 2011 and **S.I. No. 201 of 2011** Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 respectively.

In the case of the review of the Limerick Development Plan **S.I. No. 436 of 2004 and S.I. No. 201 of 2011 apply.**

S.I. No. 201/2011 - Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 state that a full SEA is a mandatory requirement in respect of the following:

- Development Plans where the population or target population of the area is 10,000 persons or more;

Or

- Development Plans where the planning authority determines that the plan would be likely to have significant effects on the environment.

The SEA process for the review of the Limerick City Development Plan and the Limerick County Development Plan is as follows, please note that, since SEA is mandatory for the preparation of the Limerick Development Plan 2022 – 2028, as outlined above and the process has moved directly to the scoping stage, with the screening element has been omitted:

Following the current Scoping Report stage, the Environmental Report will assess the likely significant effects on the environment, resulting from implementation of the content of the draft development plan. It will reflect the requirements of the SEA Directive (2001/42/EC) on the assessment of the effects of certain plans and programmes on the environment and also the transposed regulations in Ireland (S.I. 436/2004) as amended in 2011.

2.3 – Challenges and Opportunities

2.3.1 – Introduction

Limerick City and County Council are about to commence the preparation of the first Limerick Development Plan, which will be considered urban and rural issues, covering the area of Limerick City and County, with wide ranging and challenging issues, however this does present the first holistic view from a planning perspective, of both city and county and offers an opportunity to consider the priorities for Limerick, through this strategic document.

2.3.2 – Implications of the National Planning Framework (NPF) for the Plan

The National Planning Framework, prepared in 2018 proposes the consolidation of development, within existing urban structures. In the city and environs at least 50% of new housing shall be within the built up area, while another 30% outside the city is to be within the built environment of Limerick's towns and villages. This move towards consolidation of development will have implications for land use planning, including the use of brownfield sites and infill sites, while also considering the provision of appropriate support infrastructure. While elements of compact growth have been mentioned, in the 2007

Development Plan Guidelines, the references to it in the NPF are the strongest yet in any national level planning policy document and will have implications for development plan policies. On page 28 the NPF states the following:

"A preferred approach would be compact development that focuses on reusing previously developed, 'brownfield' land, building up infill sites, which may not have been built on before and either reusing or redeveloping existing sites and buildings. An increase in the proportion of more compact forms of growth in the development of settlements of all sizes, from the largest city to the smallest village, has the potential to make a transformational difference. It can bring new life and footfall, contribute to the viability of services, shops and public transport, increase housing supply and enable more people to be closer to employment and recreational opportunities, as well as to walk or cycle more and use the car less. Along with transport demand, higher densities and shorter travel distances will also reduce energy demand and use. Multi-storey and terraced buildings in close proximity require less energy and make renewables based systems of energy distribution such as district heating, more feasible".

The quote above has in it many of the issues, which need to be considered in the proposed development plan, sustainability, employment, vibrant settlements and energy use.

2.3.3 – Lack of Infrastructure capacity in Towns and Villages

Capacity issues in terms of wastewater treatment capacity and water supply exists in some of Limerick's towns and villages. This includes settlements, such as Newcastle West (Irish Water April 2020 report) which is a key town, as identified in the Regional Spatial and Economic Strategy. Other towns such as Askeaton, Dromcollogher, Murroe, Foynes Glin and Hospital. This will have serious implications, not just in terms of resource allocation to improve capacity in Waste Water Treatment Plants, but also in how best to meet the requirements of the NPF in terms of the consolidation of settlements. In addition many of the settlements have constraints in terms of water supply, which is exacerbated by long dry spells, which has resulted in water being tankered to certain locations in County Limerick.

2.3.4 – Sustainability and Pressure for Development

Ireland has one of the highest levels of emissions of greenhouse per capita in the EU, which is partly a result of the high level of commuting. Transport is one of the largest emitters of greenhouse gases. Development sprawl is very evident in the whole country and no different Limerick, with as the city centre itself, suffering from out of centre development. In many cases infrastructure has not kept pace with the scale of development, since the late 1990s. We have seen this in the previous section with infrastructural deficits in terms of waste water and water infrastructure.

This type of unsustainable development puts increasing pressure on the environment, both in terms of resource use and also pollution. This is the established means of development and there will be huge pressures in adjusting, both expectations and economic goals to reflect sustainable development. The challenge is to provide policy support to change, this unsustainable pattern and create a more balanced approach towards development. While

energy sources such as wind farms and anaerobic digesters have generated intense debate in Limerick, they are at least an attempt to utilise renewable resources. The challenge is not new to planning. The 2007 Development Plan Guidance document, the first such planning guidance document for development plans, has mentioned the need for compact and sustainable development and mentions basic planning principles, such as centre out development. What has changed in the 13 years, since the publication of the document is the scale of the environmental issues faced by Ireland and by extension, Limerick. With time passing, there is a more pressing need to comprehensively address the issue of sustainable development in the Development Plan review.

2.3.5 – Marine Spatial Planning

Another issue, which has emerged is that of marine spatial planning. Consultations have taken place in the early part of 2020, on the draft Marine Spatial Plan which, when it is eventually adopted, will coordinate planning functions between the terrestrial and marine planning areas. This process is likely to evolve during the preparation phase of the proposed Limerick Development Plan. Relevant content from the Marine Spatial Planning processes will be incorporated into the draft plan.

In previous plans, there was a separate chapter on the Shannon Estuary and in 2015 the City and County Development Plans were varied, to include the Shannon Integrated Framework Plan. Many of the issues remain pertinent and this will be considered in the development plan and it is useful in assessing common issues that affect both marine and land use planning.

2.3.6 – Climate Action and transition to a low carbon economy

The adoption of the Limerick City and County Climate Adaptation Strategy in July 2019, was the adoption of the first policy document relating solely to climate issues in Limerick. It will play a part in informing the content of both the environmental report and the draft plan. The current development plans content, in relation to climate issues generally, and not just in relation to adaptation will need to be expanded and updated. Adaptation of course refers to dealing with the effects of climate change, while mitigation means dealing with the causes, i.e. reducing greenhouse (GHG) gas emissions. This is the most pressing challenge facing the plan in that reducing carbon production is key in reducing GHG emissions, so the goal of a low carbon economy is a central one for the plan. As we have seen above there is likely to be challenges to this as traditional development patterns often run against this requirement.

In terms of achieving this goal, the first step would be to identify, which parts of the economy can contribute to this end, policies will need to emphasise not just the elements of the NPF, such as compact settlements, but to support local production to meet local needs. This could range from local food production to light engineering works to mention but two. The question of energy use and production will also have to be considered.

One of the central issues associated with the transition to a low carbon economy is that of an equitable transition. It is likely that many sectors will suffer during the transition

particularly during the initial phases. Since the Development Plan, will guide this transition through its policy content, it is important that it recognises that the costs and burdens of the transition, as well as the gains, are shared equally.

In terms of a transition to low carbon transport, the RSES also promotes what it refers to as "low carbon connectivity" both nationally and internationally. In this regard Regional Policy Objective 139 mentions ports, which has particular relevance for Limerick, in that Foynes is an important link in the international transport infrastructure, not just for Limerick, but for the region and the country as a whole. The Development Plan will have a separate section on the estuary and the importance of the port to Limerick.

3.0 – Scope of environmental baseline data to be used in the assessment

3.1 – Introduction

The SEA Environmental Report, which will accompany the proposed draft Plan on public display will include, information on state of the environment in Limerick. It will include maps of individual environmental components, environmental sensitivity mapping, analysis and a description under the topics, identified by the SEA Directive and transposing Regulations (i.e. biodiversity, flora and fauna, population and human health, soil, water, air and climatic factors, material assets, cultural heritage and landscape). The SEA Environmental Report will consider the zone of influence of the Plan and as such will refer to certain factors outside the functional areas of Limerick City and County Council, such as European Sites and the landscape character areas and protected views and prospects of adjacent planning authorities. This wider view will be informed, by the content of the Regional Spatial and Economic Plan for the Southern Region (RSES), which was adopted in January 2020.

The headings that follow in Section 3.2 below are drawn from Table 4B Indicative list of Environmental Protection Objectives (SEA Guidance November 2004). Though it is intended as a list of suggested objectives, it is a very useful list of suitable chapter headings for the Environmental Report. It is also a very useful checklist for those who wish to make submissions during the scoping stage of the plan. As the process continues and a proposed draft plan emerges, the Environmental Report can consider issues such as alternatives and mitigation. Due to the merger of the two authorities, the policy content of the Limerick County and City Development Plans is a decade old and in need of updating. It is the responses from both the Environmental Authorities and the public, which will inform both the content and often the subject matter of the Environmental Report and hence the proposed Development Plan. It is for this reason that particular importance is attached to the responses received during the scoping exercise.

3.2 – Biodiversity, Flora and Fauna

The SEA process will consider available information on designated ecological sites and protected species, ecological connectivity (including possible links and corridors) and non-designated habitats. The SEA will also identify data sources, which may be appropriate to local, project level development and assessments. These could include reports and assessments that would have been furnished to the Development Management section of the Planning Authority for instance, or prepared for Council activities and projects outside of planning, such as bridge or road projects. Since Appropriate Assessment concentrates on possible effects on Natura 2000 sites such as Special Areas of Conservation and Special Protection Areas and not on Natural Heritage Areas (NHAs) and other national level ecologically designated sites, the Environmental Report can deal with these sites, thereby filling any gaps in overall assessment. There will be cross references, of course, between the Natura Impact Statement and the Environmental Report.

NHAs are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They can be 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. There are four NHAs designated in County Limerick – Lough Gay Bog (002454); Grageen Bog and Fen (002186); Moyreen Bog (002361) and Carrigkerry Bogs (002399). Proposed Natural Heritage Areas were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. There are a number of proposed Natural Heritage Area throughout Limerick, which also important sites from a biodiversity perspective.

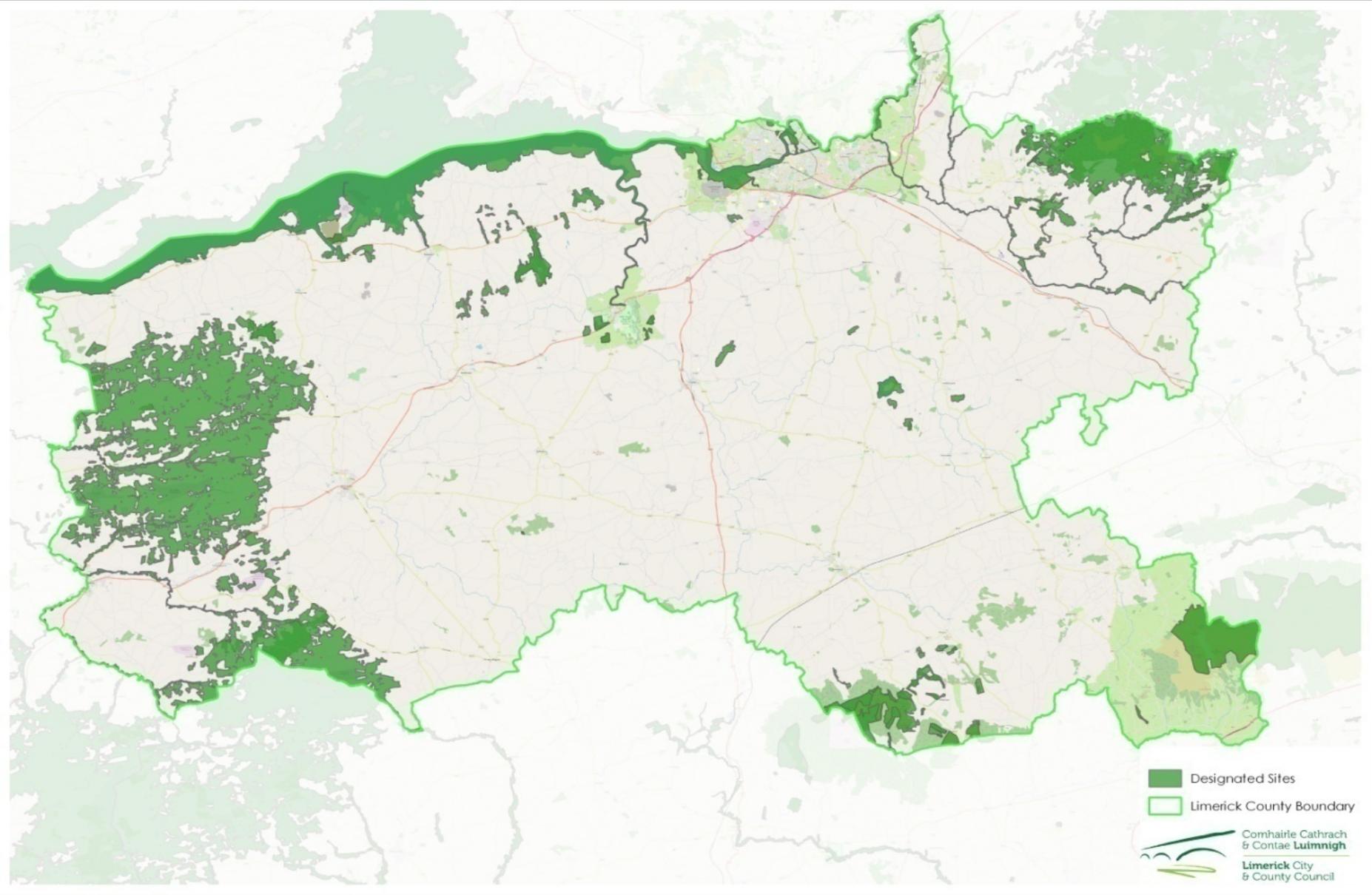
Ecologically sensitive areas located within the City and County include aquatic and terrestrial ecological areas, which are part of Limerick’s extensive network of watercourses and wetlands, which comprise of the following:

- Rivers, streams and riparian zones (such as River Shannon, Abbey River, Groody River, Mulkear River, River Mague, River Feale and the Allaghaun River);
- Loughs (such as Westfields, Lough Gur, Dohyle Lough); and
- Bogs and fens and marshes (such as Knockalisheen, Griston Bog and Ellaha fen).



Figure 3 – Grageen bog and Fen (002186, located in the Slieve Felim Special Protection Area, which has been designated for the hen harrier

Figure 4 – Designated Sites in Limerick – Including Special Area of Conservations, Special Protection Areas and Natural Heritage Areas



In addition to SACs, SPAs and NHAs, other areas such, as wildfowl sanctuaries will also be examined. One of the key ecological parameters is water quality and here work carried out under the Water Framework Directive will be of particular importance. The Local Authority Water Protection Office (LAWPRO) will be consulted on an ongoing basis, during the plan preparation. Other areas will also need to be considered, such as wetlands, peatlands and flood plains. In relation to peatlands, the Irish Peatland Conservation Council (IPCC) produces a list of peatlands in each county and has a list of Limerick's bog and fen habitats. With wetlands and flood plains being considered, there is obviously linkages with the Strategic Flood Risk Assessment being carried out as part of the Plan preparation process. There is the potential to link the protection of biodiversity, flora and fauna with the area of green infrastructure and ecological connectivity, ecological networks and zoning and this will be examined in the Environmental Report. Other potential considerations which will be examined include:

- Important sites for flora, including Flora Protection Order sites. There are many areas in and around Limerick City, which, while not Flora Protection order sites, contain species, such as the Triangular Club rush, which is located along the River Shannon and some of its tributaries, particularly in the areas, around Limerick City, for example Barrington's Pier;
- Other sites of high biodiversity value or ecological importance, e.g. Bird Watch Ireland's 'Important Bird Areas' (Crowe et al., 2009). In Limerick City, Westfields and Coonagh would be important sites, as well as Lough Gur, located in Co. Limerick.



Figure 5 – Summer Snowflake (*Leucojumaestivum*) photographed beside the Abbey River in Limerick City

Limerick City Council prepared a Biodiversity Plan in 2012, the overall objective of the plan, was to highlight, what we can do to help maintain biodiversity for future generations in Limerick City and to identify where we can find key habitats, containing biodiversity within Limerick City. The Limerick City Biodiversity Plan aims to pool knowledge and resources of stakeholders to identify and understand local biodiversity and how we can best conserve it.

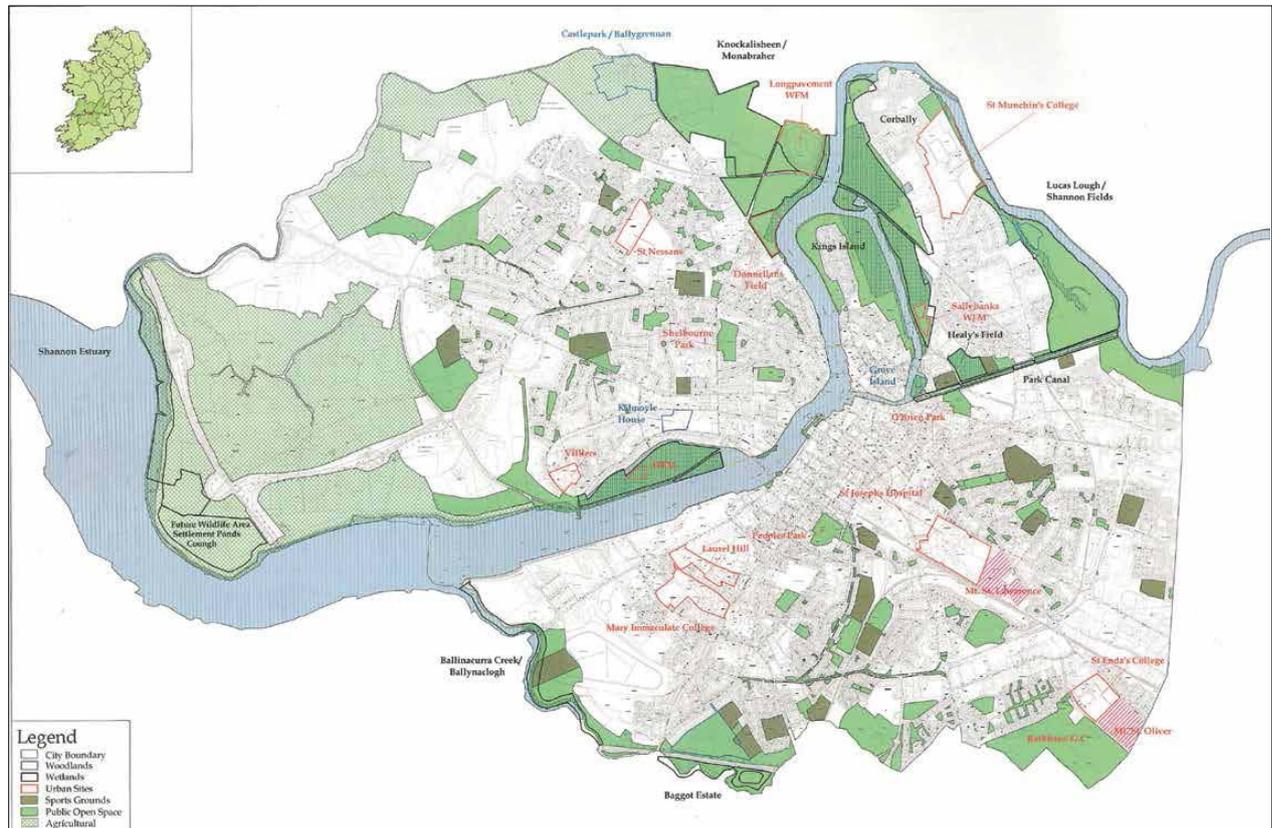


Figure 6 – Limerick City Biodiversity Plan (2012)

The map above in Figure 6 would prove a very good starting point for an Urban Green Infrastructure Strategy for the City and Environs. It also gives a good indication of the network of habitats that are present in the city.

The Environmental Report will use available data sources including internal council reports, those from the National Parks and Wildlife Service, the EPA's Framework National Ecological Network for Ireland and CORINE land cover mapping and the National Biodiversity Data Centre. The Environmental Report will also take into account local biodiversity sites, including habitats and species of county importance. The Limerick City Biodiversity Plan 2012 will be an important resource for City habitats. The Environmental Report will be informed by the findings of the AA and will follow elements of Integrated Biodiversity Assessment with reference made to the EPA's 2013 Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual. Other sites beyond the County border that could be affected by the proposed Plan will be considered by the assessments, in terms of transboundary effects, where this is possible.

3.3 – Population and Human Health

The total population of Limerick was 194,899 persons in the Census of Population 2016. The 2011 Census showed a population of 134,703. Limerick contains a hierarchy of settlements, which starts with Limerick City and Suburbs and moves gradually down to smaller settlements located throughout rural Co. Limerick. These are listed in Table 3.1 Settlement Hierarchy of the existing Limerick County Development Plan, and are shown in Figure 2 in this report. The existing Limerick City Development Plan provides the policies for development in the city. The challenge, as outlined earlier, will be to combine policies covering both City and County.

The National Planning Framework (NPF), published in February 2018, sets out the overall planning policy framework for the country to 2040, the focus of the NPF, is to plan for significant growth to 2040 on the Island of Ireland and to redress the imbalance of development on the Island, with the growth of regional cities and selected towns throughout the country. It identifies Limerick as the largest urban centre in Ireland’s Mid – West region and sets out ambitious targets for housing and commercial growth in the city, with an addition 56,000 persons in Limerick City and suburbs by 2040.

Limerick City and Suburbs	2016 population	Population Growth Range (percentage)	Target Population Range 2040 (People)	Minimum target Population
	94,262	50-60%	47,000 – 56,000	141,000

Table 1 – NPF Population targets for Limerick City and Suburbs

In addition to setting out population targets the National Planning framework requires that “least half (50%) of all new homes that are targeted in the five Cities and suburbs of Dublin, Cork, **Limerick**, Galway and Waterford”, are built within their existing built-up footprints”.

National Policy Objective 3c of the NPF states “Deliver at least 30% of all new homes that are targeted in settlements other than the five Cities and their suburbs, within their existing built-up footprints. This will have implications for the provision of supporting infrastructure for these populations, a topic which is further discussed in section 3.4.1 below.

The Implementation Roadmap for the National Planning Framework sets out population targets for Limerick, which are demonstrated in Table 2 below.

Region and Counties	2016	2026	2031
Limerick	195,000	229,000 – 235,500	246,000 – 256,500

Table 2 – Implementation Roadmap for the National Planning Framework – Extract for Limerick

The Regional Spatial and Economic Strategy (RSES) for the Southern Region, adopted in January 2020, sets out regional policy for the growth of the Southern Region for the next 12 years, it considers in detail the growth of the regional cities, including Limerick City. It seeks to support the regeneration and continued growth of Limerick City and investment to

achieve brownfield regeneration of City Centre sites, with high quality mixed-use sustainable and transformative projects, which set national and international good practice standards in innovation, quality design, exemplary urbanism and place making. Furthermore, the RSES seeks to revitalise or towns, villages and rural areas.

Furthermore, the RSES breaks down the population of the Limerick – Shannon Metropolitan Area as follows:

Area	Population 2016	Population Projections 2026	Population Projections 2031
Limerick City and Suburbs (in Limerick)	89,671	112,089	123,289
Limerick City and Suburbs (in Clare)	4,521	5,607	6,150
Subtotal	94,192	117,696	129,448
Remainder Metropolitan Area (Limerick)	15,281	19,453	21,611
Reminder Metropolitan Area (Clare)	22,947	25,414	26,463
Subtotal	38,228	44,867	48,074
Total Limerick – Shannon Metropolitan Area	132,420	162,563	177,552

Table 3 – Population Growth Proposed for the Limerick – Shannon Metropolitan Area

Limerick City and County has experienced slow population growth between 2011 and 2016. The city and county shares in the national easing-off of growth that has been occurring since the years of peak growth in the late 1990s and years leading up to 2008. Changes associated with the international banking crisis of 2008, which particularly affected the property market, also led to an increase in unemployment and reduction in inwards migration. While there has been some recovery since then, this crisis, and the paths of the subsequent recovery, have exposed underlying issues for development both nationally and locally.

Figure 7 – Percentage Population Change 2011 – 2016 per Electoral Division in Limerick

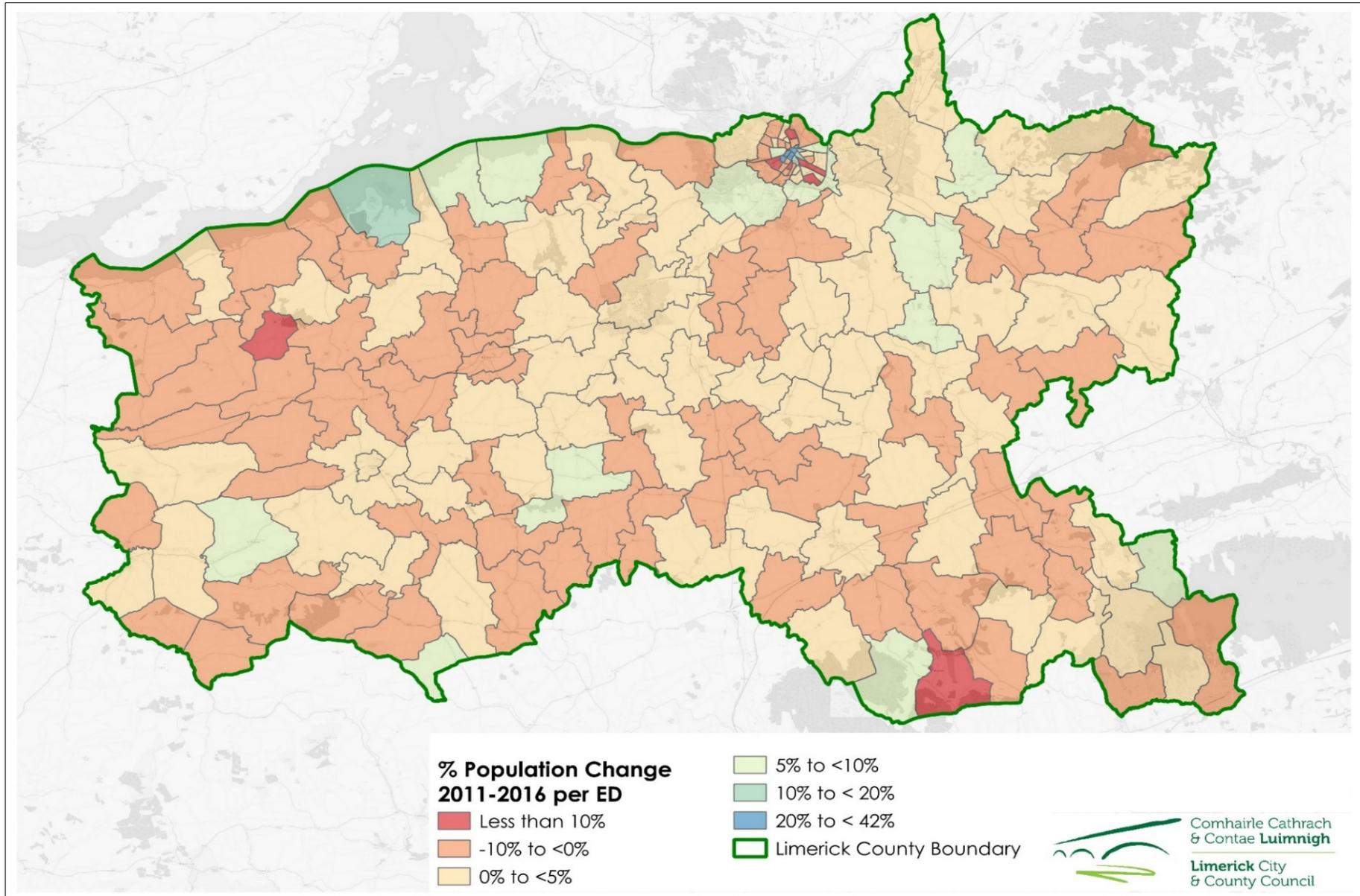
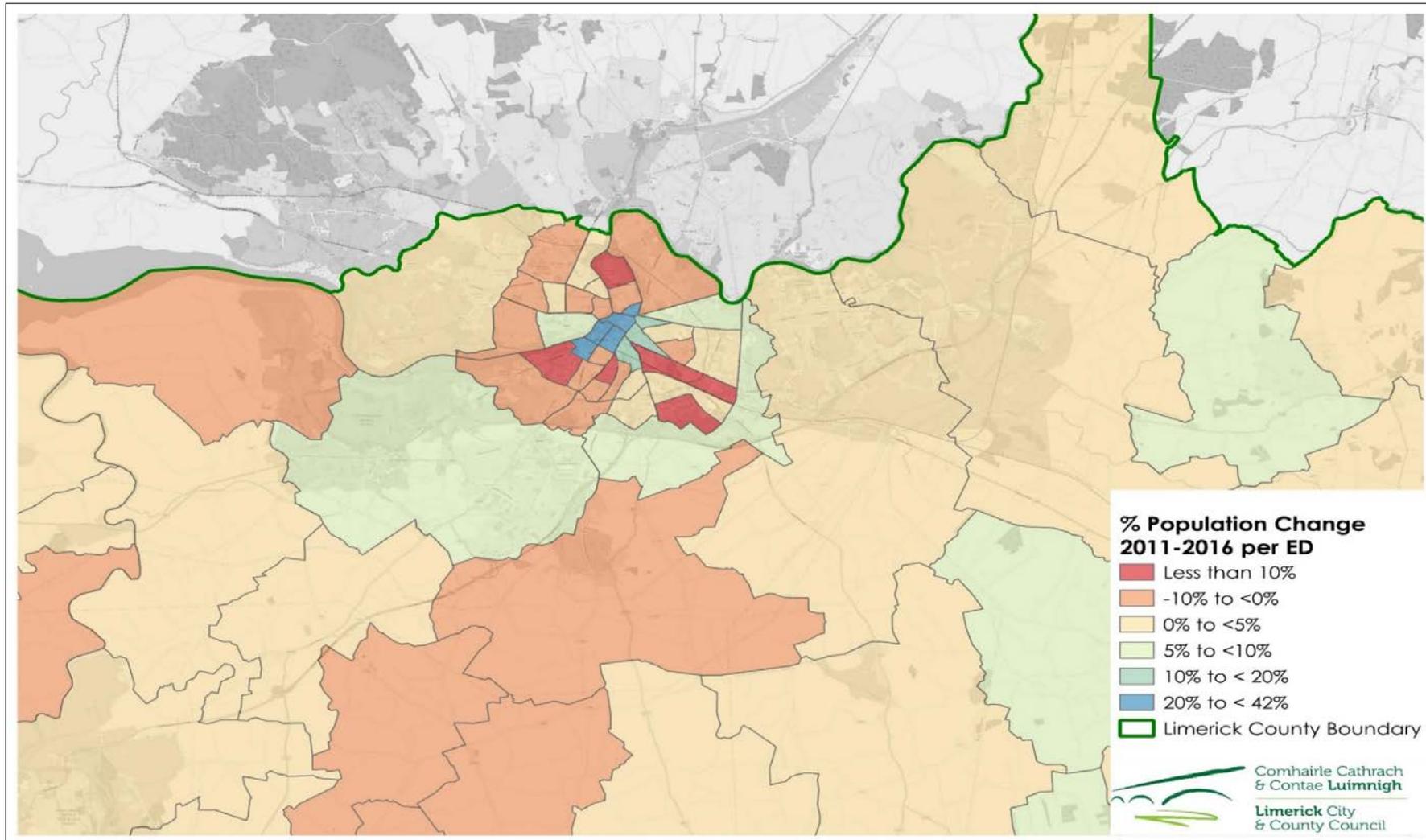


Figure 8 – Percentage Population Change at Electoral Division Level 2011 – 2016 in Limerick City and Environs



There has been the longstanding issue of development in the environs taking place at the expense of the city. This has led a donut effect on the core City Centre population, with many areas being underused and much of the population resided in the suburbs. Over the last 20 years or more the retail base of the city has suffered with the gradual development of out of centre retail outlets.

In 2014, Limerick City Council and Limerick County Council prepared the Limerick 2030 Spatial and Economic Plan, which was later incorporated in to the Limerick City Development Plan by way of a variation. The 15-year plan sought to transform Limerick through the economic, social and physical renaissance of Limerick City Centre and the wider County and Mid – West. The Plan was prepared as Limerick was about to enter an important phase in its history, Limerick City Council and Limerick County Council had just merged to create Limerick City and County Council and Limerick was designated national City of Culture. While Limerick has been in decline as a commercial centre over the previous 10 - 20 years, the city centre had suffered the most, as a result of significant out of centres commercial development in relation to both retail and business.

The Plan set out the following vision - *“Limerick will become a major economic force in the Irish and European economy, a leading centre for commercial investment – both foreign direct investment and endogenous business growth, capitalising on the strength of its higher education institutions (HEIs), the skills of its workforce and its environmental and heritage attributes. The City Centre will be at the heart of this economic force – an attractive magnet for retail, leisure, residential, commercial, educational and cultural growth. Growth will benefit all citizens across the City, County and Mid-West Region.”*

The plan sought to deliver 12,000 jobs with 5,000 in the city centre. Since the launch of the plan, Limerick has experienced significant growth with close to 12,000 jobs and €2.73 billion in investments announced. The implementation of the Limerick 2030 Plan has been further accelerated by the establishment of the Limerick Twenty Thirty Strategic Development DAC (Designated Activity Company) which is the first entity of its kind created by a local authority to deliver a city and countywide programme of investment. It is the biggest single Irish commercial property development programme undertaken outside the capital and is tasked with delivering over €500m worth of transformational investment infrastructure across four strategic sites in Limerick City.

The importance of the architectural heritage of Limerick is clearly recognised, but the poor condition of much of the Georgian area is also highlighted as an issue. The plan also mentions that “rules and regulations for the refurbishment and conservation of historic properties need to be applied sensitively to encourage investment”. There is also the need to balance the need for investment with the need to conserve the architectural heritage of the city. The sensitivities of the built environment throughout the city needs to be taken into account. The Spatial Plan recognises this issue and places an emphasis on that part of

the built heritage that dates from both, the Georgian and Victorian eras and states that “it is essential that this quality becomes an inspiration and is not further devalued by inappropriate development”. There is a precedent for the integration of older building stock into new developments, in the Opera Lane Development in Cork, where protected structures were retained and reused within a modern retail development (Retail Design Manual: A Good Practice guide DEHLG 2012).

These areas are categorised as “brown field sites” in that they have had a long history of development. In terms of material assets of which the previously existing building stock is included the SEA guidelines (DEHLG 2004) stresses the need to “maximise use of the existing built environment. This ties in with the intention of the National Planning Framework to focus development on brownfield sites and development within existing built up footprint.



Figure 9 – Scale of Proposals outlined in the Limerick 2030 Plan for Limerick City Centre

The National Planning Framework calls for population increases of approximately 56,000 additional people by 2040, which means that ambitious plans, such as the Limerick 2030 plan, will be more critical. It will also call for careful consideration of urban land use patterns. One issue that the NPF has outlined is the desirability of moving redevelopment of Limerick City Centre towards Limerick Docklands.

Newcastle West is identified as a key town in the RSES, the role of the key towns is to act as service centres in their respective parts of the county. The location of Newcastle West on the Shannon Estuary and adjacent North Kerry presents opportunities for future economic development and employment growth. Newcastle West has displayed a strong rate of population growth, since 1991 with a 54% increase to 6,619 (2016). Its number of jobs is has also increased, which stands at 2,413 in 2016. There are strong sub-regional

interdependencies between Newcastle West, Listowel, Rathkeale and Abbeyfeale, which provides a strategic opportunity for their further collaboration and enhanced economic growth, such as opportunities for joint projects. An example of this is the potential for the Limerick Greenway (Great Southern Greenway Limerick) to extend to Listowel.

In addition, housing policies will have to be updated to take into account new legislation such as amendments to the Housing Acts and to update policy responses to the housing crisis. They will also have to take into account the emphasis on compact development and the re-use of brownfield sites, as identified in both the NPF and the RSES.

Increased population will also lead to increased demands for resources, such as potable water, infrastructure and wastewater disposal and transport, while leisure needs will lead to increased demands for parks and leisure facilities, often with associated demands on landscape and habitats. These issues will be discussed further in the document.

The provision of adequate services, such as waste disposal will have beneficial effects on human health, as will the provision of adequate open space and leisure facilities. This has added emphasis during the preparation of the proposed plan, as both the population of what had been referred to as the City and Environs (i.e. Castletroy and the Southern Environs, including Raheen) with their higher population densities, as well as the former Limerick City population will have to be considered in the one plan. This makes the provision of sustainable social amenity facilities of particular importance, both for the Environmental Report and the new draft Development Plan. One suggested starting point is an assessment of the combined amenity and open space areas that are contained in the existing plans and perhaps also the inclusion of some aspects of the Limerick City Biodiversity plan, where this is feasible.

The question of Seveso sites is also to be examined. There are a number of such sites in the plan area, in Limerick City and the others in the County. Policy will have to be updated in order to reflect the existence of these sites in the preparation of the proposed Limerick Development Plan.

3.4 – Soil

A Foras Taluntais, now Teagasc, had by March 1966, completed a county wide survey of soils and published the results in Soil Survey Bulletin No.16, the second county level survey to be produced. Works by other agencies since such as the Environmental Protection Agency have added to this body of knowledge. The 1966 survey grouped the soils of Limerick into 11 different groups. These are listed as follows:

- Brown Earth Group
- Brown Podzolic Group
- Grey Brown Podzolic Group
- Gley Group
- Podzol Group
- Lithosol Group
- Organic Soils or Peats

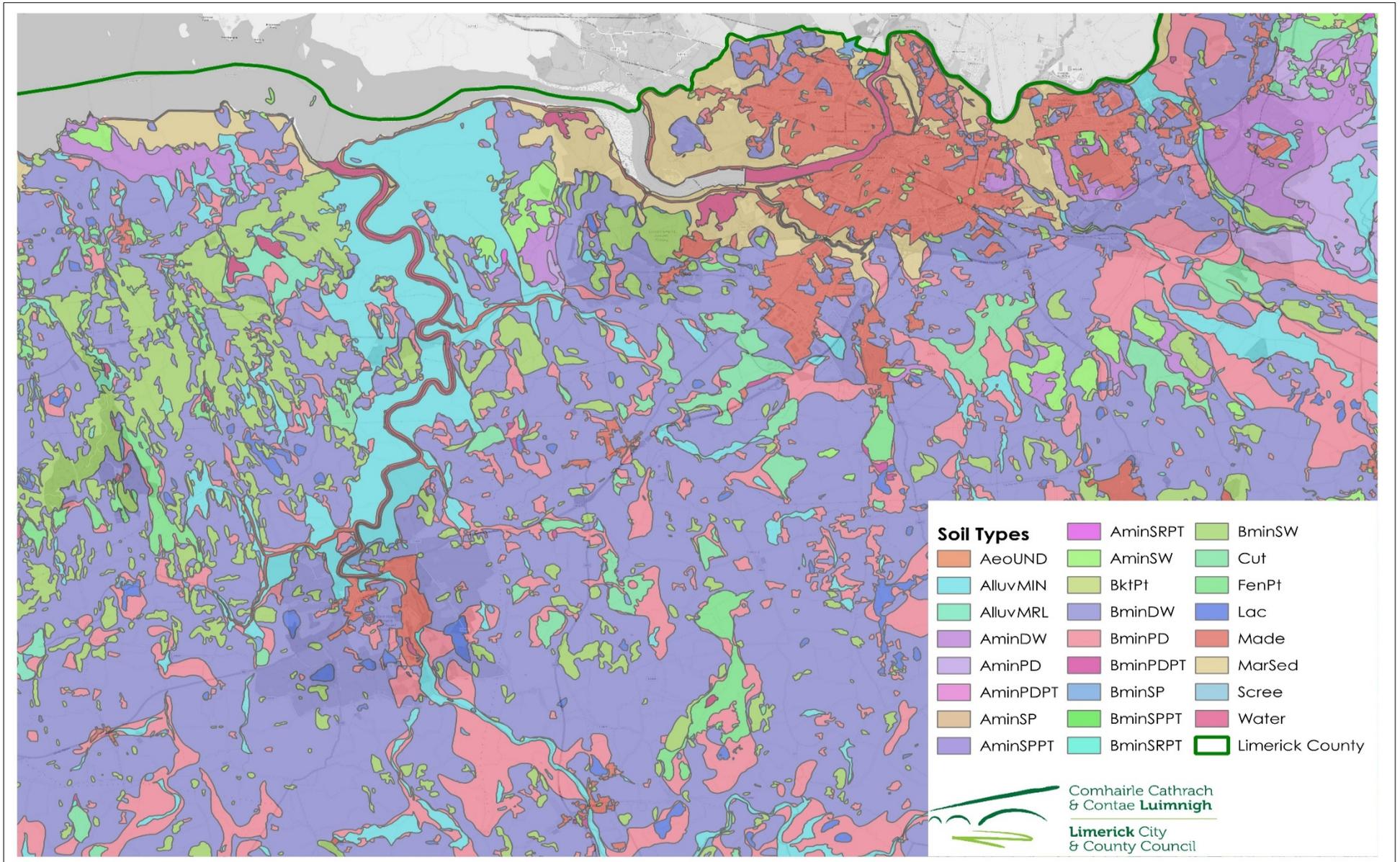
- Lake Alluvial Soils
- River Alluvial Soils
- Estuarine Alluvial Soils
- Other Soils

Each group has varying characteristics, including drainage. This has implications for agriculture and for the effective functioning of wastewater treatment units for smaller scale developments in rural and un-serviced areas. The 1966 report does acknowledge the varying qualities of Limerick soils with a description of West Limerick Soils as being “less favoured”. There has been substantial modification of soils within Limerick City through centuries of development with much of the land area within the city boundaries consisting of “made ground”, areas that have been substantially modified through development activity.

Figure 10 presents an overview of the soil types in part of Limerick, which presents an interesting perspective and should be used to inform decision making in terms of suitability of lands for development.

Key issues for examination in terms of soils in Limerick, will be soil conservation, promoted through environmental objectives, encouraging the reuse of brown field sites, adequate treatment and disposal of waste and re-use of soil following excavations works and treating contaminated soil. These policies will need to be updated in the proposed Development Plan. The NPF focus on the development of brown field sites will place further emphasis on this issue.

Figure 10 – Sample of soils mapping for the northern part of County Limerick and the City and Environs



3.4.1 – Water Status and Quality

The Water Framework Directive (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 to maintain the good status of water bodies, which are currently unpolluted and improve polluted water bodies to good status. It requires the preparation of plans at catchment level to achieve these aims.

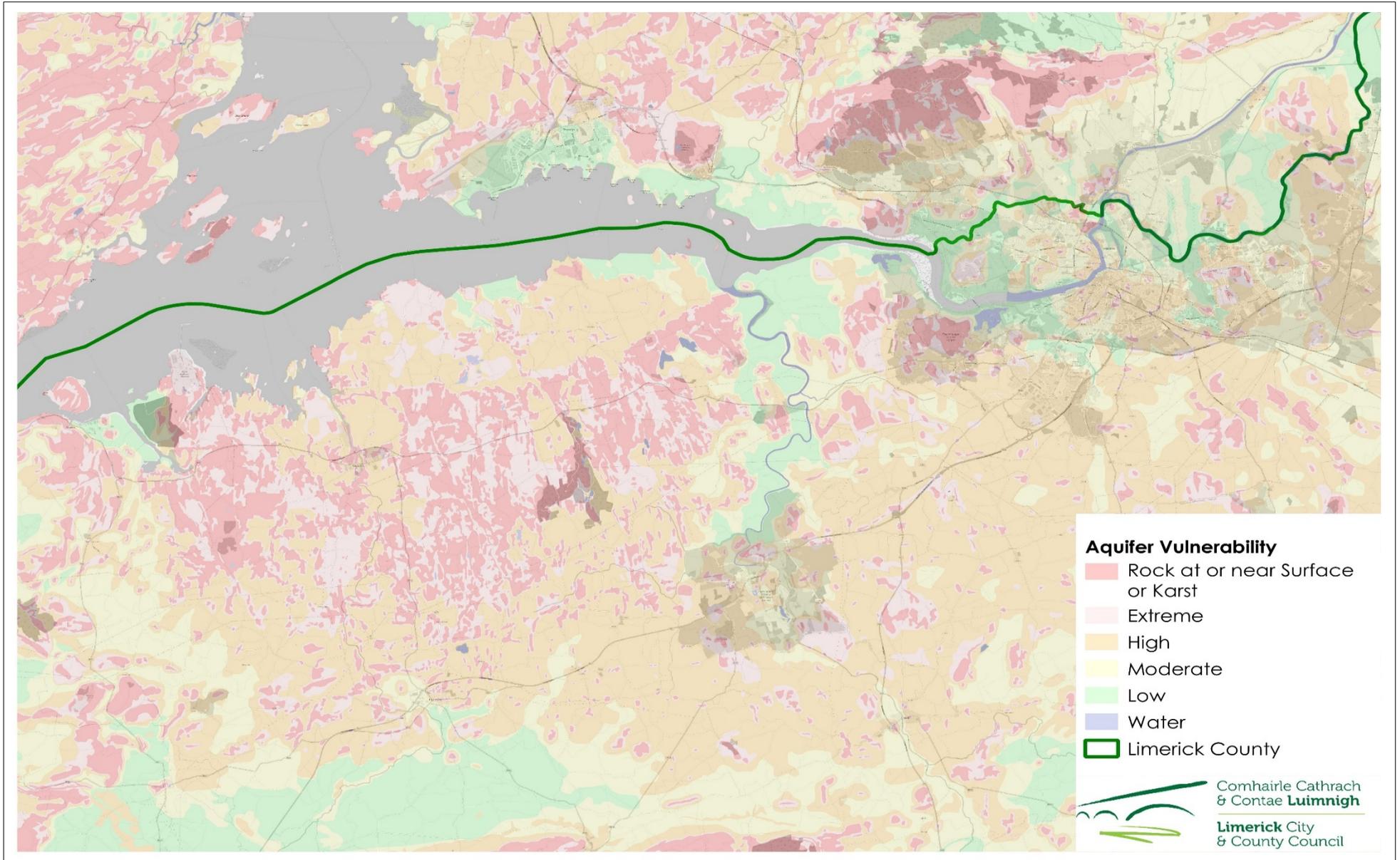
Limerick depends heavily on ground water for much of its drinking water sources. Many water supply schemes either public or private rely on wells to source their supplies. In Limerick, ground water in the north of the county is in a poor ecological state. This is due, in part, to geology, the bedrock in much of this area is limestone and soils are shallow which allows for the ingress of pollutants. Since ground water can account for much of the base flow of rivers, during summer months, these pollutants are also an issue in Limerick's surface watercourses.

In contrast, within Limerick City, the construction of the wastewater treatment plant at Bunlicky as part of the Limerick Main Drainage scheme has resulted in improvements in water quality with many untreated discharges to both the Shannon and Abbey Rivers being eliminated. It will be important to ensure that infrastructural capacity keeps pace with future development, to ensure adequate capacity exists in the networks.

The Environmental Report will need to consider a number of issues, in relation to further protection of water quality, a sample of measures include using buffer areas around water courses can help, as can the continued implementation of Ground Water Protection plans in rural areas. The use of buffer zones for sensitive watercourses has implications for flooding of course and this will be reflected in that section which follows.

The question of water quality is also closely connected to that of human health and of human usage of the assimilative capacity of watercourses for treated discharges from wastewater treatment plants. The main Waste Water Treatment Plant for the area of the city and environs is the plant at Bunlicky. Capacity is adequate for the city's need with a population capacity of 130,000. The plant came into operation in 1999. Irish Water are proposing an upgrades to the plan at Bunlicky in the near future, subject to funding.

Figure 11 – Groundwater Vulnerability in the northern part of County Limerick and the City and Environs



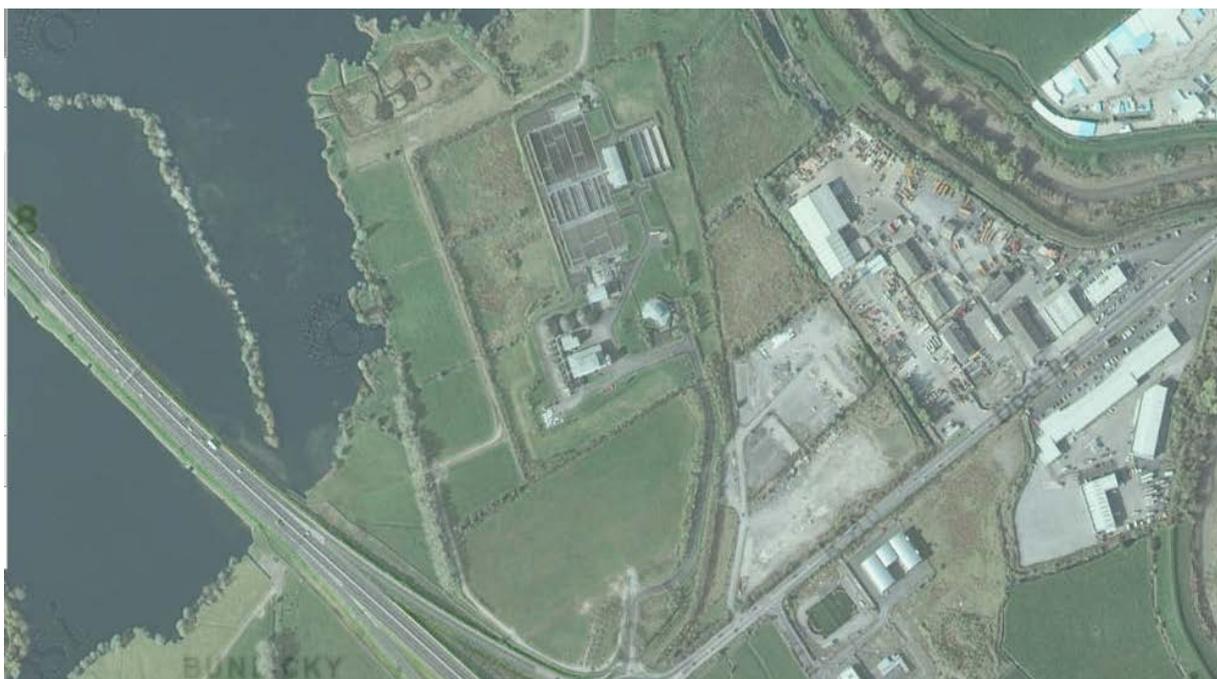


Figure 12 – Aerial view of Bunlicky Waste water treatment Plant in Limerick

Many of the settlements in County Limerick are constrained by the lack adequate treatment facilities, extensive consultation will take place with Irish Water throughout the process. It is important to ensure that potential developers should liaise with Irish Water, in order to determine the spare capacity of any plant to which they might need to connect

With the emphasis on development within urban areas and compact development, this will pose a huge resource challenge for the Local Authority, in ensuring that treatment infrastructure is able to keep pace, with what could well be increased demand for these services in Limerick's towns and villages.

Climate change may also have implications for water supply. The prolonged dry period in the summer of 2018, lead to water shortages in the south east of the County, which lead to water being transported into the area. This lasted until the autumn of 2018, as aquifer recharge was slow following the drought conditions, which prevailed during the summer months. The issue of water conservation and adaptations measures to water usage patterns in response to such issues will be examined in the Environmental Report. The main source of drinking water for the city and environs is at Clareville. Drinking water, produced by Irish Water/Limerick City and County Council at the Clareville treatment plant is delivered to Limerick City and Environs. The treatment plant has undergone significant refurbishment and upgrade works in recent years.



Figure 13 – Clareville Water Treatment Plant

The upgrade works included: a Stage 1 build of an 87 million/litre/day plant with the ultimate development of a 140 million/litre/day plant intended. In addition to the treatment of water, there is also an ongoing programme of leakage detection and repair, in an effort to promote water conservation.

County Limerick's rural housing stock are served by on site wastewater treatment systems and water sources in many cases. It is critical from a public health and a water quality perspective that appropriate measures are taken to ensure that suitable assessment of ground for wastewater facilities are carried out and oversight of installation is carried out, to ensure adequate protection of ground and surface water resources.

3.4.2 – Flooding

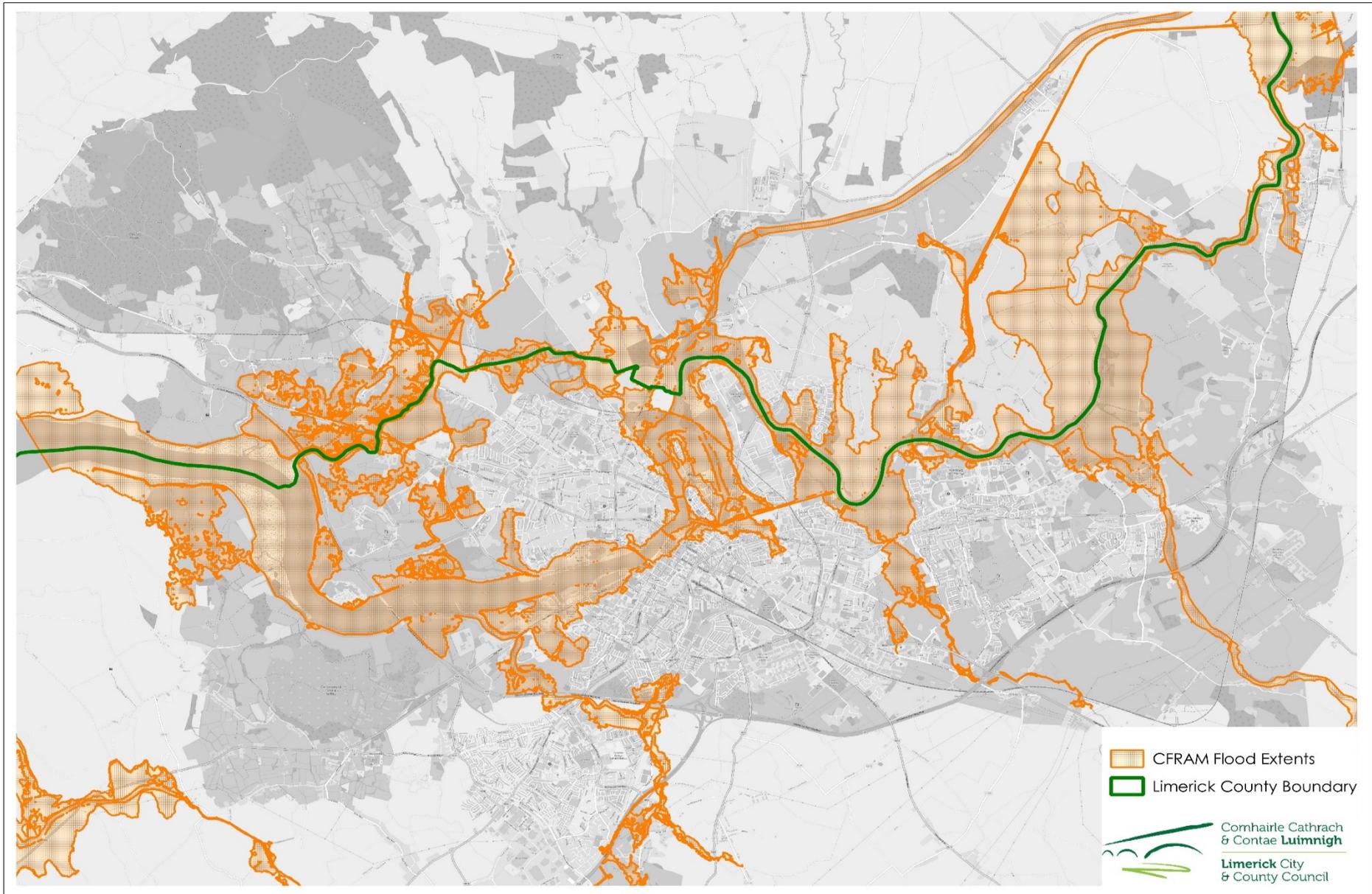
Flooding occurs frequently throughout the City and County of Limerick. There are elements of Fluvial, Pluvial, Coastal and Groundwater flooding, that occur in the City and County and sometimes in certain situations, elements of all of these occur simultaneously. A Strategic Flood Risk Assessment (SFRA), as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG and OPW, 2009), will be carried out alongside the preparation of the SEA and the preparation of the Draft Plan. The SFRA will focus on land use zoning, provided for by the proposed Limerick Development Plan. The SFRA will consider available and emerging information on flood risk indicators, including the OPW's Flood Hazard and Risk Mapping, the already existing CFRAMs and individual site-

specific flood risk assessments submitted to the Local Authority and any flood defences and inter county interactions. Attention will also be given to the use of buffer zones to allow flood plains to take as natural shape as possible.



Figure 14 – Implications of flooding for land usage, in urban context. This shows the Groody Valley, in the eastern part of the Limerick City Environs in flood.

Figure 15 – CFRAM Flood Extents in Limerick City and Environs



The role of potential flood residence areas in helping to provide cost effective solutions to flooding problems will be examined. The utility of such areas as habitats and green infrastructure resources will also be included. This is a factor in Climate Change and it will also be discussed under that heading. The EPA (2019, p. 48) makes the point “that flood events and consequent subsidence may damage critical infrastructure such as roads, rail, electricity, water and communications”. This point might also be made about other severe weather and climate related events and will be mentioned later in this document.

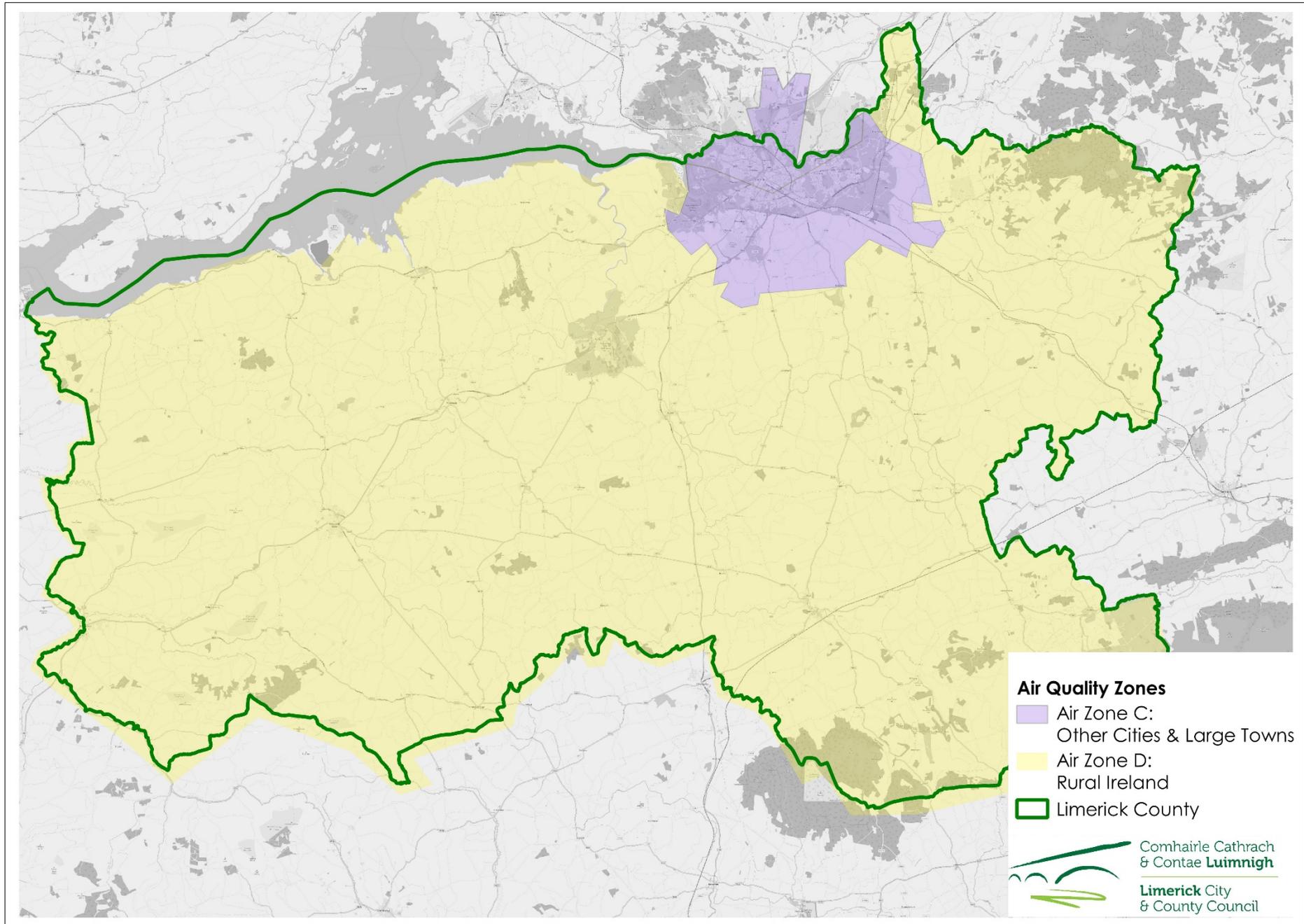
3.5 – Air and Climatic Factors

3.5.1 – Air Quality

Air quality monitoring nationally is divided into four zones. Dublin (Zone A), Cork Urban Area (Zone B) and specified population centres with a population over 15,000. (Zone C). Non-urban areas are in Zone D. The EPA publication, Air Quality in Ireland (2018, p.4), states that pollutant levels “were below EU legislative limits”. This does not mean that localised problems would not arise. Typically, it is emissions from transport on heavily used routes such as national primary routes can that can cause a build-up of pollutants. They can also cause noise emissions, which, particularly when such routes move through or close to urbanised areas, can affect the local population.

There are two air monitoring stations in Limerick. Both are located within or close to the City. One is located in the Fire Station at Mulgrave Street in the city and the other is located at Mungret Village.

Figure 16 – Air Monitoring Zones in Limerick



3.5.2 – Climate Action

There is little doubt that the climate action content of both current Development Plans requires updating, there have been significant effects of climate change witnessed in Limerick, in the intervening ten years, since the existing plans were prepared. There have been many changes in the legislative background, including the adoption of the Limerick City and County Council Climate Change Adaptation Plan in July 2019, which places further emphasis on the need for climate actions. It should be pointed out from the outset that action should be considered on two fronts, mitigation and adaptation.

Mitigation is the reduction of greenhouse gas emissions i.e. dealing with the causes of climate change, while adaptation is dealing with the effects of climate change e.g. the construction of flood defences and the use of green infrastructure. In terms of mitigation, higher density development, sustainable transport links and reuse of buildings can reduce emissions, reduce energy usage and noise and improve air quality. In this regard the EPA publication, Integrating Climate factors into the Strategic Environmental Assessment process in Ireland is very useful as it provides a list of topics that would provide the basis of climate action policies in the proposed plan. Nevertheless this is an evolving area and new insights will be gained from the SEA scoping process.

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. National Climate Action Plan (2019) is an all of Government plan to tackle climate change 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 targets for 2030 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.

Climate Action will affect all of the Development Plans content to some degree or other, but key issues will be those of energy production, transport and flooding. Dealing with the issue of flooding will be one of the key adaptation actions, while transport is one of the greatest producers of greenhouse gases in Ireland. The production of renewable energy is one of the key mitigation measures that can assist in the reduction of greenhouse gas emissions. As outlined above, the question of a just and evenly apportioned transition to a low carbon economy will have to be considered. It is considered that one of the ways in which, the transition could be made would be to put policy supports in place in the Development Plan to support a strong local economy, where local needs are met by local production.

There has been significant changes in terms of renewable energy production and priorities over the last decade, evolving technologies and focus is a key consideration for the proposed plan. There has been only one new wind energy application, since the last County Development Plan was adopted in 2010. This may be because much of the Limerick uplands

have been designated as Special Protection Areas for the conservation of the Hen Harrier. There has been a high level of interest in recent years, in solar technologies with over ten planning applications received. There is a need to update policies in relation to renewables and to take into account the on shore implications of the Offshore Renewable Energy Development Plan. Policies in relation to support of onshore renewables and the differing technologies involved will also need updating. The question of micro renewables, particularly in the urban environment i.e. Limerick City will also need to be examined in the course of the review of the Development Plans.

The Limerick Climate Change Adaptation Strategy has included a number of actions for land use planning, which will be included in the proposed Development Plan. These include inclusion of policies in relation to River Basin Management Planning; policies take into account the effects of climate change on built and cultural heritage and policies in relation to invasive species. There is also a need to include policies in relation to green infrastructure. It will be necessary to examine interactions between a changing climate and flooding. Flooding is influenced by climatic factors and the implications of climate change with regard to flood risk, which will be considered by the SFRA that will be undertaken as part of the review process.

3.5.3 – Waste Management

Waste management in Limerick is covered by the Southern Regional Waste Management Plan 2015 – 2021. This sets out the policies for waste management in the region and in Limerick. There will have been, by the time the Limerick Development Plan is adopted, two iterations of the Regional Waste Management, which emphasises the need for Development Plan to update its policies in relation to new waste utilising technologies (combustion, anaerobic digestion for instance) and also to update policies in relation to reuse and recycling.

Initial contact with the Regional Waste Management team have indicated that they are in the process of developing a template for the reuse and recycling of building materials on large development sites, in an attempt, to reduce construction and demolition waste. They intend to trial this on large development sites in the city. This could well be included in the Development Management guidance section of the proposed Limerick Development Plan. There is a close link between waste management and climate mitigation and this is another pressing reason for updating the suite of policies for waste management and prevention in the proposed draft plan.

3.6 – Material Assets and Infrastructure

As climate change has been described as a cross cutting theme, it is worth considering climate adaptation and the effects of a changing climate and weather events on material assets and on the public infrastructure, which Limerick City and County Council manages. Severe rain caused three bridges to be washed away in the Slieve Felim Hills in the east of the county in 2014, while floods resulting from a pluvial event in Newcastle West in August 2008, lead to severe flooding and damage to bridges, public infrastructure (road networks and treatment plants) and large areas of the town. The Shannon Estuary is essentially mud

based and as such is very vulnerable to erosion. In 2016, this led to the partial collapse of the protective embankment for the National Road (N69) close to Glin. A summary of some climate related events is in Table 4 below.

It is not just Local Authority infrastructure, which may be at risk, it is essential that infrastructure providers work together to ensure their networks are resilient to climate change. Of course climate resilience relates not just to infrastructure, but to wider issues, such as zoning and planning functions generally and this will be examined in greater detail by the Environmental Report, for inclusion in the proposed Development Plan.

Table 4 – Some climate events and effects on Infrastructure

Climate event	Effects	Date	Location
Fluvial and Ground water flooding	Partial collapse of flood defence embankment	2014	Kings Island, Limerick City
Coastal Erosion	Partial collapse of N69 Protective embankment	2015	Glin
Fluvial flash floods	Three bridges washed away	2014	Slieve Felim hills in East County Limerick
Pluvial Flooding	Flooding of town, damage to roads WWTP and bridges	2008	Newcastle West
Drought	Importation of water required for areas in SE Limerick	2018	South East Limerick/Anglesboro area
Drought	Low water levels in River Feale causing difficulty in water abstraction for the town water supply	2014 and 2018	Abbeyfeale
Fluvial and Pluvial	Flooding in the Mill road from the Abbey River	March 2020	Mill road, Corbally, Limerick City
Fluvial and Pluvial	Flooding	Feb 2015	Corbally and College park road, Limerick City

Source: AA screenings and NIS prepared by Forward/Strategic Planning Section for repair and other works following these events



Figure 17 – Partial embankment collapse in Kings Island in Limerick City

Material assets also includes, our built environment, and careful adaptation and re-use of these resources is effective, not just in terms of resource use, but can ensure the continued development of brown field sites and those which, might now be currently disused or underutilised. It should also be pointed out in relation to transport infrastructure that over the number of years, Limerick City and County Council has begun the process of establishing greenways and sustainable transport links, such as walkways and cycle-ways within the city, promoting sustainable transport and healthier lifestyles.

3.7 – Cultural Heritage

3.7.1 – Archaeological Heritage

Archaeological heritage is protected under various legislation, including the National Monuments Acts (1930 – 2004), Natural Cultural Institutions Act 1997 and the Planning and Development Act 2000 (as amended). The SEA Environmental Report, will include information on the archaeological heritage of Limerick, including that relating to designations such as entries to the Record of Monuments and Places. In this plan, there will be the archaeological heritage of both City and County to consider, with a huge range of monuments from Kings John’s Castle to ring forts to consider. The estuary too provides its own range of archaeological features to consider, both within Limerick City and downstream. Riparian and instream archaeology has long been one of the topics contained

in submissions on archaeological heritage to land use plans by the Department of Culture, Arts and the Gaeltacht.



Figure 18 – Kings John's Castle and the nearby Thomond Bridge, important components of Limerick's urban heritage. Source: Shannon Heritage

It is worth giving specific mention to Lough Gur and the range of archaeological monuments and their settings that exist in that area. Given the unique setting and the nature of the archaeological character, it is worthy of its own landscape character area in the existing Limerick County Development Plan 2010 – 2016 (as extended), defined by the area of archaeological and visual sensitivity that surrounds the lake. This Landscape Character Area and its zone of special development control provide the basis of Limerick's efforts to safeguard the amenity of the area and the unique archaeological setting.

3.7.2 – Architectural Heritage

The current Limerick City Development Plan contains 435 protected structures. These are effectively a history of development in the City, with varying structures being dwellings, parts of transport infrastructure, such as canal locks and bridges and parts of Limerick's industrial past. In an urban environment, in particular, they add local character and in areas, where Architectural Conservation Area (ACA) designations are in place they can define the local character. Limerick City is notable for having six Architectural Conservation Areas which play an important part in preserving the historical areas of the city. Dereliction and abandonment are cited as being one of the main threats to the buildings and structures within ACAs in Limerick, followed by insensitive development. ACAs also play part on the conservation of architectural heritage in County Limerick with ACAs present in Newcastle West and in Kilmallock where the designation plays an important role in the conservation of

the built heritage of the town. They are also present in many of the other towns and villages of Limerick including Abbeyfeale, Askeaton, Bruff, Cappamore, Glin Hospital and Rathkeale.

The Record of Protected Structures included in the current City and County Development Plans is legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 (as amended). Protected Structures are defined 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. This plan will be the first to combine the architectural heritage of both Limerick City and County. The city is characterised by its extensive Georgian streetscapes, which are protected by Architectural Conservation Area designations. An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest and can sometimes contain a number of protected structures. The Environmental Report will consider the implications and support the update of the policies for the architectural heritage of the county.



Figure 19 – Three arch stone bridge near Loghill in West Limerick

3.8 – Landscape

The landscape of County Limerick has been assessed and divided into ten different landscape types, following the completion of a Landscape Character Assessment process for the 2005 Limerick County Development Plan and follows up in the 2010 Limerick Development Plan. These are as follows:

- Agricultural Lowlands;
- Ballyhoura/Slieve Reagh;
- Galtee Uplands;
- Knockfierna Hill;
- Lough Gur;
- Shannon Integrated Coastal Management Zone;
- Southern Uplands;
- Tory Hill;
- Slieve Felim Uplands;
- Western Hills/Barnagh Gap/Sugar Hill.

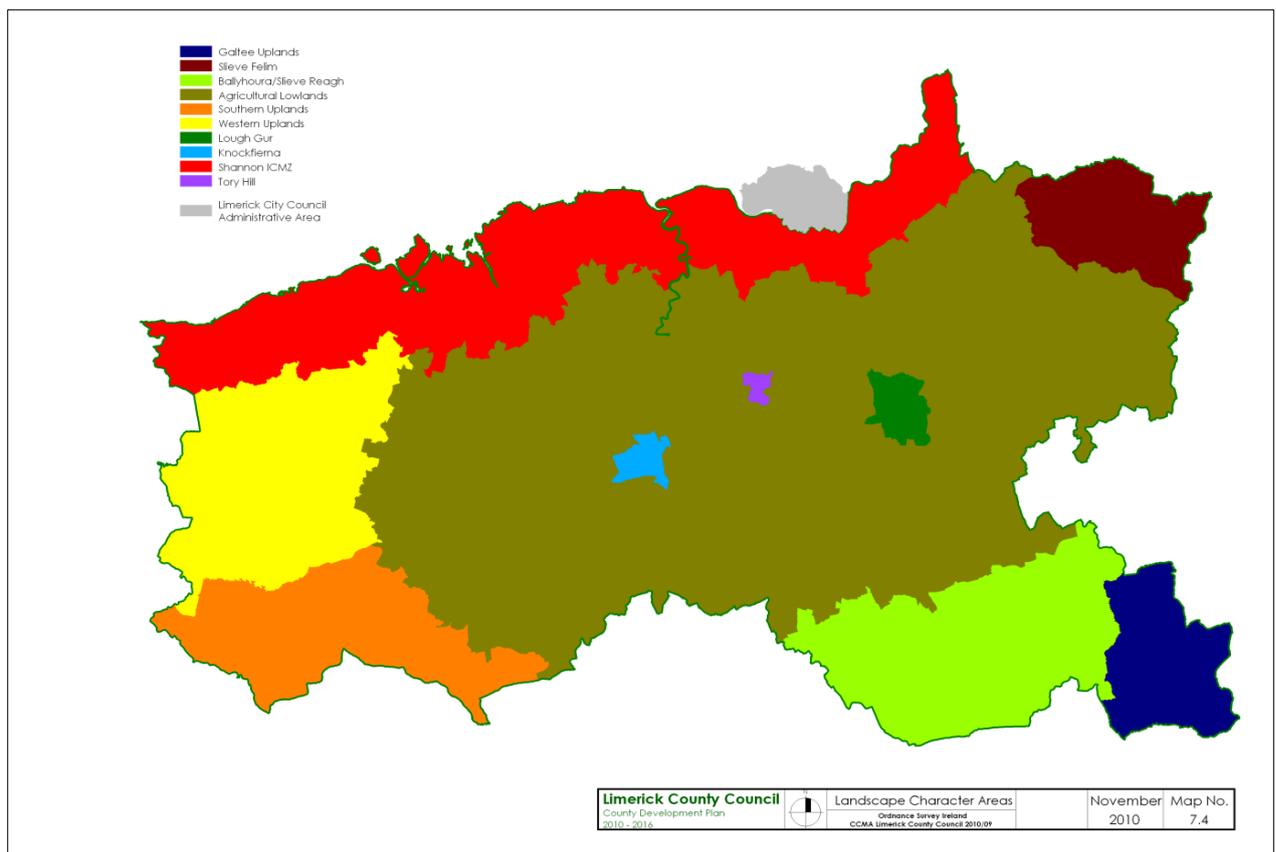


Figure 20 – Landscape Character Areas identified in Limerick County Development Plan 2010 – 2016 (as extended)

While the Landscape Character Areas have been long established the National Landscape Strategy for Ireland (2015 – 2025) seeks to develop a National Landscape Character Assessment. This may well have implications for the current Limerick landscape characterisation and any outcomes from the National Landscape Strategy will be reviewed and incorporated into the plan where this is deemed necessary.

Another possible input may come from the Draft National Marine Planning Framework and Marine Spatial Policy which is currently under preparation. The creation of a seascape methodology will have implications for coastal counties, in particular but it may also have implications for up to 20 miles inland. This will take in Limerick City, a regional capital on the largest estuary in Northwest Europe. Currently this process, (April 2020) is in its earliest stages, but as it evolves it may well feed into the landscape character areas of Limerick. As can be seen from Figure 20 above, there is currently one landscape character area in Limerick with a coastal theme, that of the Shannon Integrated Coastal Management Zone. Figure 20 below gives an indication of the scale of the estuary and the influence it has on this area of Limerick, including the city. The influence of both the Draft National Marine Planning Framework and the National Landscape Character Assessment will be examined by the Environmental Report, with a view to informing the content of the proposed development plan.

In the previous County Development Plan, a separate chapter called the Shannon Estuary was included to emphasise the importance of this area for County Limerick. The importance of this area, not just for Limerick, but on a regional level was further emphasised by the publication of the Shannon Integrated Framework Plan in 2012 and its subsequent inclusion in the City and County Development Plans in 2015.



Figure 21 – Extent of the Shannon Estuary – View towards County Limerick

Limerick City has a unique and distinctive landscape that forms a key aspect of the City's character. As with the county, the River Shannon provides a backdrop to the much of the city area and forms an essential part of the character and attraction of the city. The presence of the city docks is also a feature to be considered. The city is steeped in history and the historic element of the city such as Kings Johns Castle (see Figure 13 above) and the Georgian areas provide unique aspects of the city character. There are overlaps between landscape and architectural heritage. The current Limerick City Development Plan puts it well "within cities, such as Limerick, landscape character involves the combination and interplay of many elements, including: the landscape; built environment; riverscape and natural heritage.

Landscape is largely a non-renewable resource and therefore it is in the City's interest to ensure that the City's landscape assets that remain are protected for future generations for their visual, functional, natural heritage and other values. Many of Limerick's landscape assets, and particularly those that have an open 'greenfield' character, have been lost over a period of time. Given the diminishing supply of non-renewable landscape assets the City Council has sought to review the existing landscape policy and to provide a clear policy basis for protecting those remaining assets".



Figure 22 – Thomond Bridge, the Eel weir at Thomondgate and the Railway Bridge beyond, there is little doubt about the influence of the River Shannon on Limerick's urban landscape. Source: irishnet.de.

While the possible effects of the Marine Spatial Plan on the County's landscape policies has been mentioned above, it is equally likely that there will be implications for landscape policies in the city. The current Limerick City Development Plan clearly recognises the significance of watercourses in the city saying "rivers and water ways are very important assets of Limerick and play an important role in the layout and structure of the city and are an integral element of the city's landscape character" (Limerick City Development Plan 2010, p. 11.7). Given the renewed emphasis on the River Shannon through the annual Riverfest festival, held in May each year, the plan review offers new opportunities to update policies for the unique urban landscape of Limerick.

4.0 – Alternatives

The development and assessment of alternatives is a legal requirement under the SEA Directive and Regulations. Article 5(1) of the SEA Directive and 13E (1) of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (as amended 2011) requires that the Planning Authority considers alternatives within the Environmental Report. The formulation of development plan requires consideration of alternative approaches in terms of framing plan policy and goals. Alternatives must be realistic and capable of implementation, and should represent a range of different approaches within the statutory and operational requirements of the particular plan, while complying with the National Planning Framework, Regional Spatial and Economic Strategy and the Planning and Development Act 2000 (Amended).

Alternatives are fundamental to Strategic Environmental Assessment (SEA) and are required to be considered under the SEA Directive (Directive 2001/42/EC). Consideration of alternatives in SEA provides the opportunity to identify and explore different ways to deliver a plan's or programmer's objectives, while addressing environmental issues. In developing alternatives the 'do nothing' approach is not considered a realistic option, due to the statutory requirement to review the both the Limerick City and County Development Plans and the requirement to comply with the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region and other guidance that has been published in the intervening period, since the adoption of the existing plans. The EPA published guidance in 2015 on the development of alternatives, within the SEA process 'Developing and Assessing Alternatives in SEA'.

5.0 – The next step in the Plan Process

5.1 – Plan Research

This scoping document is being prepared at the very beginning of the Plan preparation process and before a draft of the development plan is prepared. The responses of the Environmental Authorities will be important in informing the initial shape of the Environmental Report and the draft Plan itself. Part of the Environmental Report, when it is drawn up will be a series of Environmental Protection Objectives (EPOs). While it is early in the process, some suggested EPOs are listed below in Table 4 to prompt comments from the Environmental Authorities, they are suggestions only and will evolve as the plan preparation process progresses.

As part of the plan research, web sources such as the Environmental Sensitivity Mapping (ESM) Tool and www.heritage.ie will be considered, under each of the chapter headings of the Environmental Report and the proposed Plan. The first contains environmental information structured in a fashion that lends itself to SEA analysis, while the second is a wider ranging compendium of heritage and general information. Both when, used together, will indicate, whether issues will arise under headings, such as landscape for example. It will then be possible to gather further information from specific agencies (such as Teagasc or internal Local Authority reports for example) to further add to the content of the Environmental Report.

Table 5 – Suggested Environmental Protection Objectives and Data Sources

Biodiversity, Flora and Fauna	Possible environmental issues
B1: Protect, conserve and enhance habitats, species and areas of national and local importance, including aquatic habitats and species and promote the sustainable management of ecological networks.	- Encroachment, fragmentation. Habitat loss, isolation and pollution.
B2: Include policy content on green infrastructure.	- Must be compatible with findings of SFRA and complement ecological sites.
Population and Human Health	
P1: Facilitate a good standard of health for the local population through ensuring high quality residential, recreational and working environments	- Provision of amenity facilities and demands on landscape - Green space provision
P2: Ensure that policies take into account NPF population targets	- Health facility provision and policy support in plan
Water Resources	
W1: Achieve and maintain required water quality standards and reduce discharges of pollutants or contamination to waters.	- Pollution. Adequate provision of infrastructure to sustain development
W2: Introduce water conservation content to plan.	- Climate change, drought. Flooding
Soils and Geology	
S1: Protect the quality of soils in the interests of avoiding environmental degradation in water quality and biodiversity	- Re-development of brownfield sites with consequent expense rather than new development on green field sites, where fewer constraints would exist
S2: introduce content in relation to dealing with	

contaminated soil	
Air and Climatic Factors	
<p>AC1: Increase energy efficiency and the proportion of energy generated from renewable sources</p> <p>AC2: Implement through the policies of the Development Plan, those actions required from Planning by the Limerick Climate Change Adaptation Strategy</p> <p>AC3: Update plan and policy content as responses to climate change evolve</p>	<ul style="list-style-type: none"> - Climate change, noise, emissions - Flooding- see W1 above as well - Climate action is an ongoing process, which will require plan updating perhaps through midterm review
Cultural Heritage	
C1: Protect and conserve features of archaeological and architectural heritage and their settings	<ul style="list-style-type: none"> - Loss, encroachment, damage
C2: Protect and conserve and promote the sustainable re-use of architectural heritage	<ul style="list-style-type: none"> - Insensitive development of this asset. See also B2 above
Landscape	
<p>L1: Protect and conserve the quality, character and distinctiveness of the townscapes and minimise negative visual impacts</p> <p>L2 Place particular emphasis on landscape sensitivity in key areas</p>	<ul style="list-style-type: none"> - Poor quality development, over development, loss of views and vistas.
Material Assets	
<p>MA1: Maintain the quality of, and access to infrastructure for appropriate development, including maintenance of physical and social infrastructure</p> <p>MA2: insert policy content in relation to service providers working in collaboration to construct, maintain and repair key infrastructure, particularly in response to climate change and extreme weather events</p>	<ul style="list-style-type: none"> - Threats from climate change. Need for ongoing maintenance for infrastructure - Infrastructure to keep pace with development to ensure it is adequately serviced

6.0 – Outcome of the Scoping Exercise and next steps

The findings and comments received as part of the scoping process will be included and addressed in the SEA Environmental report, this will be published alongside the proposed Draft Development Plan for public consultation under Section 20(3) of the Planning and Development Act 2000 (Amended).