



**ENVIRONMENTAL REPORT FOR THE
STRATEGIC ENVIRONMENTAL ASSESSMENT
OF THE
PROPOSED AMENDMENT NO.1 TO THE TRALEE
MUNICIPAL DISTRICT
LOCAL AREA PLAN
2018-2024**

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NON-TECHNICAL SUMMARY

Chapter 1 Introduction

Kerry County Council has commenced drafting amendment no. 1 to the Tralee Municipal District Local Area Plan. The amendment relates to a proposed Masterplan for two key sites in Fenit village, a coastal settlement along the western coastal boundary of the Tralee MD LAP.

The Tralee Municipal District Local Area Plan 2018-2024 (Tralee MD LAP) was made in 2018 in accordance with the requirements and provisions of the Planning and Development Act 2000, as amended. The Tralee MD LAP sets out a comprehensive local planning framework with clear policies and land use zonings and objectives for the settlements in the Municipal District area.

All planning applications received within the Tralee MD will be measured against the contents of the Tralee MD LAP and the current Kerry County Development Plan 2015-2022 and the Draft Kerry County Development Plan 2022-2028 and any amendment thereof.

The context of the Tralee MD LAP within the broader planning framework is discussed in further detail in Section 2 of this report.

Strategic Environmental Assessment (SEA) is a systematic and effective process for ensuring that environmental issues are taken into account at every stage in the preparation, implementation, monitoring and review of plans, programmes and strategies. It is a process of evaluating the environmental consequences of a proposed policy, plan or programme (P/P). **As noted, in this report the “plan” being screened is the proposed amendment to the Tralee MD LAP 2018-2024.**

Pursuant to Article 14(B) of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI 436 2004), as amended in Regulations 2011, (S.I. No. 201 of 2011) and Article 9(1) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI 435/2004), as amended in Regulation 2011, (S.I. No. 200 of 2011), KCC is required to carry out a SEA for an amendment to the LAP further to thresholds listed in the above regulations. As the Tralee MD area exceeds those thresholds (5,000 persons or more) screening was therefore deemed unnecessary as a mandatory SEA was required. The SEA proceeded straight to scoping. The scoping process was subsequently outlined in a SEA Scoping Report produced in January 2022. It should also be noted that in addition to the SEA, the proposed amendment to the Tralee MD LAP 2018-2024 was assessed under Article 6 of the Habitats Directive 92/43/EEC and was informed by the process where appropriate. A Natura Impact Report accompanies the proposed amendment to the Tralee MD LAP. The Tralee MD LAP was also subjected to a Strategic Flood Risk Assessment (SFRA) which ran concurrently with the original drafting of the Tralee MD LAP, the SEA and AA.

Chapter 2 Planning Policy Context

The Municipal District Local Area Plan is part of a systematic hierarchy of land use plans and spatial plans as outlined below in Figure 2.1.

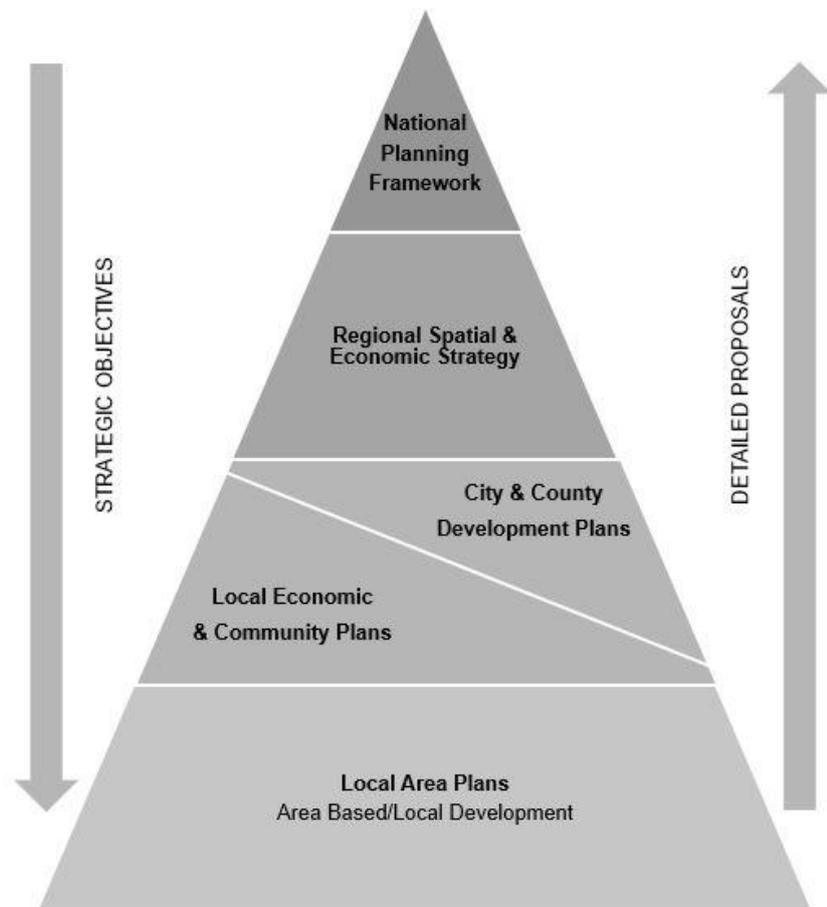


Figure 0-1 Planning Hierarchy context for proposed Amendment no.1 to the Tralee MD LAP 2018-2024

Chapter 3 Methodology for the Strategic Environmental Assessment of the Tralee MD LAP/Fifth Variation to the TTDP 2009-2015

The Strategic Environmental Assessment of the proposed amendment no. 1 to the Tralee MD LAP reflects the requirements of SEA Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment and Irish legislation through the SEA Regulations (S.I. No. 436 of 2004), as amended. Based on the requirements of legislation and guidance the SEA is carried out in a series of stages. The SEA is also informed by an assessment under Article 6 of the Habitats Directive (Section 1.3) and the Strategic Flood Risk Assessment (Section 1.4). The integration process is outlined below.

STAGES IN PLAN MAKING PROCESS	PLAN	SEA	SFRA	AA
Pre-review	Preparation of Issues Papers	SEA mandatory for LAP/ screening not applicable	-	-
Initial public consultation	Publication of (a) statutory notice of intention to make MD LAP/5 th	Scoping of the Environmental Report, in consultation with environmental authorities		Notify consultees that an assessment under Art 6 will be undertaken

STAGES IN PLAN MAKING PROCESS	PLAN	SEA	SFRA	AA
	variation	noting SFRA to be undertaken		
Preparation of Documentation	Preparation of draft Plan	Preparation of Environmental Report. The process will be iterative, amendments will be made to the plan by SEA where required, and record made of same	Inform plan making process, will be iterative	An AA will be drafted in parallel with SEA and Plan. The process will be iterative, amendments will be made to the plan where required, and record made of same
Public consultation	Public display of draft plan and consideration of Submissions	Public display of ER/SFRA and consideration of submissions		Public display AA and consideration of submissions
2nd public display (if required)	Display of any material amendment(s) to draft plan	Identify any significant environmental effects resulting from material amendments		Identify significant effects/ adverse effects on the site integrity on European sites resulting from material amendments
Completion of process	Adoption of plan	Making specified information available in the form of a SEA Statement	Finalise SFRA	Provide information on the AA
Post-plan Adoption	Implementation	Monitoring of significant environmental effects		Monitoring, if required/appropriate

The first stage in the SEA process was scoping - subsequently outlined in a SEA Scoping Report produced in January 2022. The report was sent to statutory consultees. The findings and comments received as part of the scoping process were included and are addressed in this ER.

The aim of this SEA ER is to now identify the likely significant effects on the environment as a result of implementing the proposed amendment no. 1 to the Tralee MD LAP, develop mitigation measures to reduce/remedy these impacts if required and identify monitoring procedures to monitor the impacts of the Plan. The Environmental Report is being made available at the same time as the draft amendment to the Tralee MD LAP and consultation is taking place with the relevant authorities and the public prior to adoption.

This Environmental Report complies with the requirements of the Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive) as implemented in Ireland through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004), as amended.

Information in this ER is divided as follows:

Information to be included in an Environmental Report as defined in Schedule 2B of SI 436 of 2004	Relevant Chapter in this Environment Report
<i>(a) an outline of the contents and main objectives of the plan and relationship with other relevant plans</i>	Chapter 2
<i>(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan</i>	Chapter 4
<i>(c) the environmental characteristics of areas likely to be significantly affected</i>	Chapter 4
<i>(d) any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive;</i>	Chapter 4
<i>(e) the environmental protection objectives, established at international, European Union or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;</i>	Chapter 6
<i>(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors</i>	Chapter 6
<i>(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;</i>	Chapter 7
<i>(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information</i>	Chapter 3
<i>(i) a description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan</i>	Chapter 8
<i>(j) A non-technical summary of the information provided under the above headings.</i>	Non-technical summary.

Chapter 3 Alternative Development Scenarios

The development and assessment of alternatives is a legal requirement under the SEA Directive. Alternatives must be realistic, reasonable, viable and implementable. In the context of this plan, the alternative scenarios to be considered are limited by the hierarchical policies/objectives. Scenarios can only relate to alternatives within the Masterplan amendment plan area. Other limits on alternative options are outlined. Two alternatives are subsequently considered.

To assess the likely significant impacts of each alternative on the environment, a matrix is used. The matrix assesses the alternatives against the established environmental objectives outlined in Chapter 6. Further to the assessment process Alternative 2 is deemed the preferred option. This option seeks to utilise the masterplans as an effective planning tool to drive future development in Fenit village in line with the vision for this settlement as set out in the Tralee MD LAP.

Chapter 4 State of the Environment-Existing Environmental Baseline in the Tralee MD Area.

This chapter includes an overview of the baseline environment of the proposed amendment plan and surrounding area. As required this includes a description of the state of the environment at present; discussion of the key problems/ issues currently being faced in the area; and a description of the expected evolution of the environment should the plan not be implemented, i.e. in the absence of the plan. The geographical location of the plan area is highlighted in maps in Section **Error! Reference source not found.** of this document.

The key environmental baseline data for the plan area is under the parameters outlined in Schedule 2B (f) of SI No 436/2004. They are:

- population/human health,
- biodiversity (flora, fauna),
- geology/soils,
- water,
- air quality/
- climatic factors,
- material assets
- cultural assets (architecture, archaeology),
- landscape, and
- the interrelationship between the above factors

Chapter 5 Proposed Environmental Objectives, Targets and Indicators for the Strategic Environmental Assessment

SEA uses a combination of objectives, targets and indicators to describe and monitor change and predict impacts of proposed plans and programmes on the environment. Objectives and targets set aims and thresholds that should be taken into account when assessing the impact of proposed plans on the environment. The final determination of a potential set of indicators for this SEA was subject to review further to the SEA scoping with statutory consultees undertaken in January 2022 and was determined by the availability of existing data, relevance, monitoring programmes and the scale of application. They are summarised below in Table 1.

Chapter 6 Likely Significant effects on the Environment from the Proposed Amendment no. 1 to the Tralee Municipal District Local Area Plan

This section gives an overview of the likely significant effects of implementing the proposed amendment no. 1 to the Tralee MD LAP. It includes an assessment of the proposed masterplan, additional supporting text and new objective to be inserted into Tralee MD LAP. By evaluating the proposed additions to the Tralee MD LAP the likely significant effects of implementing the proposed amendment to the Tralee MD LAP are identified and allows for mitigation measures to be incorporated to avoid, reduce, repair or compensate. Mitigations measures are discussed in more detailed in Chapter 7. In assessing the likely significant effects of the proposed amendment no. 1 to the Tralee MD Plan the full range of effects as set out in Annex I of the SEA Directive are considered. The screening of the new objective and text proposed in the Tralee MD plan are provided in Appendix 2.

Chapter 7 Mitigation Measures

Mitigation measures is provided in this chapter. In relation to mitigation, it should be noted that certain terminology has been already integrated into the Tralee MD Local Area Plan to ensure protection of the environment. *Sustainable/Sustainable development* implies adherence to the principles of protection of the environment further to the SEA/AA processes. The principles of *sustainable development* underpin the original drafting of the Local Area Plan and this is prefaced at the start of the document, specifically in Section 1.5. The terms *at appropriate locations* and *subject to environmental assessment* are integrated into the Tralee MD LAP. The LAP already includes measures to protect the natural and cultural heritage and social fabric of the plan area by ensuring all policies and objectives comply with the principles of proper planning and sustainable development and the relevant County Development Plan.

Chapter 8 Monitoring Measures

Under Article 10 and Section (i) of Schedule 2B of the SEA Regulations, monitoring is required in order to identify at an early stage any unforeseen adverse effects caused by the Plan and any amendment to it. Monitoring will focus on aspects of the environment that are likely to be significantly impacted by the proposed amendment. Indicators and targets have been identified for the main environmental issues in the study area as outlined in Chapter 4. The indicators chosen are at a level, which is relevant to the proposed amendment, and are collated and reported on by a variety of Government Agencies, such as EPA, OPW, NPWS and different sections within Kerry County Council. The frequency of monitoring is set by relevant legislation. Monitoring measures are summarised below in Table 1.

Chapter 9 Next Stage

Ongoing consultation forms an integral part of the SEA methodology. The consultation period will run from Wednesday 6th April to Wednesday the 18th May both dates inclusive. Submissions, observations or comments on this ER are welcomed and can be on line at <https://consult.kerrycoco.ie/> or by post marked **Fenit Village Design Masterplan** to the following address: **Senior Planner, Planning Policy Unit, Kerry County Council, Rathass, Tralee, Co. Kerry, V92 H7VT.**

Table 1: EOs and associated Targets, Indicators and Monitoring used in this SEA.

SEA Topic	Draft Objective	Draft Target	Draft Indicators	Monitoring Data Available & Who/Where
Population	P1: Guide the future development of the Plan area in a sustainable manner that reflects the existing character and amenities of the area and improves the quality of life for the existing and future populations.	That populations in the Plan area have access to high quality residential, amenity and public infrastructure with sustainable travel patterns	<ul style="list-style-type: none"> • Provision of public facilities over lifetime of the plan – amenity, recreational/green infrastructure • Design statements/public realm plans undertaken • Master Plans completed • Social Housing provided • Travel patterns within Plan area • Population of settlement over lifetime of MD LAP • Quantity of development on central sites over lifetime of the plan. 	Yes – information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; MD office/r, KCC; Capital Infrastructure Unit (CIU), KCC; Irish Water and CSO data.
Human Health	HH1: Protect the public from threats to health and wellbeing across the functions of relevance to the Plan area	That the quality of the local environment that is governed by the Plan protects the health and wellbeing of the population	<ul style="list-style-type: none"> • As above – equally applicable to human health • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc for discharges (including under the Urban Waste Water Directive for Tralee WWTP), noise, odour and/or air quality • Health Impact Assessments/relevant sections of EIA submitted with planning applications 	Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; MD office/r, KCC; Capital Infrastructure Unit (CIU), KCC; Irish Water and CSO data. Also, Enforcement & Environment Sections KCC/EPA
Biodiversity	B1: Protect biodiversity	That biodiversity is integrated	<ul style="list-style-type: none"> • Sustainable 	Yes- information available from

SEA Topic	Draft Objective	Draft Target	Draft Indicators	Monitoring Data Available & Who/Where
(Flora/Fauna)	including ecosystem services	into all decision making across the functions of the Plan.	<p>integration/provision of green infrastructure and blueways</p> <ul style="list-style-type: none"> • Compliance of plans/projects/activities originating from the Plan with Article 6 of the Habitats Directive • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc for discharges (including under the Urban Waste Water Directive for Tralee WWTP) • Landscaping plans for developments – native species/ecological networks/planting for pollinators • Ecological reports submitted with planning applications • Invasive species management plans 	<p>variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; Environmental Assessment Unit (EAU); MD office/r; Irish Water.</p> <p>Also, Enforcement & Environment Sections KCC/EPA</p> <p>IFI and NPWS data also available.</p>
Geology/Soil	S1: Protect soils against pollution, and prevent degradation of the soil resource	That the soil/geology and the geological heritage of the Plan area is protected	<ul style="list-style-type: none"> • % change of land use in settlements in the plan area • Impacts to GSC sites from development • Quantity of brownfield/infill sites developed • Geological reports/relevant sections of EIA submitted with planning applications. 	<p>Yes - information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC.</p> <p>GSI data also available.</p>
Water	W1: Ensure that the status of waterbodies is protected,	That the functions governed by the LAP support compliance	<ul style="list-style-type: none"> • Compliance with existing 	<p>Yes- information available from variety of sources including</p>

SEA Topic	Draft Objective	Draft Target	Draft Indicators	Monitoring Data Available & Who/Where
	maintained and improved in line with the requirements and implementation plans of the WFD	with the objectives of the WFD	<p>legislation/regulations/conditions for relevant licences, permits etc for discharges</p> <ul style="list-style-type: none"> • Provision of approved WWTP in Fenit • Relevant reporting from the WFD including reporting on AFAs identified in the plan • Compliance of plans/projects/activities originating from the MD plan with Article 6 of the Habitats Directive • Water/hydrogeology reports/relevant sections of EIA submitted with planning applications 	<p>Forward Planning Unit & Development Management Unit, KCC; Environmental Assessment Unit (EAU) and Irish Water.</p> <p>Also, Enforcement & Environment Sections KCC/EPA</p> <p>Also, data available from WFD/LAWCO/EPA</p> <p>IFI and NPWS data also available.</p>
Air Quality	AQ1: Protect local air quality from emissions that are harmful to human health and the local environment	That the quality of the local environment governed by the functions of the LAP protects local air quality	<ul style="list-style-type: none"> • Compliance with existing legislation/regulations/conditions for air quality • Traffic patterns within the Plan Area • Integration/provision of green infrastructure • Quantity of development sites developed • Air quality/emissions/odour reports/relevant sections of EIA submitted with planning applications 	<p>Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC.</p> <p>Also, Enforcement & Environment Sections KCC/EPA</p>
Climatic Factors	C1: Ensure the integration of Climate action - mitigation and adaption in to Plan	That mitigation and adaptation to climate change inform the functions/decision making governed by the LAP	<ul style="list-style-type: none"> • % of key sites developed • FRA reports undertaken • Implementation of SuDS & 	Yes- as above

SEA Topic	Draft Objective	Draft Target	Draft Indicators	Monitoring Data Available & Who/Where
			<p>similar technologies</p> <ul style="list-style-type: none"> • Integration/provision of green & blue infrastructure • Population of Fenit over lifetime of MD LAP • Traffic patterns within the Plan Area • Renewable energy projects • Impacts on natural carbon sink (eg peat soil) • Provision of greenways/walksways/cycle ways • Implementation of <i>Smarter Travel</i> initiatives 	
Material Assets	M1: Protect the material assets of the Plan while optimising new assets to match proposed growth and sustainable development.	That the Plan promotes sustainable development that matches existing and new infrastructure with the proposed population growth in the Plan area.	<ul style="list-style-type: none"> • Completion of infrastructure projects identified in the Plan • Growth in settlement with sufficient waste water infrastructure as per the Core Strategy • Provision of public facilities over lifetime of the plan – amenity, recreational/green infrastructure • Masterplan completed and taken up • Quantity of sites developed 	Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; MD office/r; Broadband Officer, KCC; Operational Section, KCC, KCC NRDO; Irish Water and CSO.
Cultural Heritage	CH1: Protect the cultural heritage of Plan area	That protection of the Plan's cultural heritage informs decision making.	<ul style="list-style-type: none"> • Design statements/public realm plans undertaken • Masterplan completed and taken up 	Yes- information available from variety of sources including Forward Planning Unit & Development Management

SEA Topic	Draft Objective	Draft Target	Draft Indicators	Monitoring Data Available & Who/Where
			<ul style="list-style-type: none"> Archaeological Impact Assessments, and/or archaeological investigations undertaken Architectural Impact Assessments/Surveys undertaken for PS/ACAs Number of literary, musical, artistic and other cultural initiatives undertaken in the Plan Area 	<p>Unit, KCC; EDU (Economic Development Unit) KCC; Environmental Assessment Unit (EAU); MD office/r; Conservation Officer and County Archaeologist, KCC.</p> <p>Also, Tourism Office, Arts Office, KCC and data from Fáilte Ireland/OPW/NPWS/KCC and Fáilte Ireland WAW monitoring data.</p>
Landscape	L1 Protect the landscape of the Plan area	That landscapes identified in the Plan area, including local urban townscapes and streetscapes, are protected and enhanced by good design principles.	<ul style="list-style-type: none"> Design statements/public realm plans undertaken Village Renewal schemes/projects undertaken Visual Impact Assessments/relevant sections of EIA submitted with planning applications Architectural Impact Assessments undertaken for PS/ACAs 	Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; Conservation Officer, KCC.
Flooding	F1 Protect the public and infrastructure from inappropriate development in areas at risk of flooding	That sustainable flood risk management practices are implemented in the Plan area in adherence to DOEHLG's <i>Guidelines on Flood Risk Management</i>	<ul style="list-style-type: none"> Flood Risk Assessment reports submitted with planning applications in compliance with the SFRA Implementation of SuDS & similar technologies Integration/provision of green & blue infrastructure over the lifetime of the plan 	<p>Yes- information available from Forward Planning Unit & Development Management Unit, KCC.</p> <p>Also, CFRAM data and OPW.</p>

1. INTRODUCTION

1.1. Background

Kerry County Council has commenced drafting amendment no. 1 to the Tralee Municipal District Local Area Plan. The amendment relates to a proposed Masterplan for two sites in Fenit village, a coastal settlement along the western coastal boundary of the Tralee MD LAP.

The Tralee Municipal District Local Area Plan 2018-2024 (Tralee MD LAP) was made in 2018 in accordance with the requirements and provisions of the Planning and Development Act 2000, as amended. The Tralee MD LAP sets out a comprehensive local planning framework with clear policies and land use zonings and objectives for the settlements in the Municipal District area.

Kerry County Council has determined the need to develop and deliver a masterplan for the most effective presentation, management and development of two sites in the village of Fenit, which is proposed to be adopted as amendment no. 1 to the Tralee MD LAP.

Amendment no.1 to the Tralee MD LAP has two principle elements:

- 1 Incorporation of the Fenit Village Design Masterplan and
- 2 The inclusion of additional supporting text and objective no. FT-GO-08.

The Masterplan relates to two key sites in the village of Fenit: the greenfield site including O'Sullivan's Hotel (the Central Core) and the seafront public realm centred on the playground, railway terminus and entrance to the beach (the Terminus). The localised re-alignment of the R558, also forms a key consideration of this masterplan.

These sites are considered key to the consolidation and reinforcement of the urban potential of Fenit, which has been identified as a location suitable for population growth in the Tralee Municipal District Local Area Plan 2018-2024. The Masterplan seeks to create a vibrant place for people to meet, recreate and connect with their area and to guide development of the village into the future in a sustainable manner that takes cognisance of the heritage and landscape assets of the village.

Additional text as follows is proposed to be included in Section 3.4, page 76 of the Tralee MD LAP in addition to new objective FT-GO-08 as follows:

Fenit Village Design Masterplan

Fenit Village Design Masterplan, sets out proposals for the redevelopment of the core of the village, primarily from the central green area to the beachfront. The Masterplan provides for the development of two key sites in the village: the greenfield site including O' Sullivan's Bar (the Central Core) and the seafront public realm centred on the playground, greenway terminus and entrance to the beach (the Terminus) and the realignment of the public road (R558) serving the port.

New objective FT-GO-08;

Facilitate the delivery of the Fenit Village Design Masterplan to guide the development and prosperity of the area in a sustainable manner.

1.2. Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is a systematic and effective process for ensuring that environmental issues are taken into account at every stage in the preparation, implementation, monitoring and review of plans, programmes and strategies. It is a process of evaluating the environmental consequences of a proposed policy, plan or programme (P/P).

SEA is governed by the European Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes (P/P) on the Environment (commonly known as the *SEA Directive*). It was transposed into Irish legislation by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435/2004), amended in Regulations 2011 (S.I. No 200 of 2011) and the Planning and Development (Strategic Environmental Assessment Regulations 2004 (SI 436/2004), amended in Regulations 2011 (S.I. No 201 of 2011) and Planning and Development (Amendment) Regulations 2011 (SI 262 of 2011). The SEA process consists of a series of steps or stages which are:

- **Screening** of P/P to establish whether it must undergo an SEA;
- **Scoping** of the details to be provided in the Environmental Report (ER), in consultation with environmental authorities;
- **The Environmental Report (ER)** containing the findings of the assessment on the likely significant effects on the environment of the P/P;
- **Consultation** on the Draft Plan and associated Environmental Report;
- **An SEA Statement** - identifying how environmental considerations and consultations have been integrated into the Final Plan; and
- **Monitoring Programme** of the significant environmental effects of the P/P.

Pursuant to Article 14(B) of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI 436 2004), as amended in Regulations 2011, (S.I. No. 201 of 2011) and Article 9(1) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI 435/2004), as amended in Regulation 2011, (S.I. No. 200 of 2011), KCC is required to carry out a SEA for an amendment to a Local Area Plan further to thresholds listed in the above regulations. As the Tralee MD area exceeds those thresholds (5,000 persons or more) screening was therefore deemed unnecessary as a mandatory SEA was required. The SEA proceeded straight to scoping.

The scoping process was outlined in a SEA Scoping Report produced in January 2022. The scoping report was sent to statutory consultees as required under aforementioned regulations. Comments received, discussed further below, have informed this report which is the next stage in the SEA process – the Environmental Report (ER) of the Proposed Amendment No. 1 to the Tralee MD plan.

1.3. Article 6 of the Habitats Directive 92/43/EEC

It should also be noted that in addition to the SEA, the proposed amendment to the Tralee MD LAP was assessed under Article 6 of the Habitats Directive 92/43/EEC and was informed by the process where appropriate. A Natura Impact Report accompanies the amendment.

1.4. Strategic Flood Risk Assessment (SFRA)

The Tralee MD LAP was subjected to a SFRA which ran concurrently with the drafting of the original Tralee MD LAP, the SEA and AA. The SFRA is essentially an assessment of the flood risk of MD area and was prepared in accordance with requirements of the DoEHLG and OPW Planning 2009 Guidelines '*The Planning System and Flood Risk Management*'. The purpose of a SFRA under the DEHLG (2009) guidelines is, "to provide a broad (area-wide) assessment

of all types of flood risk to inform strategic land-use planning decisions. SFRAs enable the Local Authority to undertake the sequential approach, including the Justification Test, allocate appropriate sites for development and identify how flood risk can be reduced as part of the development plan process." The SFRA therefore informed policy formulation and any land zoning decisions in the original drafting of the Tralee MD LAP. The Masterplan does not provide for the re-zoning of lands. The SFRA prepared for the Tralee MD LAP will continue to provide guidance to ensure sustainable flood risk management principles underpin planning decision making in the LAP over its lifetime.

1.5. Proposed Amendment (Masterplan) area

1.5.1. Masterplan Geographical Area

The area incorporated into the Masterplan is outlined in **Error! Reference source not found.** and **Error! Reference source not found.**

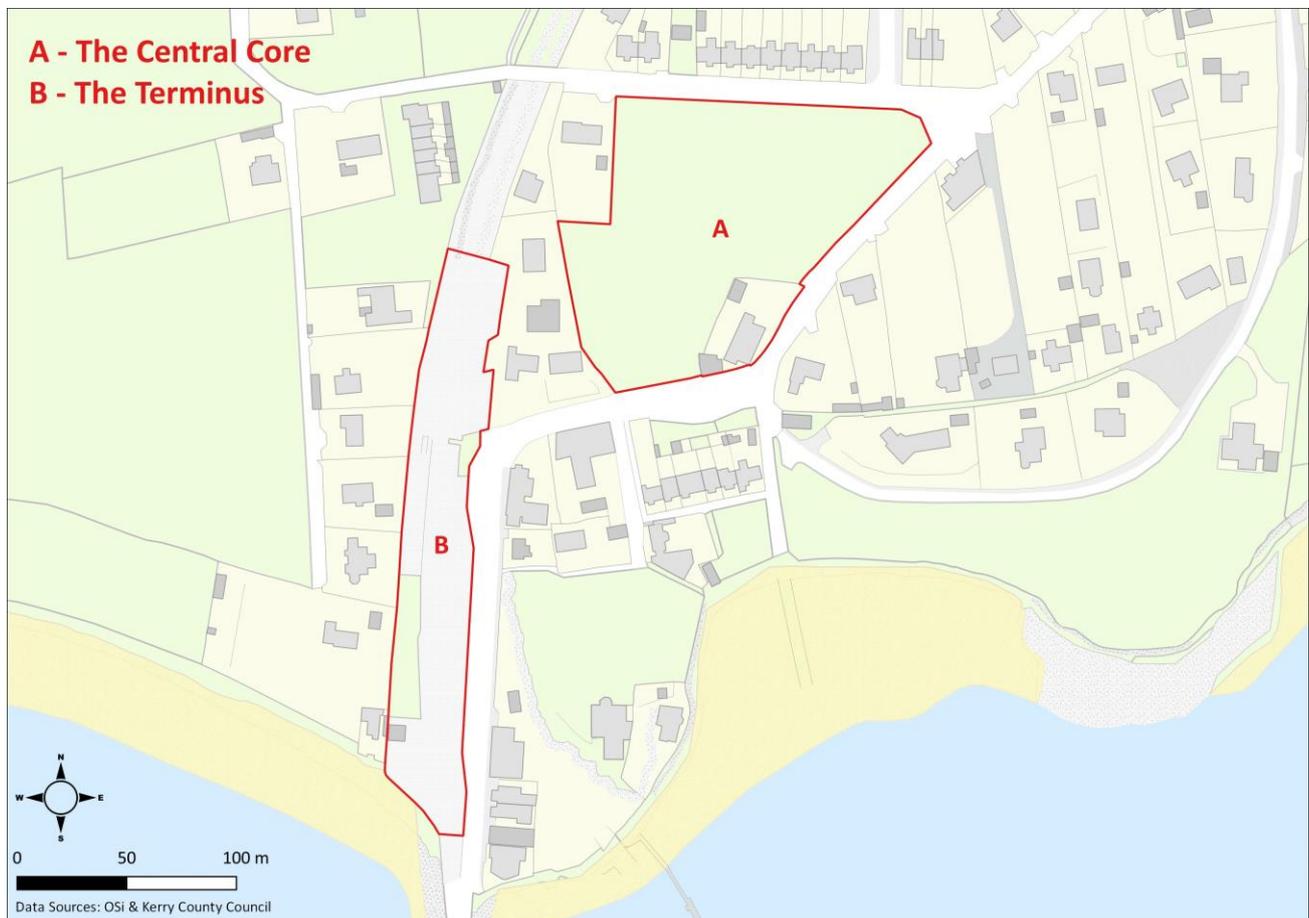


Figure 1-1 Location of sites in the Fenit Masterplan- proposed amendment no. 1 to the Tralee MD LAP 2018-2024

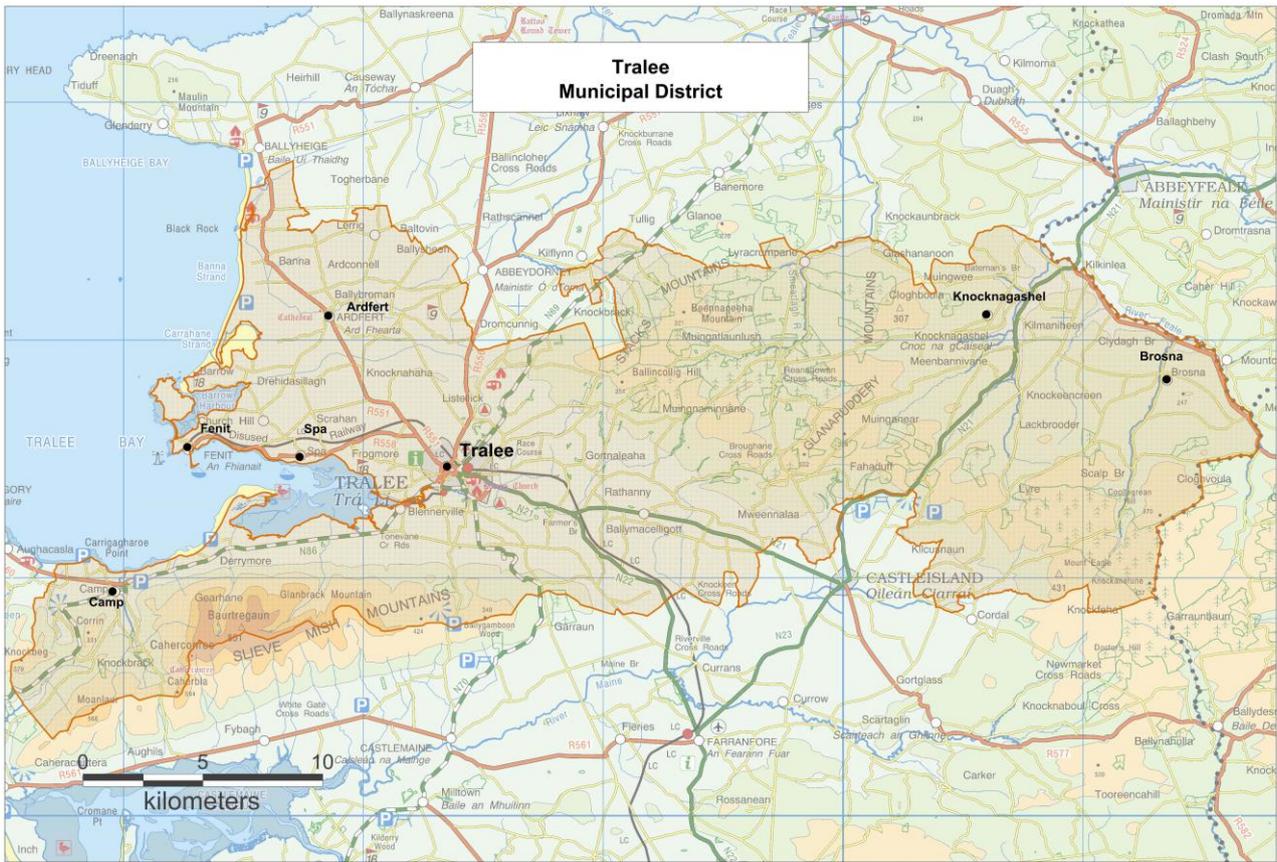


Figure 1-2 Tralee Municipal District Local Area Plan area highlighting location of Fenit on western coast of Tralee MD

1.5.2. Purpose of the Tralee Municipal District LAP

The Tralee MD LAP is the principal statutory planning instrument for setting out a balanced understanding, vision and spatial strategies at the local level. The purpose of the LAP is to guide future plan led coordinated sustainable development within the towns and villages of the Tralee MD. It includes provisions in relation to land use management, community facilities and amenities, transport and infrastructure, urban design, heritage and the environment.

The Tralee MD LAP provides guidance as to how the development can be achieved, what new developments are needed, where public and private resource inputs are required and guidance for development proposed in the plan area. The Masterplan which will be incorporated into the Tralee MD LAP as amendment no. 1 must be read in conjunction with the Tralee MD LAP and the Kerry County Development Plan 2015-2021 and the Draft Kerry County Development Plan 2022-2028 and any amendment thereof.

1.6. ER Report

The remainder of this report is structured as follows:

Section	Heading
2	Planning Policy Context
3	Methodology for the SEA of the Proposed Amendment no. 1 to the Tralee MD LAP
4	Alternative Development Scenarios
5	State of the Environment – Existing Environmental Baseline in the Tralee MD Area
6	Proposed Environmental Objectives, Targets and Indicators for the SEA
7	Likely Significant Effects on the Environment from the Proposed Amendment no. 1 to the Tralee MD LAP
8	Mitigation Measures
9	Monitoring Measures
10	Next Stage

2. PLANNING POLICY CONTEXT

2.1. Introduction

The Tralee MD LAP is located within a clear hierarchy of spatial planning policy. This hierarchy of strategies, policies, plans follows a format which commences with high level International and/or EU documents linking progressively downwards into the site specific local plans and policies. This is illustrated in **Error! Reference source not found.** below. A MD LAP must therefore adhere to policy and strategic options which are pre-determined by higher level plans. Relevant international and national policies, plans and programmes are set out in Appendix 1.

The SEA Directive requires that the SEA process include an assessment of other Plans/Programmes (P/Ps) related to the P/P being assessed (Annex I (a) and Schedule 2B of S.I. 436 of 2004). As part of the SEA process the Tralee MD LAP is established with regard to other plans and programmes that have been adopted at International, European, National and Regional level. The purpose of this review is to take into consideration the legislative and policy framework within which the Tralee MD LAP sits and must conform.

The Tralee MD LAP forms a fourth tier to this spatial planning decision making hierarchy.

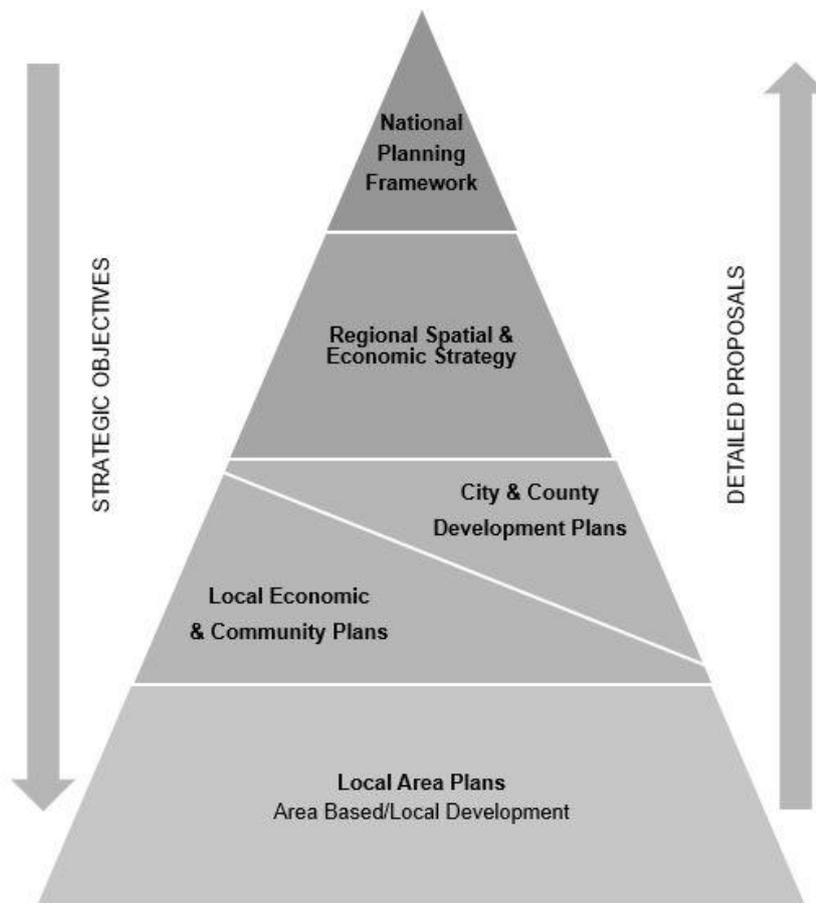


Figure 2-1 Diagrammatic flow chart illustrating the hierarchical relationship between the Local Area Plan and the wider spatial context of land use and spatial plans

2.2. The National Planning Policy Context

The Municipal District Local Area Plan is part of a systematic hierarchy of land use plans and spatial plans including *Project Ireland 2040 – National Planning Framework (Feb 2018) (NFP)* and the *Regional Spatial and Economic Strategy for the Southern Region* and the Kerry County Development Plan 2015-2021 and Draft Kerry County Development Plan 2022-2028 as shown above in Figure 2.1. These plans provide a broad canvas to steer sustainable growth and prosperity of the region and County, through the formulation of public policy integrating land-use, transport, economic growth and investment.

As shown in Figure 2.1 MD LAPs are located towards the end of the overall spatial planning decision making hierarchy. The original drafting of the Tralee Municipal District Local Area Plan was therefore guided by the *National Strategic Outcomes* of the NFP including the following *Shared Goals*:

1. Compact Growth
2. Enhanced Regional Accessibility
3. Strengthened Rural Economies and Communities
4. Sustainable Mobility
5. A Strong Economy, supported by Enterprise, Innovation and Skills
6. High-Quality International Connectivity
7. Enhanced Amenities and Heritage
8. Transition to a Low Carbon and Climate Resilient Society
9. A Sustainable Management of Water, Waste and other Environmental Resources
10. Access to Quality Childcare, Education and Health Services

The NFP recognises rural decline and to address it a significant proportion of national population and economic growth will be targeted at building up the fabric of smaller towns, villages and rural areas. An emphasis is therefore placed on redeveloping derelict and under-utilised lands inside small towns and villages in the Tralee MD LAP. Priority is given to renewing and developing existing built up areas rather than continual expansion and sprawl of cities and towns.

The enhanced development of Fenit through amendment no. 1 sits within several of the National Strategic Outcomes contained in the National Planning Framework as follows:

1. **NSO1 Compact Growth:** It is anticipated that Fenit will experience growth in the coming years having regard to the policies and objectives set out in the Tralee Municipal District Local Area Plan 2018-2024 such as the population target. The masterplan seeks to create a more compact and attractive village.
2. **NSO4 Sustainable Mobility:** the promotion of smarter travel initiatives through the development of the Tralee-Fenit Greenway and the ancillary recreational and supporting infrastructure for the Greenway as set out in this masterplan.
3. **NSO6 High quality:** international connectivity, improving access to Fenit Port through the localised realignment of the strategically designated R558.
4. **NSO7 Enhanced Amenity and Heritage:** The masterplan sets out significant proposals for enhanced public realm development at the seafront in the village centre to maximise the existing recreational opportunities that the village provides and new recreational infrastructure such as the Tralee-Fenit Greenway (due for completion in Summer 2022), the proposed Tralee-Fenit Blueway and new diving boards will bring to the village.
5. **NSO8 Transition to a low carbon and climate resilient society:** the development of ancillary and recreational infrastructure to compliment and support the Tralee-Fenit Greenway is set out in the Masterplan.

2.2.1. Local Economic and Community Plan (LECP) 2016-2022

Further to the *Local Government Reform Act 2014* and *Putting People First: Action Programme for Effective Local Government*, economic, social and community development has become a key role of Local Government. The main vehicle to achieve the aims of this policy is the Local Economic and Community Plan (LECP). LECPs not sit alongside the County Development Plans (CDPs) providing a stronger and clearer role for local government in economic and community development. This framework underpins the vision set out in the *Action Programme for Effective Local Government*.

The Kerry LECP was published by KCC in 2016. It sets out the objectives and actions needed to promote and support the sustainable economic and local community development of the County from 2016 to 2022. The aim is to focus the role of Local Government, State Agencies, Community Sector, Local Development Groups and other bodies that are involved in the development of County Kerry in a coherent manner. The LECP is guided by the Local Community Development Committee in co-operation with the Economic Development and Enterprise Strategic Policy Committee of KCC. The LECP is consistent with the KCDP Core Strategy and the Regional Planning Guidelines. The Tralee MD LAP is below the LECP and is led by several of the policies and objectives of this strategic overarching plan. In effect, the KLECP 2016-2022 and KCDP 2015-2021 had significant influence on the Tralee MD LAP.

2.2.2. Regional Planning and Economic Strategy for the Southern Region 2020 RSES

The Fenit village design masterplan aligns with key elements of RSES including: enhancing regional connectivity, the RSES provides for upgraded transport links in the Region and seeks to optimise the region's international connectivity. The R558 Tralee to Fenit Road has been specifically designated a strategic link under this plan and its upgrade will assist in securing the position of Fenit port. The RSES also seeks to promote the provision of sustainable mobility, through walking and cycling and recreational assets. The proposed public enhancement scheme and the development of supporting infrastructure to support the Tralee-Fenit Greenway village will assist in the achievement of increased sustainable mobility and the transition to a low carbon society.

2.3. Draft Kerry County Development Plan 2022-2028

The Draft Fenit Village Design Masterplan also aligns with the main goals set out in the Draft Kerry County Development Plan 2022-2028 including the development of a vibrant compact settlement providing a high quality of life for residents and visitors, the enhancement of physical connectivity through the re-alignment of the of the R558, the enhancement of natural and built environment through the development of a public realm enhancement scheme to complement existing and new proposed recreational infrastructure in the village and the attainment of the low carbon and climate resilient society.

2.4. Tralee Municipal District Local Area Plan 2018-2024

As shown in Figure 2.1 the MD LAP at its tier of decision making will influence a range of locally led environmental issues within the geographical range of the plan area. In order to develop policies and objectives that are appropriate to the needs and future potential of the settlements identified within the municipal district area, Municipal District Local Area Plans are framed by the overall development strategy outlined in the settlement hierarchy set out in the Kerry County Development Plan 2015-2021. The KCDP in turn has been influenced by the aforementioned national and regional strategies.

The proposed amendment no. 1 incorporating Fenit Village Design Masterplan and allied supporting objective aligns and compliments the vision and objectives set out in the Tralee MD LAP specifically objectives:

FT-I-01 which seeks to upgrade the strategically designated R558 Tralee to Fenit Road in order to support access to and the development of Fenit Port.

FT-TE-02 which seeks to make provision for the environmentally sustainable expansion of the village centre, retail, service uses, and amenity space while protecting features of biodiversity and cultural importance.

2.5. Overall Vision and Strategic Issues Identified in the Tralee MD Plan

The Tralee MD LAP's presents a key vision for the MD as follows:

'Building on their unique characters and strengths, Tralee Municipal District's settlements will be sustainable, vibrant, attractive, well connected places offering a quality of life that people will want to live and work in, conduct business in and visit now and into the future'.

In aiming to achieve this vision a number of key strategic issues for the area have been identified. They are detailed in Section 2.13 of the plan and are listed in brief below:

- The reinforcement of the social and economic strength of the area,
- The continuing development of Tralee in its role as capital of the region,
- The establishment of the region as a preferred destination for FDI,
- The increase in connectivity of the municipal district,
- The development of the technological capacity within the area,
- The sustainable management of the land resource in the Municipal District settlements, and
- Provide opportunities for residential development to cater for all sectoral demands in the municipal district.

2.5.1. Overall Development Strategy of the Tralee MD

The overall development strategy of the MD is outlined in Section 2.1.4 of the plan. It recognises the importance of the growth of the towns and villages identified in the settlement hierarchy of the KCDP 2015-2021 in achieving the aims and objectives of the MD plan. This is a major challenge for the MD, particularly as rural areas outside of settlements have continued to attract a strong demand for one off rural type housing. The impact of low growth rates for the main towns and villages and the longer term social, economic physical and environmental implications for the Tralee Municipal District are highlighted. The development and sustaining of a critical population mass is identified as vital to the sustainability of the settlements in the Tralee Municipal District. It is the aim of the settlement strategy as set out in section 3.1 of the KCDP 2015-2021 to:

- support the sustainable development of the Linked Hub of Tralee-Killarney to meet the population target by 2021. This implies that Tralee is the centre of sustainable economic growth in the MD,
- promote the growth and sustainable development of Ardfert as a district town, and
- promote Fenit as a location suitable for population growth further to the construction and operation of an approved waste water infrastructure.

The MD plan envisages that the development of these settlements will allow for the provision of local services, by encouraging and facilitating population growth at a scale, layout and design that reflects the character of those settlements, where water services infrastructure is likely to be available or there are plans in place to develop such infrastructure. Strategic development objectives are listed in the plan to further this aim.

2.5.2. Amendment 1 to the Tralee MD LAP

The land use zoning objectives and activities for lands in Fenit are set out in the Tralee Municipal District Local Area Plan 2018-2024 (Tralee MDLAP). The Proposed Amendment no. 1 (draft Masterplan) aligns with the vision and Strategic Goals as set out in Tralee Municipal District LAP and the Draft County Kerry Development Plan 2022-2028. Section 2 of the Tralee

MDLAP outlines its focus on the renewal and revitalisation of town and village centres and sets out its vision and objectives for the development of vibrant, attractive and viable settlements within the plan area to attract new people, increase population and provide a range of services and facilities to support growth and tourism, together with cycling and walking opportunities. The Draft Masterplan outlines potential future arrangements for the existing car parking site as a significant and attractive public realm space and the potential for mixed use development including residential opportunities on the central core site in a manner which is consistent with the established land use zoning objectives for these lands. The development of these two key sites is clearly highlighted and supported generally within the shared goals and overall strategic development objectives for settlements set out within Section 2 of the Tralee Municipal District Local Area Plan 2018-2024.

The Draft Masterplan provides for a schematic indication of two options for the localised re-alignment of the R558 route. The R558 has been included and highlighted in the Regional Spatial and Economic Strategy for the Southern Region, Kerry County Development Plan 2015-2021, the Draft County Development Plan 2022-2028 and Tralee MDLAP as a strategic piece of infrastructure necessary to increase connectivity in the region and internationally through Fenit Port.

All of these higher level plans were subject to both SEA and AA. While the Draft Masterplan does set out a spatial framework and design principles for two key sites in the village which will act as a guide for the future development of Fenit, the draft Masterplan does not provide for the re-zoning lands.

3. METHODOLOGY FOR THE SEA OF THE PROPOSED AMENDMENT NO. 1 TO THE TRALEE MUNICIPAL DISTRICT LOCAL AREA PLAN 2018-2024

3.1. Guidance

The Strategic Environmental Assessment of the amendment no. 1 to the Tralee MD LAP will reflect the requirements of SEA Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment and Irish legislation through the SEA Regulations (S.I. No. 436 of 2004), as amended. In a specific Irish legislative context, the following provide guidance on interpreting the SEA Directive and will inform this SEA:

- *Implementation of SEA Directive 2001/42/EC: Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities*, Department of Environment Heritage and Local Government Guidelines (2004),
- *Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland*, Synthesis Report, Environmental Protection Agency.
- *Strategic Environmental Assessment, SEA Pack*, EPA updated to May 2016 including the Draft Consultation SEA Process Checklist and the EPA SEA Scoping Submission,
- European Communities (Environmental Assessment of Certain Plans and Programmes (Amendment) Regulations 2011, (S.I. No. 200 of 2011), amending the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2001 (S.I. No. 435 of 2004),
- Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (S.I. No 201 of 2011) and Planning and Development (Amendment) Regulations 2011 SI 262 of 2011, amending the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No.436 of 2004).
- EPA Guidance for Integration of Environmental Considerations, updated to 7/2/17
- *Integrating Climate Change into the SEA in Ireland, A Guidance Note*, EPA 2015
- *Developing and Assessing Alternatives in SEA*, EPA 2015
- *Local Authority Adaptation Strategy Development Guidelines*, EPA 2016
- GISEA Manual Improving the Evidence Base in SEA, EPA, 2015

3.2. Key stages in Strategic Environmental Assessment

As discussed, the SEA process consists of a series of steps or stages that need to be undertaken. These are:

- **Screening** of P/P to establish whether it must undergo an SEA;
- **Scoping** of the details to be provided in the Environmental Report, in consultation with environmental authorities;
- **An Environmental Report** - containing the findings of the assessment on the likely significant effects on the environment of the P/P;
- **Consultation** on the Draft Plan and associated Environmental Report;
- **An SEA Statement** - identifying how environmental considerations and consultations have been integrated into the Final Plan; and
- **Monitoring Programme** of the significant environmental effects of the P/P

Based on the requirements of legislation and guidance the SEA will be carried out in the series of stages outlined above. The SEA will be informed by an assessment under Article 6 of the Habitats Directive (Section 1.3) and the Strategic Flood Risk Assessment previously carried out as part of the Tralee MD LAP 2018-2024 (Section 1.4).

This report however specifically addresses step 3 of the above process, the Environmental Report of the SEA for the proposed amendment no. 1 to the Tralee MD LAP 2018-2024.

3.2.1. Scoping

The purpose of scoping in the SEA process is two-fold – to “scope” possible environmental effects of the plan in consultation with key stakeholders. Scoping identifies the likely extent (geographic, temporal and thematic) and level of detail for the environmental assessment and the information to be included in the SEA Environmental Report. Key stakeholders are then consulted with and asked to comment on the key environmental issues and elements of the P/P. Scoping should identify issues that are of most importance so that these can be addressed in more detail and eliminate those that are not of significance. Further to this and under Article 13A(4) of the Regulations SI 436 2004, as amended in Regulations 2011, (S.I. No. 201 of 2011) and DoECLG Circular Letter PSSP 6/2011 dated 26th July 2011 in relation to “*Further Transposition of the EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA)*”, designated environmental authorities were consulted in relation to the scope and level of detail to be included in this Environmental Report. It should be noted that since the original drafting of the above regulations/circular letter there have a number of changes to State Departments. In recent correspondence from the EPA¹, the following authorities were consulted:

- EPA
- Minister for Housing, Local Government and Heritage
- Minister for Agriculture, Food and the Marine
- Minister for Environment, Climate and Communications and Transport
- Minister for Tourism, Culture, Arts, Gaeltacht, Sport and Media
and
- any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, in this instance,
 - Limerick City and County Council
 - Cork County Council and
 - Clare County Council

3.2.1.1. Outcome of the Scoping Exercise

Specific comments made further to the consultation of the SEA Scoping Report, January 2022, are detailed below in Table 3-1.

3.2.2. Environmental Report (ER)

The aim of this SEA ER is to identify the likely significant effects on the environment as a result of implementing the proposed amendment no. 1 to the Tralee MD LAP, develop mitigation measures to reduce/remedy these impacts if required and identify monitoring procedures to monitor the impacts of the Plan. The Environmental Report is being made available at the same time as the draft amendment no. 1 to the Tralee MD LAP and consultation is taking place with the relevant authorities and the public prior to the documents being adopted. Schedule 2B of S.I. 436 of 2004 (as amended) specifically details what information is to be contained in an Environmental Report. Table 3-2 lists the information required and details where this information is contained in this Environmental Report.

¹ Letter from the EPA to the Planning Policy Unit of KCC dated 17th February 2017 further to notice given to the EPA under Section 20(1) of the Planning and Development Act, as amended.

Table 3-1 Comments made from statutory consultees further to consultation on the SEA Scoping Report, January 2022.

Consultee	Comments	Addressed
EPA	<p>Submission provided information on various Guidance and resources available on SEA for the Council's reference. The submission states that KCC should ensure that the amendment aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region.</p> <p>In relation to the provision of critical service the EPA states that infrastructure (drinking water, wastewater, waste) to support current and future development, commitments to support and collaborate with the relevant stakeholders including Irish Water should be considered. Any development proposals and associated population increases associated with the Amendment should be linked to the ability to provide adequate and appropriate critical service infrastructure.</p>	Throughout the ER
Department of Housing, Local Government and Heritage	No response made	N/A
Department of Agriculture, Food and the Marine	<p>Comments from Fisheries Division of Dept. submission states that it is important that there are no impacts on the marine environment. The importance of commercial fishing is highlighted. The evaluation of potential impacts on any commercial sea fishing activities needs to be given consideration as part of any planning/proposal process and during the development process itself.</p> <p>It is imperative that engagement should be sought with the fishing industry and other relevant stakeholders at as early a stage as possible to discuss any changes that may affect them to afford a chance for their input. Fishers' interests and livelihoods must be fully recognised, supported, and taken into account</p>	Throughout the ER. Impacts on the marine environment to be considered in all planning applications proposed. The proposed amendment relates to a masterplan for two sites within Fenit that were zoned for development in the Tralee MD LAP. The existing safeguarding policies on environmental protection implicit in the Tralee MD LAP 2018-2024 still apply.
Department of Environment, Communications and Transport	No response received	N/A
Department of Tourism, Culture, Arts, Gaeltacht, Sports and Media.	No response received	N/A
Cork County Council	No response received	N/A
Limerick County Council	No response received	N/A
Clare County Council	No response received	N/A

Consultee	Comments	Addressed

Table 3-2 Information contained in this draft Environmental Report as per Schedule 2B of S.I. 436 of 2004

Information to be included in an Environmental Report as defined in Schedule 2B of SI 436 of 2004	Relevant Chapter in this Environment Report
<i>(a) an outline of the contents and main objectives of the plan and relationship with other relevant plans</i>	Chapter 2
<i>(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan</i>	Chapter 5
<i>(c) the environmental characteristics of areas likely to be significantly affected</i>	Chapter 5
<i>(d) any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive;</i>	Chapter 5
<i>(e) the environmental protection objectives, established at international, European Union or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;</i>	Chapter 6
<i>(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors</i>	Chapter 7
<i>(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;</i>	Chapter 8
<i>(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information</i>	Chapter 4
<i>(i) a description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan</i>	Chapter 9
<i>(j) A non-technical summary of the information provided under the above headings.</i>	Non-technical summary.

3.3. Integration of the MD LAP Plan, SEA, AA (NIR) and SFRA

This ER was prepared in parallel with the proposed amendment no. 1 to the Tralee MD LAP. The integration of the plan and SEA was achieved through close liaison between personnel delivering the SEA and other assessment. This included the key stages of scoping, the review of the existing situation in the area and the assessment of the proposed amendment. The internal procedures for integrating the plan process with the SEA are outlined in Table 3-3. The appropriate assessment under Article 6 of the Habitats Directive carried out for the proposed amendment and the original SFRA carried out during the drafting of the Tralee MD LAP 2018-2024 also informed the plan as appropriate. Table 3-3 explains the full integration of the original drafting of the Tralee MD LAP the SEA, SFRA and the Appropriate Assessment.

Table 3-3 Integration of SEA, SFRA and AA

STAGES IN PLAN MAKING PROCESS	PLAN	SEA	SFRA	AA
Pre-review	Preparation of Issues Papers	SEA mandatory screening not applicable	-	-
Initial public consultation	Publication of (a) statutory notice of intention to make MD LAP/5 th variation	Scoping of the Environmental Report, in consultation with environmental authorities noting SFRA to be undertaken		Notify consultees that an assessment under Art 6 will be undertaken
Preparation of Documentation	Preparation of draft Plan	Preparation of Environmental Report. The process will be iterative, amendments will be made to the plan by SEA where required, and record made of same	Inform plan making process, will be iterative	An AA will be drafted in parallel with SEA and Plan. The process will be iterative, amendments will be made to the plan where required, and record made of same
Public consultation	Public display of draft plan and consideration of submissions	Public display of ER/SFRA and consideration of submissions		Public display AA and consideration of submissions
2nd public display (if required)	Display of any material amendment(s) to draft plan	Identify any significant environmental effects resulting from material amendments		Identify significant effects/ adverse effects on the site integrity on European sites resulting from material amendments
Completion of process	Adoption of plan	Making specified information available in the form of a SEA Statement	Finalise SFRA	Provide information on the AA
Post-plan Adoption	Implementation	Monitoring of significant environmental effects		Monitoring, if required/appropriate

4. ALTERNATIVE DEVELOPMENT SCENARIOS

4.1. Introduction

The development and assessment of alternatives is a legal requirement under the SEA Directive. “Reasonable” alternatives should be considered “taking into account the objectives and the geographical scope of the plan or programme” (Article 5.1, SEA Directive 2001/EC/42). Recent 2015 guidance from the EPA on alternatives within the SEA process – *Developing and Assessing Alternatives in the SEA* expands further on the requirements of the environmental assessment of alternatives in the plan making process. This guidance has informed the SEA of each MD LAP as discussed below.

4.2. Development of alternatives

As required by SEA, alternatives must be realistic (i.e. able to achieve the plan’s/programme’s objectives), reasonable (i.e. based on socio-economic and environmental evidence), viable (technically and financially feasible) and implementable (realisable within the plan’s/programme’s timeframe and resources). They should represent a range of different approaches within the statutory and operational requirements of a plan. It is important to recognise that reasonable, realistic alternatives that are capable of implementation are shaped by the position of the MD LAPs within the planning policy and decision-making hierarchy outlined in Section 2 of this report. For this plan the following considerations have to be taken into account when formulating alternatives:

- The geographical extent of Fenit village is set and the lands are zoned therein for specific land use related activities as set out under the adopted Tralee MD LAP. There is no scope to propose alternative zonings at the location of the proposed sites the subject of the Masterplan other than what is specifically set out under the Tralee MD LAP.
- Higher level plans set the strategic planning options for the Tralee MD LAP. This specifically relates to the *Core Strategy* and associated settlement hierarchy that has been laid out in Section 3.1 of the KCDP 2015-2021. The Population growth figures were based on the sustainable availability of public infrastructure – waste water and water supply, or plans for same – as informed by the strategic plans of Irish Water.
- In the Tralee MD LAP, Fenit was allocated population growth – as outlined in Table 4-1 below. It should be noted that Fenit is awaiting the construction of an approved waste water facility. Permitted development will be in line with Municipal District LAP, the CDP and the capacity of the wastewater treatment Plant.
- In addition, the NPF seeks to promote the development of new homes in centrally located sites in towns and villages. The lands in Fenit were zoned taking into account the requirements of the NPF and County Development Plan.

Table 4-1 Population allocation for Fenit as outlined in the KCDP 2015-2021 and Tralee MD LAP 2018-2024

Settlement	Population Allocation 2015-2021	Housing Requirement	Census Population 2016
Fenit	122	46	538

The alternative scenarios to be considered in the SEA of this proposed amendment no. 1 to the MD LAP are therefore limited by the zonings set out already in the Tralee MD LAP, and the hierarchical policies/objectives outlined above. Scenarios can only relate to alternatives within limited circumstances. As noted in the EPA’s Guidance on alternatives, the “do-nothing” option is not a viable alternative for a land use plan as there is a statutory requirement to make/and/or

review land use plans, however there is no statutory requirement to adopt the Draft Masterplan in this case. A *business as usual* alternative is considered – essentially the likely evolution of the current state of the environment without the implementation of the proposed amendment no. 1 (i.e. Masterplan) to the Tralee MD LAP. Essentially alternatives in the case of the proposed amendment are limited, given that it is essentially an option of adopting the draft Masterplan or not adopting it. *Business as usual* as an alternative discussed in more detail below.

4.3. Assessment of Alternatives

The alternatives to be compared to each other to determine the scenario with the lowest levels of environmental impact are presented below. The limits on alternative options is outlined in the previous section.

Alternative 1: This alternative looks at a *business as usual* i.e. the likely state of the environment without the adoption of Proposed Amendment no. 1 (Draft Masterplan) into the Tralee MD LAP 2018-2024.

Alternative 2: This alternative looks at the strategic sustainable masterplanning option. This alternative recognises the importance of the masterplanning as a key planning tool in achieving sustainable development.

To assess the likely significant impacts of each alternative on the environment, a matrix is used. The matrix assesses the alternatives against the established environmental objectives outlined in Chapter 6. In assessing the likely significant effects alternatives, the full range of effects including 'secondary, cumulative, synergistic, short, medium and long term, permanent, temporary and negative effects were addressed. The assessment is presented in Sections 0 below.

Further to the assessment process Alternative 2 is deemed the preferred option. This option seeks to utilise masterplanning as a key planning tool to drive development in the village at two key sites in a co-ordinated manner.

4.4. Alternative 1: Business as usual

This alternative would see development proceed when planning permission was sought and funding was made available. While the development would have to comply with the provisions of the Tralee MD LAP 2018-2024 in terms of zonings and objectives an overall co-ordinated vision for the two key sites may not be fully developed. Ultimately this may lead to may lead to piecemeal development over time.

Alternative 2: Business as Usual				
Likely significant Effect	+	-	+/-	0
Environmental Protection Objectives	P1 B1 W1 S1 AQ1 C1 M1 CH1 FI		CH1 M1 L1 HH1	

SEA comments on alternative 1:

- May result in other sites that are zoned in the village being developed first prior to the development of the key sites identified in the Masterplan.
- May result in piecemeal development at either of the two sites without an overall co-ordinated vision, particularly if development progress is impacted negatively by the availability of funding.
- Lack of an agreed Masterplan may inhibit access to certain funding streams.
- The absence of a Masterplan may impact on the buy in from the public to the development proposals set out in the Masterplan.
- The absence of a Masterplan may reduce the public’s opportunity to have their say on the two options proposed for the road re-alignment.

4.5. Alternative 2 Strategic Sustainable Masterplanning.

This alternative puts masterplanning as a key planning tool to the forefront to achieve sustainable development for key sites in Fenit Village. Population growth is targeted as per the agreed population projections set out in the County Plan and Tralee MD LAP and the masterplan supports the achievement and vision of some of the key objectives of the Local Area Plan. Development is focused within zoned and serviced areas in the context of an agreed *Core Strategy*. This alternative sees the strengthening of Fenit, where infrastructure is either available and/or to be made available over the lifetime of the plan, and residential development targeted into designated sites as per the *Core Strategy*. Appropriate environmental protection measures will be implemented for environmentally sensitive areas which will

be under less pressure as consolidated growth in existing built areas/village centre will be encouraged. The masterplanning approach supports and compliments the vision and objectives set out in the Local Area Plan specifically objectives:

FT-I-01 which seeks to upgrade the strategically designated R558 Tralee to Fenit Road in order to support access to and the development of Fenit Port.

FT-TE-02 which seeks to make provision for the environmentally sustainable expansion of the village centre, retail, service uses, and amenity space while protecting features of biodiversity and cultural importance.

Alternative 2: Strategic Sustainable Masterplanning				
Likely significant Effect	+	-	+/-	0
Environmental Protection Objectives	P1 HH1 B1 W1 S1 AQ1 C1 M1 L1 CH1 FI		CH1 L1	

SEA Comments on Alternative 2:

- Provides for an overall vision for key development sites in order to avoid piecemeal development,
- Directing population growth into zoned and serviced lands in Fenit which has been identified in the settlement strategy as supported by the *Core Strategy*,
- Concentrating development in zoned/serviced areas will allow for greater synergies with sustainable transport initiatives including active travel and the *modal shift* required to fulfil climate policy,
- Concentrating development in zoned/serviced areas will allow for greater synergies with energy planning and spatial planning, particularly regarding the roll out of decarbonised zones,
- See pressure for development move away from areas identified as *areas under significant urban influence* outside certain towns and villages and associated environmental sensitivities including biodiversity, soil and water resources,
- Aligns with the objectives and vision set out in the Local Area Plan which seeks the localised upgrade of the R558 in order to support access to and the future development of Fenit Port,
- Will see the environmentally sustainable expansion of the village centre with a mix of uses including an upgrade to the public realm while protecting features of biodiversity and cultural importance.
- Ultimately allows for more public services to be provided to communities particularly for waste-water treatment; energy planning, sustainable transport all aligned with climate action policy.

Conclusion: This Alternative is the preferred development scenario for Fenit village.

5. STATE OF THE ENVIRONMENT- EXISTING ENVIRONMENTAL BASELINE IN THE FENIT AREA

5.1. Introduction

In line with the SEA Directive, an environmental baseline must be compiled for the plan area. As required this will include a description of the state of the environment at present; discussion of the key problems/ issues currently being faced in the area; and a description of the expected evolution of the environment should the plan not be implemented, i.e. in the absence of the plan. A brief description of the Masterplan sites is included in Section 1.1 of this document. The key environmental baseline data for the Masterplan plan area will be discussed under the parameters outlined in Schedule 2B (f) of SI No 436/2004. They are:

- population/human health,
- biodiversity (flora, fauna),
- geology/soils,
- hydrology/hydrogeology,
- air quality/
- climatic factors,
- material assets
- cultural assets (architecture, archaeology),
- landscape, and
- the interrelationship between the above factors,
- as noted in Section 1.4 a Strategic Flood Risk Assessment also informed the original drafting of the Tralee MD LAP.

Table 5-1 below is a non-exhaustive list of the information sources used to compile the environmental baseline for each the environmental parameters listed above.

Table 5-1 Environmental Information Sources for use in this ER.

Environmental Parameters	Information Sources
Population/Human Health	<ul style="list-style-type: none"> • Central Statistics Office (CSO) – 2011 and 2016 data, • HSE • Environment Section, KCC • Enforcement Section, KCC • EPA
Biodiversity (flora, fauna),	<ul style="list-style-type: none"> • National Parks and Wildlife Service (NPWS), • Inland Fisheries Ireland (IFI), • National Biodiversity Data Centre (NBDC) • Golden Eagle Trust, • ENVISION EPA map viewer • WFD map viewer • Heritage & Biodiversity Office, KCC • Kerry Heritage and Biodiversity Plan 2008-2012 • Bird Watch Ireland (BWI) • Irish Peatland Conservation Council (IPCC) • Wetlands Survey Ireland website and county survey • Invasive Species Ireland website
Geology / Soils	<ul style="list-style-type: none"> • Geological Survey of Ireland (GSI) map viewer including bedrock, subsoil, soil datasets and sites from the Irish Geological Heritage Programme (IGH) • CORINE (Landuse) database (2012), • Teagasc Soil Map, • ENVISION EPA map viewer

Environmental Parameters	Information Sources
Water	<ul style="list-style-type: none"> • ENVISION EPA map viewer • WFD map viewer • EPA reports on water quality • GSI map viewer specifically aquifer and ground water vulnerability datasets • Environment Section, KCC • Local Authority Water and Community Office • IFI • Irish Water
Air Quality	<ul style="list-style-type: none"> • EPA • Department of Communications, Climate Action and Environment (DCCAIE) • Environment Section, KCC • Enforcement Section, KCC
Climatic Factors	<ul style="list-style-type: none"> • EPA • Department of Communications, Climate Action and Environment (DCCAIE) • Environment Section, KCC • Central Statistics Office (CSO)
Material assets	<ul style="list-style-type: none"> • Roads Section, KCC • Municipal District Office • National Roads Design Office, KCC, • Transport Infrastructure Ireland (TII) • Environment Section, KCC • Broadband Officer, KCC • Irish Water
Cultural assets (architecture, archaeology)	<ul style="list-style-type: none"> • Register of PS & Architectural Conservation Areas (ACAs) listed in the KCDP 2015-2021/TTDP 2009-2015 • NIAH for Kerry • Kerry SMR/RMP as listed in the KCDP 2015-2021 • Archaeological Special Protection Areas listed in the KCDP 2015-2021 • Heritage Office, KCC • County Archaeologist, KCC • Conservation Officer, KCC • Arts Officer, KCC
Landscape	<ul style="list-style-type: none"> • Existing landscape designations within KCDP 2015-2021 • Village Design statements/Public realm reports • Architectural Conservation Areas listed in the KCDP 2015-2021 • Archaeological landscapes listed in the KCDP 2015-2021
SFRA	<ul style="list-style-type: none"> • Sources are identified in the DoEHLG/OPW 2009 Guidelines '<i>The Planning System and Flood Risk Management</i>'.

5.2. Population and Human Health - Baseline Assessment

5.2.1. Baseline Assessment: Population

Fenit was designated as a growth settlement within the Core Strategy settlement hierarchy in the KCDP 2015-2021 and has been identified again for population growth under the Draft Kerry County Development Plan 2022-2028. Population growth was informed by the 2016 census and comparisons to data from the 2011 census. Population figures from 2016 census at 538 persons indicate a low population increase for Fenit. The population growth target of an additional 122 persons under the 2015-2021 County Development Plan has not been achieved. It is estimated that the population grew by only 34 during that Development Plan period.

A key objective of the KCDP 2015-2021 is to strengthen the urban structure of the hub towns of Tralee and Killarney by focusing projected population growth, over the lifetime of the plan into specific settlements – namely Tralee town, Ardfert and to a lesser extent the village of Fenit. Development in Fenit is dependent on the commitment by Irish Water to upgrade the approved wastewater treatment facility.

Table 5-2 Population allocation for Tralee Municipal District as outlined in the Core Strategy of Kerry County Development Plan 2015-2021

Tralee Municipal Area	Census Population 2016	Growth Target	Housing Requirement
Fenit under KCDP 2015-2021	538	122	46
Fenit under Draft KCDP 2022-2028*	572 (estimated population)	43	35

(* these figures may change prior to the adoption of the final Plan. Permitted development will be in line with Municipal District LAP, the County Development Plan and the capacity of the wastewater treatment Plant.)

In comparing baseline population figures/settlements as outlined within the Tralee MD LAP in the inter-census period (2011-2016) two main trends are discernible in the Tralee MD – firstly, the stagnation and/or decline of settlement in urban centres, including the main town of Tralee other settlements and secondly, the increase in developments (one-off housing) in rural areas. Figures returned for 6 settlements in the 2016 census within the Tralee MD for example indicate overall population fell from 25,690 in 2011 to 25,614 in 2016 - a 0.3% decrease. Fenit was the only settlement in the Tralee MD area that grew marginally in the inter-census period from 527 in 2011 to 538 in 2016 - an increase of 2.1%.

Conversely over the inter-census period significant rural development in the form of one off rural housing has taken place. Comparative analysis of GeoDirectory residential address database from 2011 to that of 2016 highlights the level of development in the Tralee MD. Data indicates approximately 358 additional geo-points have been added in the 5 year inter-census period. Of these 59% are located in the rural area of the MD, that is, outside of the development boundary of the settlements in the plan area².

5.2.2. Baseline Assessment: Human Health

In relation to human health, individual and population health status is largely the result of the social, cultural and physical environment in which we live. Factors such as the state of the environment, access to resources to meet basic needs, exposure to risks and capacity to cope with these, income and education levels, social network of relationships with friends, family and neighbours all have considerable impacts on health and wellbeing.

A deeper understanding around health and wellbeing has developed over the last number of years in Ireland since the drafting of the *National Environmental Health Action Plan* in 1999³. This is reflected in a later 2010 research paper carried out by the EPA as part of its STRIVE series - *Understanding the Links between the Environment, Human Health and Well-Being*⁴. In 2013 the *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013-2023* was

² See Section 2.2 of Tralee MD LAP 2018-2024.

³ <http://lenus.ie/hse/bitstream/10147/45646/1/8532.pdf> [accessed 7/4/17]

⁴ http://www.epa.ie/pubs/reports/research/health/ERC_15_Garavan_HumanHealthLinks_syn_web.pdf [accessed 7/4/17]

published⁵. The evolving idea of “quality of life” is also elaborated on in the recently published NPF (2018). Figure 5-1 below reflects the thematic elements that underpin the concept. The concept that health and wellbeing are supported by our local environment obviously underpins both the EPA’s framework and of particular relevance to this ER, an amendment to a land use plan, the NPF.



Figure 5-1 Elements supporting quality of life⁶

The *Healthy Ireland Framework* aims to address the social, economic and environmental factors that contribute to the development of chronic disease and to address health inequalities in Ireland. It culminated in the publication in 2019 of *Healthy Ireland*. The concept that health and wellbeing are supported by our local environment underpins the programme. The EPA’s most recent (2016) state of the environment report also recognises the benefits of a good quality environment to health and wellbeing. It is a key action in striving towards delivering environmental protection and sustainable development. The report goes on to note challenges faced nationally in pursuing this aim with an emphasis on two key environmental quality factors that can be directly correlated to health - air and water quality. Noise is also recognised as a parameter that affects health and well-being by causing stress anxiety and disruption of activities such as sleep.

The importance of air quality and its link to health was reiterated in the EPA’s recent launch of a new *Ambient Air Quality Monitoring Programme (AAMP)* to be rolled out from 2017-2022⁷. Discussed more in Section 5.6, the AAMP aims to strengthen the capacity and capability to provide more comprehensive, localised air quality information linked to public health advice in Ireland. Its primary purpose is to allow vulnerable individuals to modify their behaviour and

⁵ <http://health.gov.ie/wp-content/uploads/2014/03/HealthyIrelandBrochureWA2.pdf> [accessed 7/4/17]

⁶ *Project Ireland 2040 - National Planning Framework*

⁷ *National Ambient Air Quality Monitoring Programme 2017-2022, Consultation Paper*, October 2016, EPA, available at <http://www.epa.ie/air/quality/>

avoid health consequences of short and long-term exposure to ambient air pollution. The AAMP will build on the existing air monitoring network in places and accessible through the EPA's website including their *Air Quality Index for Health* AQIH system launched in 2013 (see Section 5.6 for further discussion on both. The aim of the AAMP is to ultimately increase awareness around air quality and links to health in Ireland.

Along with improved monitoring and modelling and forecasting, citizen science and engagement is the third pillar underpinning the programme. It highlights particulate matter as a significant contributor to poor health in Ireland, seconded by NO₂ and SO₂ emissions. The relevance of these pollutants in an Irish context were reiterated in the EPA's most recent annual report - *Air Quality in Ireland 2016*⁸. The report, and the equivalent report from 2015⁹, recorded exceedances of the World Health Organisation (WHO) values for various pollutants namely ozone, SO₂ and NO₂ and particulate matter (PM10 and PM2.5) at a number of its monitoring sites. The report details associated health implications for these exceedances. It notes health implications can be short term (24 hours) and/or long term (annual) with greater potential effects on vulnerable members of the community with pre-existing medical conditions. A brief overview is given in

Table 5-3. Although health trends of the general Tralee MD public in relation air quality are not widely available extrapolations can be made. In an area with high car dependency and a dispersed rural settlement reliant on traditional forms of fossil fuel, it could be assumed that health effects listed in

Table 5-3 are likely to be applicable in the MD and to the Masterplan area.

Water quality is another key environmental factor that has the potential to impact on human health. Water as a separate environmental factor is discussed in more detail in Section 5.5 However, in relation to health implications impacts of poor water quality can be both acute or indirect such as impacts on bathing waters. Impacts on water quality, for example from waste water discharge, have the potential to cause detrimental effects on receiving waters including coastal waters that support commercial fisheries and/or other food production.

Table 5-3 Health implications associated with significant air pollutants in Ireland¹⁰

Air Pollutant	Associated Health Implications/Impacts
NO ₂	<ul style="list-style-type: none"> • Short-term exposure linked to adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in asthmatics. • Long-term exposure is associated with increased risk of respiratory infection in children
SO ₂	<ul style="list-style-type: none"> • Temporary breathing difficulties for those who suffer from respiratory conditions such as asthma. • Longer-term exposure to high concentrations can aggravate existing cardiovascular disease and respiratory illness
PM ₁₀ and PM _{2.5}	<ul style="list-style-type: none"> • Impacts of particulate matter relate to its ability to penetrate deep into the respiratory tract. This inhalation can increase the risk, frequency and severity of cardiopulmonary and respiratory disorders. It is particularly harmful for those who have a pre-existing respiratory illness. It also has a strong association with circulatory disease and mortality.

⁸ *Air Quality in Ireland, 2016* EPA available at <http://www.epa.ie/pubs/reports/air/quality/Air%20Quality%20In%20Ireland%202016.pdf>

⁹ *Air Quality in Ireland, 2015* EPA available at <http://www.epa.ie/pubs/reports/air/quality/Air%20Quality%20In%20Ireland%202015.pdf>

¹⁰ *Air Quality in Ireland, 2016* EPA available at <http://www.epa.ie/pubs/reports/air/quality/Air%20Quality%20In%20Ireland%202016.pdf>

5.2.3. Existing Environmental Problems/Sensitivities

Settlement trends for the MD show that population growth is not occurring in urban centres. Five of the six of the MD settlements are either stagnating or decreasing in population growth including the main town of Tralee. Fenit was the only settlement to record a population increase and this was very small. Development in the settlement has been constrained over the years due to the inadequate wastewater treatment facilities. One off-housing has seen the majority of the population growth in the Tralee MD area over the inter-census period.

These trends are at variance with the policies and objectives of the KCDP 2015-2021, the draft KCDP 2022-2028 and the Tralee MD LAP 2018-2024 particularly in relation to the sustainable development of towns and villages. There are also indirect implications for human health further to these trends. Rural dispersed settlement requires for example excessive car based commuting patterns which impacts on localised air quality values. With the lack of health data for the Tralee MD including the Masterplan area in Fenit, certain assumptions can be made based on national trends from EPA air quality reports, specifically in relation to localised impacts from traffic and home heating. Excessive travel distances/commuting for work, education and access to a range of services can also impact on quality of life as people become disassociated with where they live and work. Equally use of concentrated public services such as municipal/group waste water treatment schemes are more efficient and sustainable in preventing deterioration in water quality which can have impacts on human health. In this context it should be noted that there is planning permission in place to construct a new Wastewater treatment plant in Fenit. Funding has been allocated by Irish Water as part of its 'Small Towns and Villages Growth Programme' and work is on-going bring the project to construction stage. Permitted development will be in line with Municipal District LAP, the CDP and the capacity of the wastewater treatment Plant.

5.3. Biodiversity (Flora/Fauna)

5.3.1. Baseline Assessment

Several European sites (also known as Natura 2000 sites) occur within 15kms of the MD area (Figure 5-2 & Figure 5-3) and Fenit village. Most notable within the MD area are designations for bird species including those of Special Conservation Interest (SCI).

Fenit and surrounding area contains a number of International, European, National and local sites of ecological interest with corresponding environmental designations. Most notable is the Tralee Bay and Magharees Peninsula West to Cloghane cSAC and Tralee Bay Complex SPA designated for bird species which overlaps with the SAC designation. Locke's beach which adjoins the Terminus (seafront site) is not located within the Tralee Bay and Magharees Peninsula, West to Cloghane SAC, the SAC is however located downstream of the settlement and adjoins it further to the east. This cSAC covers an extensive area that includes the entire bays of Tralee and Brandon and is located in very close proximity to the sites identified in the Masterplan. Habitats designated are predominately estuarine, marine and/or coastal in nature. Due to the Tralee Bay cSAC/SPA complex's combination of wetlands and significant numbers of dependent bird life, the area is recognised as an internationally important wetland or RAMSAR site¹¹.

Other cSAC designations along the coast west of Fenit include the Akeragh, Banna and Barrow Harbour cSAC which is designated for priority dune habitat and other marine/estuarine and coastal habitats. Two *Nature Reserves* in Tralee Bay overlap with European site designations – Derrymore Island Nature Reserve and Tralee Bay Nature Reserve. The pNHA of Church Hill Woods is located in close proximity to the Fenit area and Fenit beach has a blue flag status.

¹¹ <https://www.ramsar.org/about/wetlands-of-international-importance-ramsar-sites>

Several watercourses to the north/northeast of the MD area are designated as part of the Lower Shannon cSAC including watercourses that support salmonid species and three species of lamprey – brook, sea and river, however there are no designated watercourses in the Fenit area.

Tralee Bay is designated under the Shellfish Waters Directive – 2006/113/EC (see Section 5.5.2.3) for commercially managed shellfish. Inner Tralee Bay also maintains the principal site for native oyster (*Ostrea edulis*) in the country¹². The populations are commercially harvested via a Fishery Order (FOs) i.e. the management has been devolved to a co-operative under the Fisheries Act, 1959. FOs give permanent rights of access to a co-op/group to produce oysters within the order area. Consents are overseen by the DCENR¹³.

Other sites of local ecological value – hedgerows, wetlands, watercourses - that are undesignated but are protected in the KCDP 2015-2021, Draft Kerry County Development Plan 2022-2028 and/or under the Wildlife (Amendment) Act 1976, (as amended) act as stepping stones within the broader landscape and form an integral part of the existing and potential green and blue infrastructure of the plan area.

5.3.2. Existing Environmental Problems/Sensitivities

As noted above the MD plan area and area surrounding Fenit has significant biodiversity resources including priority habitats and species designated under the Habitats Directive. Main pressures on biodiversity from land use planning at settlements including Fenit which sites on the outskirts of extensive SPA and cSAC designations surrounding Tralee Bay. In particular, birds of SCI occur outside the SPA boundaries commuting and in particular roosting on supporting habitat in and around the verges of some of the settlements such as Tralee town for example.

Pressures on water quality from point source and diffuse discharges is an issue within the plan area in relation to protection of fisheries habitat and species. Fenit waste water treatment plant discharges into Tralee bay, designated as a “sensitive area” under *Urban Waste Water Treatment Directive*. In order to meet requirements of the Directive, planning permission has been sought and granted for an upgrade to the Wastewater treatment plan, funding has been put in place and there is a commitment from Irish Water to carry out the works.

As noted Locke’s beach which adjoins the Terminus (seafront site) is not located within the Tralee Bay and Magharees Peninsula, West to Cloghane SAC, the SAC is however located downstream of the settlement and adjoins it further to the east. It is noted that it is not proposed to modify the land use zonings or population allocation for the settlement as part of this amendment. It is also noted that connections to the Fenit WWTP is subject to agreement with Irish Water, that the amendment and masterplan provide for the provision of Sustainable Urban Drainage measures and that advanced plans are in place to upgrade the WWTP serving the overall settlement. The Appropriate Assessment screening report accompanying the proposed amendment notes that while construction stage works could result in an amount of sediment contained in soiled water run-off entering Tralee Bay, that the effects of same are not likely to be felt within the Bay given the assimilative, dispersion and dilution capacities available. Moreover, estuarine environments are naturally turbid. Risk of contamination arising from other construction activities is considered to be negligible and not significant.

¹² *The Status and Management of Oyster (Ostrea edulis) in Ireland*, Tully & Clarke, 2012, Unpublished report by The Marine Institute.

¹³ *Ibid*

Disturbance of key species that breed/forage/commute near urban areas or areas under tourism pressure is notable in the MD but to lesser extent in the Fenit plan area. With respect to the Masterplan sites it is noted that The waterfront (terminus) site is subject to an existing high-level array of year-round human activity. Existing operations in the area include port activities, fishing vessels, and various recreational and village activities. The greenfield (central core) site is located within the urban core of the settlement and does not constitute key habitat for any species associated with the Natura 2000 site designations in the area. The Appropriate Assessment Screening Report prepared as part of this proposed amendment notes that the central core greenfield site was surveyed for wintering waterbirds during the winter of 2018/2019, as part of a wider bird survey for the area. A total of two SCI water bird species for the Tralee Bay Complex SPA were recorded utilising this field throughout the entire 6-month survey period. These were curlew and common gull, and both were recorded in small and insignificant numbers within the context of the SPA (four Curlew and five Common Gull). There are more favourable habitats and fields for SCI waterbirds located in the wider area. The AA screening report states that this field is not regularly used by large assemblages of SCI and that the field is therefore of low importance for SCI. It further states that within the context of the proposed amendment and masterplan, the possibility of Habitat loss or fragmentation is ruled out with certainty, given the separation distances between the proposals and the boundaries of designated sites.

Other issues relating to biodiversity include localised flooding events both coastal and fluvial. Albeit the latter is not as significant for the Fenit area. Localised coastal is however an issue considering vast stretches of soft coastal shorelines along the western boundary of the MD. Hard engineering solutions to flood risk such as rock armoury and/or removal of river gravels are often perceived as negating flooding pressures. These measures however have the potential to impact on fisheries habitats and species although with other species such as otter. In addition, the plan area and surrounding area has extensive coastal areas that are designated for the protection of coastal habitats. This specifically includes a full suite of sand dune habitats including priority annexed habitat. These habitats are coming under pressure from access and tourism related activities but also potential coastal protection works from coastal flooding. With climate change likely to exacerbate coastal flooding episodes, pressures are placed for solutions that often conflict with nature conservation policy.

Invasive species and the spread of both aquatic and terrestrial species is another threat to biodiversity within the plan area. As more emphasis is placed on blue infrastructure for both tourism ventures and local amenity uses, an increased potential for detrimental impacts on native habitats/species from introduced invasive species. Use of coastal sites for blueways etc. has the potential for disturbance of marine/coastal species such as otter, seals and/or cetaceans such as bottlenose dolphins, harbour porpoise etc.

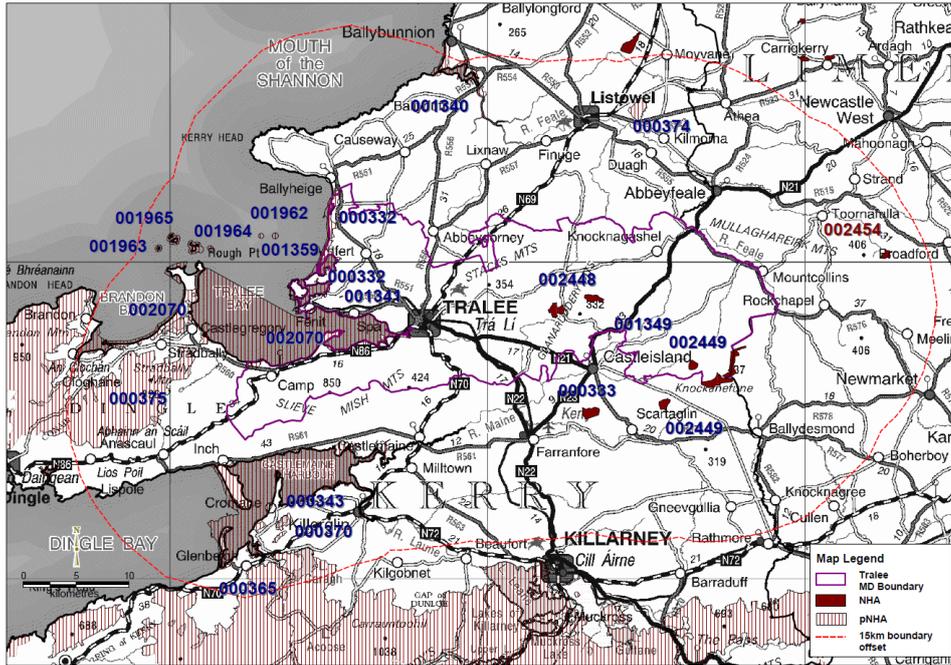


Figure 5-4 NHA and pNHA within the MD Area

5.4. Geology and Soils

5.4.1. Baseline Assessment

Provisions for soil protection are presently integrated into several existing EU environmental directives including the Nitrates Directive, Water Framework Directive and particularly the Habitats Directive through the protection of peat soils in blanket and raised bogs. An EU Soil Directive has been proposed by the EU for a number of years but to date has not materialised. In Ireland protection of soil resources are therefore reliant on national policy relating to agriculture, forestry, waste and water etc. The potential of peat soils to sink carbon and thus aid Ireland's obligations in relation to climate action has gained support as discussed in the EPA's 2011 STRIVE research paper – *Bogland: Sustainable Management of Peatlands in Ireland*¹⁴.

Soil types in the Tralee MD area are broadly represented by lowland mineral soils to the centre of the MD area in and around Tralee town (Figure 5-5). Mountainous/hill soils and peat soils occur to the north/northeast (Stacks Mountains) and south (Slieve Mish Mountains).¹⁵ The entire west boundary of the MD area is coastal. Geology/soils types reflect the marine nature of this border with extensive sandy deposits. The coastline is predominately soft with extensive sand dune systems and salt marsh habitat occurring at the interface between land and sea. Of note is a band of limestone that particularly outcrops in and around the coastal village of Fenit¹⁶ (Figure 5-6).

In relation to geological heritage, Geological Survey of Ireland (GSI) through the Irish Geological Heritage Programme (IGH) has identified important geological and geomorphological sites (County Geological Sites (CGS)) throughout the country. Several occur within the Tralee MD. These CGSs in the Tralee MD area is particularly linked to the aforementioned Karst/limestone outcropping found to the north of the Municipal District area around Fenit. A cluster of sites occur at this location. GSI record that the *residual limestone hills in the Barrow-Fenit-Castlegregory area are the most extensive array of these features in Ireland, extending across almost 100 km², and are perhaps the best example of a degraded, and partly drowned, tower karst in Ireland*¹⁷. The Carboniferous Limestone peninsula of Fenit, attached to Fenit Island by a tombolo, is also recorded as a CGS. To date IGH CGS sites in Kerry have not been designated as NHAs. They are however protected via an objective in the KCDP 2015-2021 and the Draft Kerry County Development Plan 2022-2028 where the sites are listed and illustrated.

5.4.2. Existing Environmental Problems/Sensitivities

Significant problems or sensitivities around soil/geology are not specifically identifiable in the proposed masterplan area in relation to land use planning. Issues are generally localised to potential sensitivities around use of brown field and/or green field sites for proposed developments and/or local impacts on sensitive geological sites. The latter can be relevant in relation to possible impacts from infrastructure schemes including upgrades to existing road infrastructure or coastal infrastructure.

Impacts on upland soil types form amenity and tourism pressures in particular hill walking, eco or adventure tourism are not a concern for this plan area.

¹⁴ <http://www.epa.ie/pubs/reports/research/land/strive75.html> [accessed 18/4/17]

¹⁵ County Kerry Agriculture Resource Survey, Published by County Kerry Committee of Agriculture Tralee, Ireland, 1972

¹⁶ *Ibid*

¹⁷ <http://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c22>

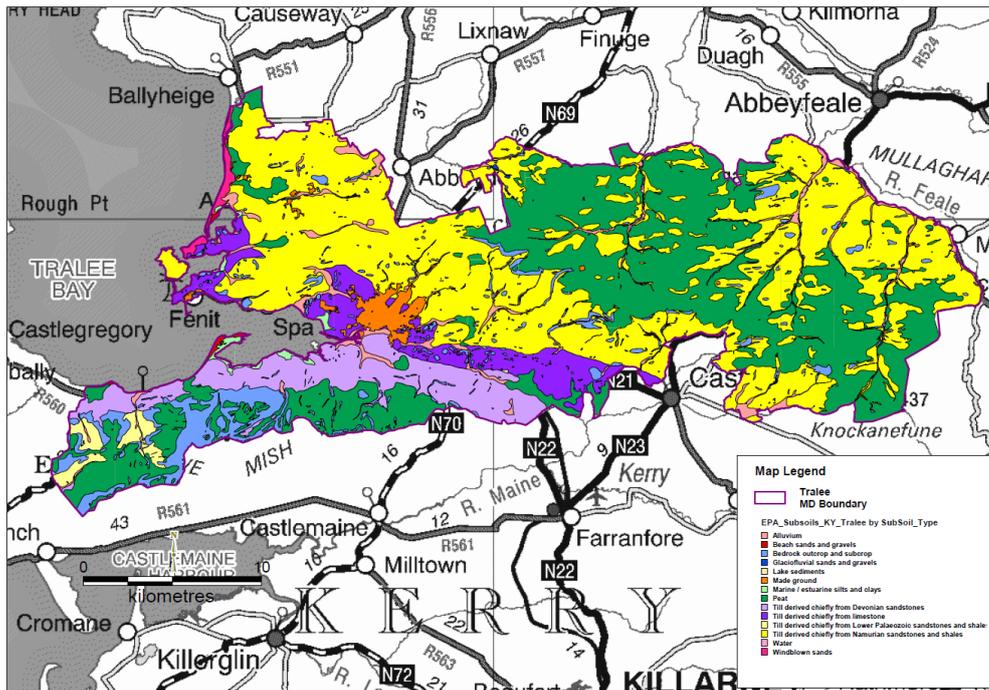


Figure 5-5 Subsoil within the MD Area.

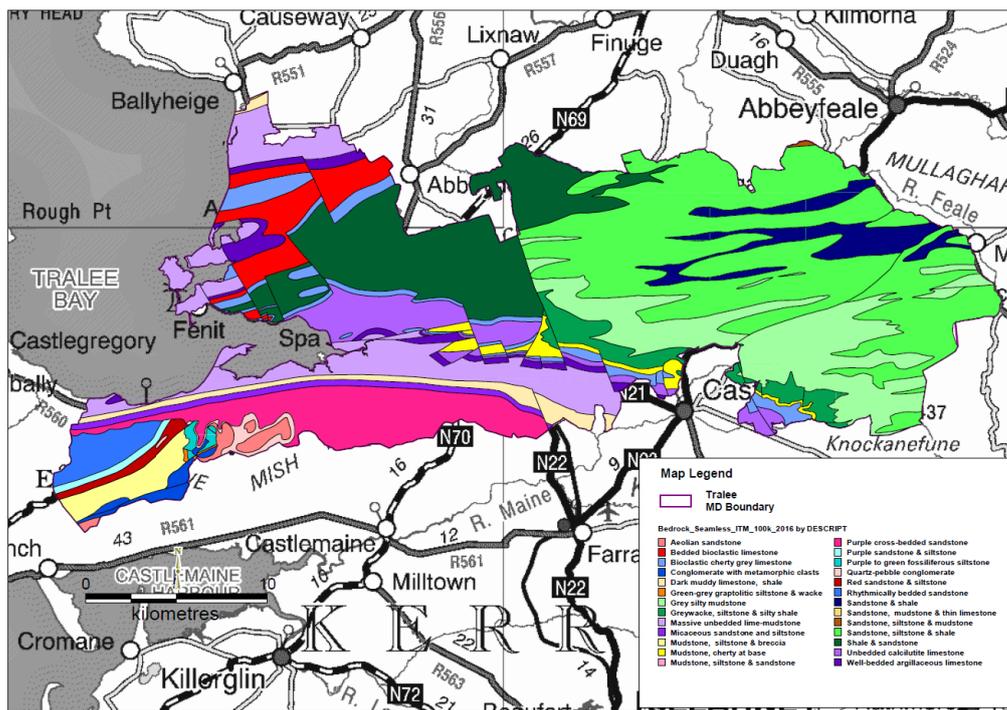


Figure 5-6 Bedrock classifications within the MD Area.

5.5. Water

5.5.1. Baseline Assessment

The Water Framework Directive (WFD) is key environmental legislation governing the management of water (surface freshwater – river and lake), groundwater, coastal and transitional (estuarine) in Ireland. The second cycle of the WFD’s River Basin Management Plan (RBMP) is guided by Ireland’s *River Basin Management Plan 2018-2021*. At the time of writing the 3rd cycle of the WFD is underway (2022-2027)¹⁸. It was due for publication in December 2021¹⁹ but Covid-19 has impacted these timeframes.

The first draft of the National RBMP (February 2017) saw the characterisation of *risk*, as defined by the WFD, to waterbodies (WB) not meeting WFD objectives. Groundwater, coastal and transitional waters were not included in this process. Information for these WBs was deemed at this stage in the cycle to be either limited and/or required large scale catchment responses. The result of the above characterisation process was the assigning of WBs (rivers and lakes) to three *risk* categories:

At Risk	of not meeting WFD objectives. More targeted supporting mitigation measures needed
Review	either more information is required or where measures have recently been implemented and improvements have not been realised
Not at Risk	of meeting WFD objectives. No additional investigative works required. Basic measures still however pertain to these catchments

By the end of 2017 “Priority Areas for Action” PAFAs were identified across the country. Twelve were recommended in Kerry. Further assessment of these waterbodies is occurring at the time of writing by LAWPRO, namely the Catchments Assessment Team, in consultation with various stakeholders including KCC. In addition to the PAFAs, the *blue dot catchments programme* is also being rolled out by LAWPRO²⁰. Kerry contains a number of these *blue dot* catchments – essentially high water status catchments that are to be either maintained or restored.

The 3rd cycle of the WFD will now run from 2022-2027²¹. The challenges affecting Ireland’s waters and possible solutions are outlined in *Significant Water Management Issues in Ireland, Public Consultation Document. An Overview of the Characterisation and Area for Action Selection Process* for the third cycle commenced in 2020.

The drafting of the 3rd cycle is occurring within the context of the EPA’s most recently published report on the *Status of Water Quality in Ireland, 2013-2018* (December 2019). The report provides an evaluation of the ecological health of Ireland’s rivers, lakes, canals, groundwaters, estuaries and coastal waters against the standards and objectives set out in the WFD and the RBMP 2018-2021. Data used to inform the report extends over the period 2013-2018.

¹⁸ <https://www.catchments.ie/public-consultation-timetable-and-work-programme-for-third-cycle-river-basin-management-plan-for-ireland-2022-2027/>

¹⁹ *Public Consultation: Timetable and Work Programme for the Third-Cycle River Basin Management Plan 2022-2027*, Department of Housing, Planning and Local Government, 2019.

²⁰ The *blue dot catchment programme* forms part of the 2nd cycle of the WFD. The programme aims to protect and restore high status waters. It aims to prioritise these catchment for the implementation of supporting measures and for available funding.

²¹ <https://www.housing.gov.ie/search/sub-topic/river-basin-management-plans/>

The 2019 report indicates some worrying national trends on the ecological health and water quality of Ireland’s rivers, lakes, estuaries, groundwater and coastal waters. Several of these national trends are reflected in Kerry. The county maintains several high or pristine catchments; no waterbody dropped to poor or bad status while coastal waters maintain a good status. Nonetheless, other trends are worrying notably the continued loss of high-status waterbodies. These sites are important reservoirs of aquatic biodiversity and their loss is a concern.

5.5.2. Water Framework Directive (WFD) Second Cycle in the Tralee MD LAP Area

Waterbodies within the Tralee MD Plan area and their status under the WFD are listed in Table 5-5 and shown in Figure 5-7. Eleven waterbodies have been characterised as *at risk* of not meeting WFD, 12 are under review and 18 are deemed *not at risk*. No lakes identified in the WFD occur in the Tralee MD LAP. Transitional and coastal waters and their *status* and *risk* are shown in Table 5-6 & Table 5-7. Of these WBs 4 sub-catchments and associated WBs have been recommended as AFAs – they are highlighted in red in each table. As previously mentioned they predominately include WB *at risk* but one WB *under review* has also been included.

The proposed Masterplan area does not contain any river waterbody. Tralee Bay lies downstream of the Terminus (seafront) site.

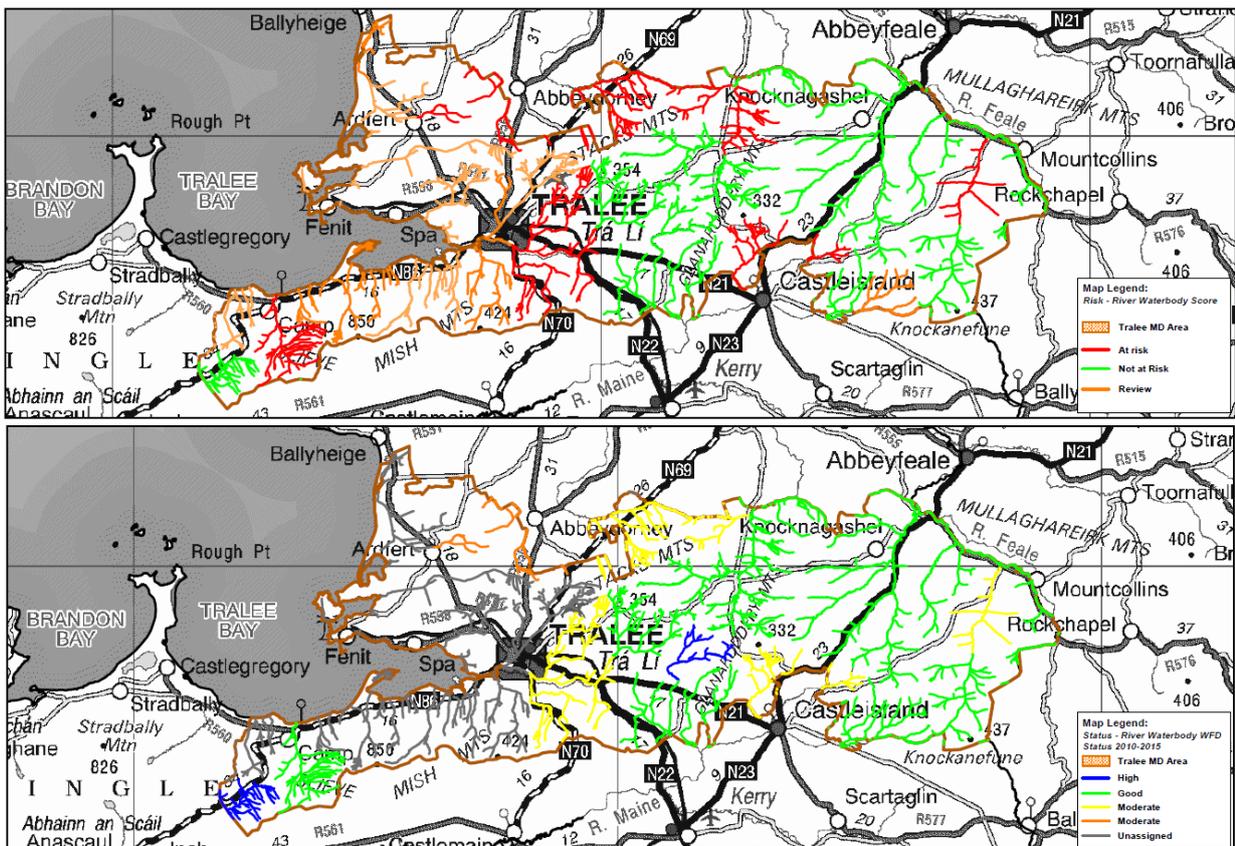


Figure 5-7 Surface waterbodies within the Tralee MD.

5.5.2.1. Waste Water Discharges in the MD Area

A review of existing waste water discharges in the MD is provided in Table 5-8 below. Three settlements – Tralee, Ardfert and Fenit – were allocated population growth in the MD LAP as per the Core Strategy of the KCDP 2015-2021.

- **Fenit** has planning approval for a new waste water treatment plant. Funding has been allocated as part of Irish Water’s ‘Small Towns and Villages Growth Programme’ and there is a commitment from Irish Water to carry out the work. To date however, there is no timescale for its construction. Until such time as the new plant is in operation new development in the village will be constrained as outlined in the Tralee MD LAP. The investment in the local wastewater infrastructure will provide additional capacity for the development of new homes and businesses in Fenit.
- Water discharges from Fenit into the Tralee Bay coastal waterbody which has been given a good status. See table 5-4 Coastal waterbodies within the Tralee MD LAP – status and risk under the 2nd cycle of the WFD.

Table 5-5 River waterbodies within the Tralee MD LAP – status and risk under the 2nd cycle of the WFD. AFAs are highlighted in red.

FW ID [RIVERS ONLY, NO LAKES IN TRALEE MD]	WATERBODY	STATUS	RISK
FINGLAS (TRALEE BAY)_010	IE_SH_23F030400	GOOD	AT RISK
SMEARLAGH_020	IE_SH_23S020400	GOOD	AT RISK
CLYDAGH (FEALE)_020	IE_SH_23C030500	MODERATE	AT RISK
FAHADUFF_010	IE_SW_22F090400	MODERATE	AT RISK
LEE (TRALEE)_020	IE_SH_23L010050	MODERATE	AT RISK
LEE (TRALEE)_030	IE_SH_23L010100	MODERATE	AT RISK
LYRACRUMPANE_010	IE_SH_23L020100	MODERATE	AT RISK
MAINE_020	IE_SW_22M010400	MODERATE	AT RISK
BRICK_010	IE_SH_23B030300	MODERATE	AT RISK
TYSHE_010	IE_SH_23T020400	POOR	AT RISK
BRICK_020	IE_SH_23B030400	POOR	AT RISK
SHANOWEN (MAINE)_010	IE_SW_22S010020	GOOD	REVIEW
ANNAGH (KERRY)_010	IE_SH_23A060890	UNASSIGNED	REVIEW
ARDFERT_OUGHTER_010	IE_SH_23A190800	UNASSIGNED	REVIEW
BIG RIVER (TRALEE)_010	IE_SH_23B040150	UNASSIGNED	REVIEW
BRICK_030	IE_SH_23B030500	UNASSIGNED	REVIEW
CARRIGAHA_010	IE_SH_23C190920	UNASSIGNED	REVIEW
DERRYQUAY RIVER_010	IE_SH_23D420880	UNASSIGNED	REVIEW
KNOCKGLASS_BEG_010	IE_SH_23K130870	UNASSIGNED	REVIEW
LEE (TRALEE)_040	IE_SH_23L010200	UNASSIGNED	REVIEW
PINURE_010	IE_SH_23P160880	UNASSIGNED	REVIEW
BALLYNOE_010	IE_SH_23B910900	UNASSIGNED	REVIEW
TYSHE_020	IE_SH_23T020500	UNASSIGNED	REVIEW
EMLAGH_010	IE_SW_22E010400	HIGH	NOT AT RISK
LITTLE MAINE_010	IE_SW_22L020500	HIGH	NOT AT RISK

FW ID [RIVERS ONLY, NO LAKES IN TRALEE MD]	WATERBODY	STATUS	RISK
BLACKWATER (MUNSTER)_010	IE_SW_18B020050	GOOD	NOT AT RISK
CLYDAGH (FEALE)_010	IE_SH_23C030200	GOOD	NOT AT RISK
FEALE_030	IE_SH_23F010120	GOOD	NOT AT RISK
FEALE_050	IE_SH_23F010310	GOOD	NOT AT RISK
GLASHACOONCORE_010	IE_SH_23G020200	GOOD	NOT AT RISK
GLASHOREAG_010	IE_SH_23G030200	GOOD	NOT AT RISK
LEE (TRALEE)_010	IE_SH_23L010030	GOOD	NOT AT RISK
LITTLE MAINE_020	IE_SW_22L021000	GOOD	NOT AT RISK
MAINE_010	IE_SW_22M010300	GOOD	NOT AT RISK
MAINE_030	IE_SW_22M010500	GOOD	NOT AT RISK
OWVEG (KERRY)_010	IE_SH_23O050200	GOOD	NOT AT RISK
OWVEG (KERRY)_020	IE_SH_23O050500	GOOD	NOT AT RISK
SMEARLAGH_010	IE_SH_23S020300	GOOD	NOT AT RISK
SMEARLAGH_030	IE_SH_23S020500	GOOD	NOT AT RISK
TULLALEAGUE_010	IE_SH_23T010100	GOOD	NOT AT RISK
CAHERPIERCE_010	IE_SW_22C910960	UNASSIGNED	NOT AT RISK

Table 5-6 Transitional waterbodies within the Tralee MD LAP – status and risk under the 2nd cycle of the WFD. AFA is highlighted in red.

TW ID	WATERBODY	STATUS	Risk
IE_SH_050_0100	Lee K Estuary	Moderate	At risk
IE_SH_050_0200	Blennerville Lake East	Unassigned	Review
IE_SH_050_0300	Blennerville Lake West	Unassigned	Review

Table 5-7 Coastal waterbodies within the Tralee MD LAP – status and risk under the 2nd cycle of the WFD. AFA is highlighted in red.

CW ID	WATERBODY	STATUS	Risk
IE_SH_050_0000	Inner Tralee Bay	Moderate	At risk
IE_SH_040_0000	Outer Tralee Bay	Good	Review
IE_SH_010_0000	Southwestern Atlantic Seaboard (HA 23)	Unassigned	Not at risk

Table 5-8 Waste Water Discharges in the Tralee MD Area²²

Discharge Reg Number	Authorisation Type & Status	Agglomeration Name	Agglomeration Size PE	Agglomeration PE & Plant Design	Treatment	Receiving WB	WB Risk [AFAs highlighted in red]	Upgrade by Irish Water
A0022-01	Certificate/Certified	Kilfenora	< 500	72 & 90	Primary	Inner Tralee Bay	At risk	Not over plan
A0078-01	Certificate/Certified	Brosna	< 500	319 & 205	Primary	Clydagh (Feale)_020	At risk	Not over plan
A0083-01	Certificate/Certified	Knocknagoshel	< 500	190 & 200	Primary	Owbeg_020	Not at risk	Not over plan
D0040-01	Licence/Licensed	*Tralee	>10,000	34266 & 50333	Secondary	Lee (Estuary) Upper	At risk	Proposed over plan – see note 2 below
D0282-01	Licence/Licensed	Ardfert	1001-2000	1013 & 450	Primary	Tyshee_020	At risk	Upgraded
D0284-01	Licence/Licensed	Fenit	1001-2000	880 & 500	Primary	Outer Tralee Bay	Review	Proposed over plan

*Tralee was highlighted as a priority area in the EPA's recent *Urban Waste Water Treatment in 2016*.

Note 2. The effluent discharged from the treatment plant met the effluent quality standards. The treatment provided is reported as secondary treatment (with ultraviolet disinfection at Tralee). This does not meet the Directive's requirement for waste water to be subject to more stringent treatment than secondary treatment.

²² <http://www.epa.ie/terminalfour/wwda/wwda-search.jsp?countyName=Kerry&Submit=Search+by+County> [accessed 24/11/17]

5.5.2.2. Areas for Action (AFA) in the Tralee MD LAP

Within the Tralee MD LAP area 4 AFAs and corresponding waterbodies (WB) are identified for further investigation in the 2nd cycle of the WFD. They are listed below in Table 5-9 with brief reasons for selection as an AFA provided²³. The AFAs are illustrated in Figure 5-8.

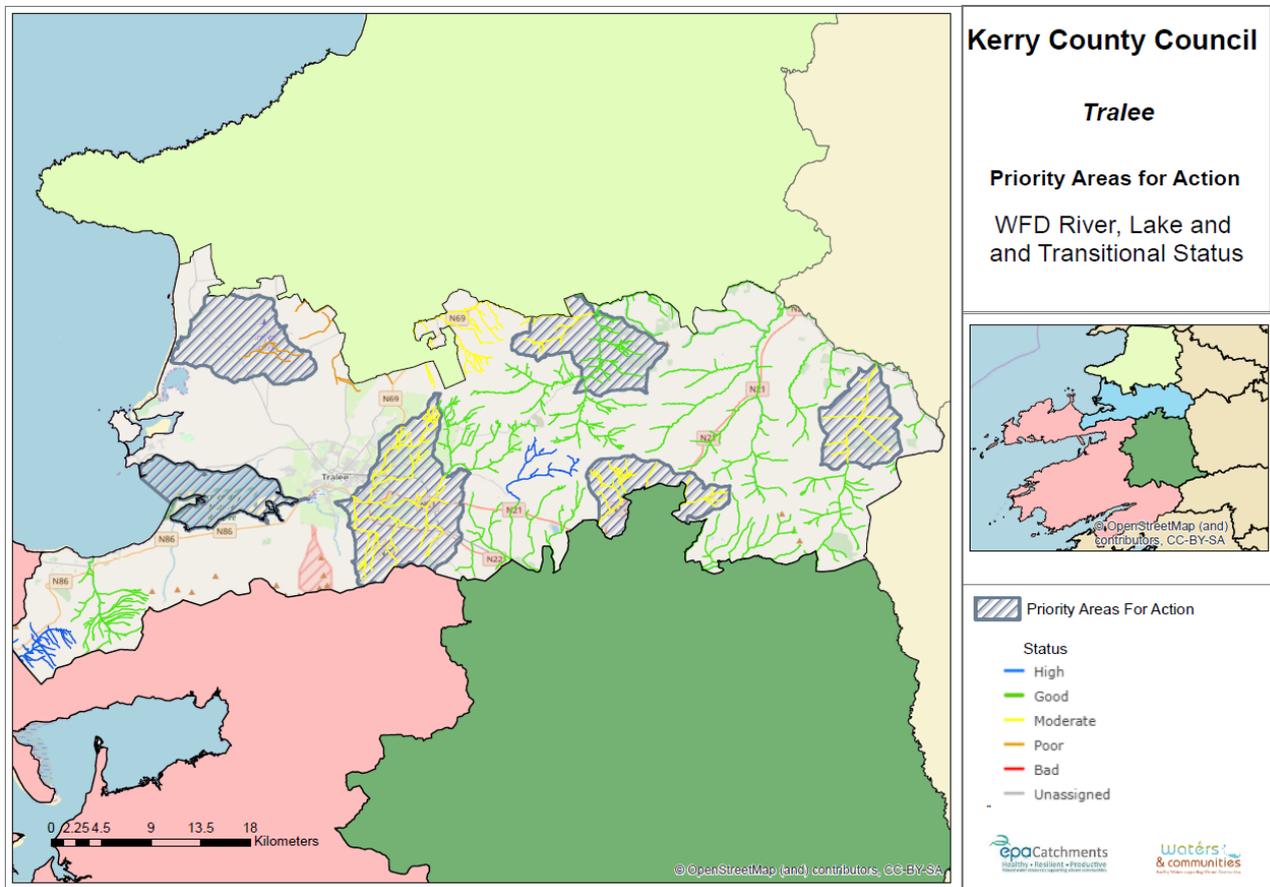


Figure 5-8 AFAs within the Tralee MD Area (see also Table 5-9)

Table 5-9 Recommended AFA within the Tralee MD Plan to be prioritised under the second cycle of the WFD²⁴

Recommended Area for Action	Reason for Selection ²⁵	No. of <i>At Risk</i> WB	No. of Review WBs
Lee (Tralee) & Estuary	<ul style="list-style-type: none"> • Headwaters to the Lee K and Tralee estuaries. • Tralee estuary is an important designated Shellfish area. • Potential project to address urban diffuse pressures and suitable measures. • Important for tourism - the possibility of opening a blueway is 	4 <ul style="list-style-type: none"> • Lee (Tralee)_030 • Lee (Tralee)_020 • Inner Tralee Bay • Lee K Estuary 	0

²³As outlined in the *Draft Report on South West Region Catchment Assessment Workshop for South West Regional Water and Environment Committee, Ver.1, August 2017*, unpublished report by LAWCO and EPA. See also <http://watersandcommunities.ie/areas-for-action/> [accessed 17/11/17]

²⁴ *Ibid*

²⁵ *Ibid*

Recommended Area for Action	Reason for Selection ²⁵	No. of <i>At Risk</i> WB	No. of Review WBs
	<p>being examined.</p> <ul style="list-style-type: none"> • Tralee Wetlands are an important tourism and environmental amenity. • Building on improvements at Tralee WWTP. • Lee K Estuary is failing to meet protected area objectives for Nutrient Sensitive Areas. • Two deteriorated water bodies. 		
Tyshe	<ul style="list-style-type: none"> • Discharges into designated bathing waters (Banna strand). • Building on improvements from upgrade to Ardfert WWTP. • Headwaters to At Risk High Ecological Status objective coastal water body. 	<p>1</p> <ul style="list-style-type: none"> • Tyshe_10 	<p>1</p> <p>Tyshe_020</p>
*Feale	<ul style="list-style-type: none"> • Would bring entire 23_4 subcatchment to Good status. • Potential to work with local community groups that received LEADER Group funding. <ul style="list-style-type: none"> • Building on proposed improvements at Listowel WWTP. • One river water body is failing to meet protected area objectives for salmon. • One river water body is failing to meet protected area objectives for drinking water. • One transitional water body is failing to meet protected area objectives for Nutrient Sensitive Areas. • Headwaters to Upper Feale estuary, • Four deteriorated water bodies. • One At Risk High Ecological Status Objective water body. 	<p>6</p> <ul style="list-style-type: none"> • Clydagh (Feale) _020 • Smearlagh _020 • Lyracrumpane_010 	<p>0</p>
*Fahaduff and the Upper Maine	<ul style="list-style-type: none"> • Build on proposed improvements at Castleisland WWTP. • Inland Fisheries Ireland reported two fish kills between 2013 - 2015. • Active community group • Ultimately discharges into Tralee Castlemaine shellfish area. • Maine is an important salmonid river. 	<p>2</p> <ul style="list-style-type: none"> • Fahaduff_010 • Maine_20 	<p>0</p>

*extends into the Listowel MD Area

**Headwaters occur in the Tralee MD LAP administrative boundary but associated WBs predominately occur the Killarney MD Area.

5.5.2.3. Protected Areas

The 2nd cycle of the WFD saw a continued emphasis on WBs listed on the Register of Protected Areas. These are areas identified as those requiring special protection under

existing national or European legislation, either to protect their surface water or groundwater, or to conserve habitats or species that directly depend on those waters. Those within the Tralee MD LAP are listed below in Table 5-10 and remain the same from the 1st cycle of the WFD. Of relevance to this proposed amendment is the protected bathing waters and the Shellfish area in close proximity Fenit village.

Table 5-10 Protected Areas in the Tralee MD LAP²⁶

Protected Area	WB (WFD ID in brackets)
Bathing Waters	Fenit (IESHBWC040_0000_0250)
	Ballyheigue (IESHBWC040_0000_0100)
	Banna Strand (IESHBWC040_0000_0200)
Drinking waters	Finglas (Tralee Bay)_10 Annagh 23_10 Emalagh_10 Brick_10 Feale_050 Smearlagh_030
Nutrient Sensitive Areas	Lee Estuary Upper (Tralee) (IETW_SH_2001_0034)
SAC	Tralee Bay and Magharees Peninsula West to Cloghane Akeragh, Banna and Barrow Harbour cSAC Ballyseedy Wood cSAC Lower Shannon cSAC Slieve Mish Mountains cSAC Magharees Island Csac
SPA	Tralee Bay Complex SPA Stacks to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA
Salmoinds River Regs (SI 293)	Feale (specifically FEALE_050 & FEALE_030)
Shellfish Area	Tralee Bay (IEPA2_0020)

5.5.2.4. Hydrogeology (Groundwater)

The Tralee MD LAP area extends over eight ground waterbodies (GWB). Their *status* and *risk* under the 2nd cycle of the WFD are detailed in Table 5-11 and shown on Figure 5-9.

Groundwater vulnerability varies across the MD. Notable for the Proposed Amendment is the limestone bedrock which outcrops northwest of Tralee town in and around Fenit village. This corresponds to vulnerability ratings of *high* to *extreme* and *karst*.

In relation to aquifer productivity, aquifers are *regionally important - Karstified (diffuse)* reflecting the limestone origins of the bedrock (Figure 5-10). Similar aquifer productivity occurs northwest of Tralee in Fenit although Fenit island is classed as *locally important aquifer - karstified*.

Table 5-11 Groundwater waterbodies within the Tralee MD LAP – status and risk under the 2nd cycle of the WFD.

GB WATERBODY ID	WATERBODY	STATUS	RISK
IE_SH_G_008	Ardfert	Good	Review
IE_SH_G_226	Tralee	Good	Review
IE_SW_G_026	Castlemaine	Good	Review
IE_SH_G_001	Abbeyfeale	Good	Not at risk
IE_SH_G_044	Brandon Head	Good	Not at risk
IE_SH_G_223	Spa	Good	Not at risk
IE_SW_G_033	Dingle	Good	Not at risk
IE_SW_G_073	Scartaglin	Good	Not at risk

²⁶ <https://gis.epa.ie/EPAMaps/> [accessed 24/11/17]

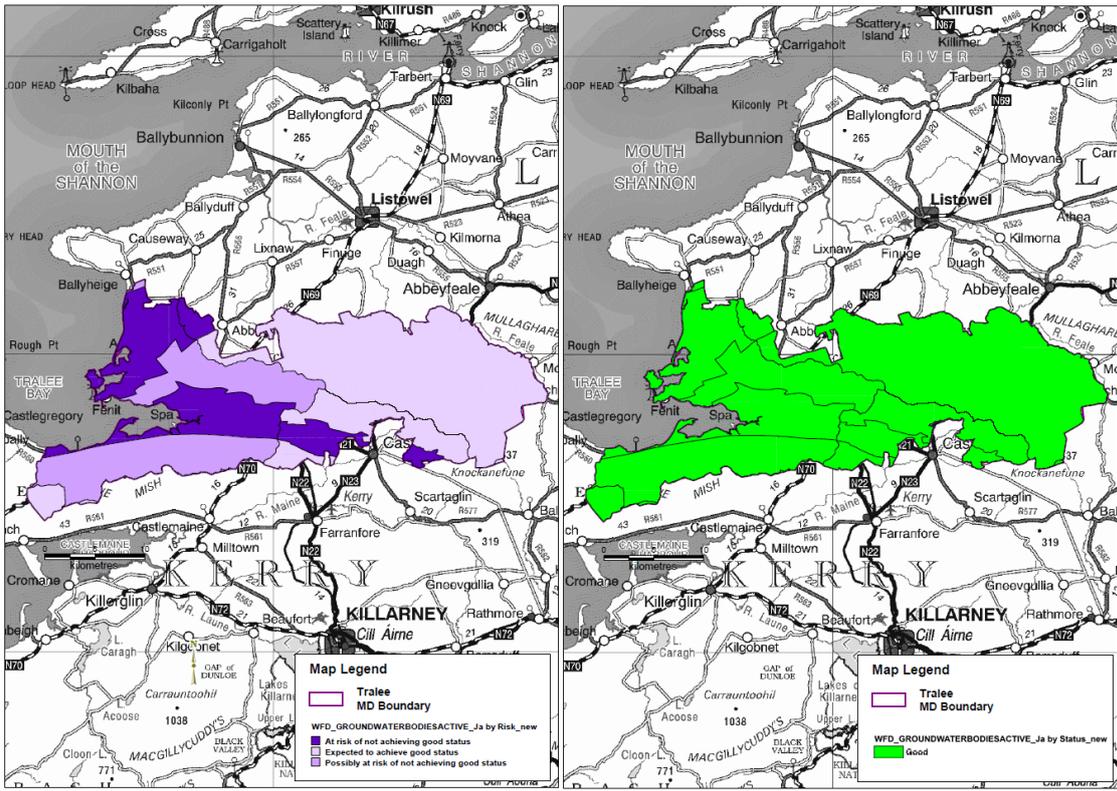


Figure 5-9 Groundwater status in the MD Area.

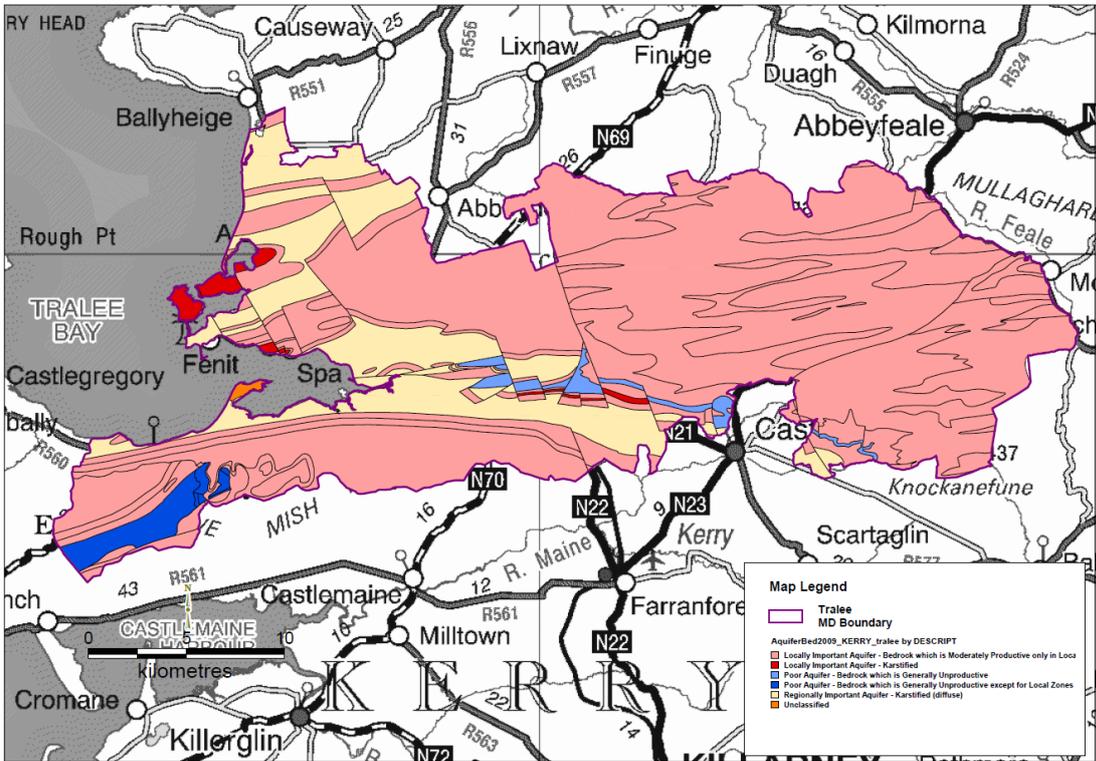


Figure 5-10 Aquifer productivity in MD area.

5.5.3. Existing Environmental Problems/Sensitivities

As noted above the overall Tralee MD LAP plan area has significant water resources – freshwater, groundwater, estuarine and coastal/marine – as defined under both the WFD and the Habitats Directive. The WFD, has specifically focused on key catchments and associated waterbodies that will require specific measures going forward. In Tralee MD four catchments have been identified as AFAs (see above).

In general, main pressures on water resources in the plan area linked to the LAP relate to urban waste water discharges. Tralee Bay is designated as a shellfish area and with populations of native oysters, is particularly sensitive to changes in water quality. The bay is also designated as a cSAC and SPA under the Habitats Directive.

As noted previously a new wastewater treatment plant has been approved for Fenit. Funding has been allocated by Irish Water as part of its ‘Small Towns and Villages Growth Programme’ however a timeline for construction is yet to be announced. Permitted development will be in line with Municipal District LAP, the County Development Plan and the capacity of the wastewater treatment Plant.

Flooding and responses to flood risk can imply hard engineering solutions such as rock armoury and/or removal of river gravels, this can impact on the ecological status of a waterbody including the hydro-morphology of surface watercourses. Coastal erosion and proposals to mitigate through hard engineering works such as sea walls, rock armoury etc can have localised impacts on water quality.

Invasive species and the spread of both terrestrial but specifically aquatic species is another threat to waterbodies within the plan area. As more emphasis is placed on blue infrastructure for both tourism ventures and local amenity uses, there is an increased potential for detrimental impacts on native habitats/species (marine in the case of the plan area) from introduced invasive species.

5.6. Air Quality

5.6.1. Baseline Assessment

The National Ambient Air Quality Monitoring Programme (AAMP) is monitored by the EPA and reported on annually. In these annual reports the EPA monitors air pollutants levels and compares and assesses them relative to EU legal limit values and the World Health Organization (WHO) guideline values. The European Union (EU) Clean Air for Europe (CAFE) Directive (EU, 2008) set specific limit and target values for air quality that were designed to protect human health and the natural environment in the EU. The WHO issue guideline values that are generally more stringent than the EU limit values and are based on protecting human health. The most recent AAMP report relates to 2019 data - *Air Quality in Ireland 2019*²⁷.

When assessing air quality, the EPA focus on the two main pollutants: 1) particulate matter – PM2.5 and PM10 (very small particles which can be solid or liquid) and 2) Nitrogen oxides (NO₂ and NO - gases nitrogen oxide (NO) and nitrogen dioxide (NO₂)). Nitrogen oxides are pollutants that are emitted in ambient air when petrol or diesel is burned in internal combustion engines. PM2.5 and NO₂ are particularly important from a health perspective. Indeed, air quality reporting continues to acknowledge that air pollution has a significantly greater impact on human health than previously realised. In its 2019 report the EPA noted 1,300 premature deaths a year in Ireland are attributed to air pollution.

²⁷ <http://www.epa.ie/pubs/reports/air/quality/epairqualityreport2019.html>

The 2019 air quality report and *Ireland's State of the Environment Report, An Integrated Assessment 2020* details the main air quality trends based on monitoring from the national ambient air quality network. Reporting from 2019 states that air quality in Ireland is generally good. However, there are spatial variations mostly evident in urban areas. Ireland was above WHO air quality guidelines at 33 monitoring sites across the country – mostly due to the burning of solid fuel in our cities, towns and villages. The country was also above the European Environment Agency reference level for PAH, a toxic chemical, at 4 monitoring sites due to the burning of solid fuel. Nitrogen dioxide (NO₂) from transport emissions is found to be polluting our urban areas. The report goes on to note that there are indications that Ireland will exceed EU limit values for NO₂ at further monitoring stations in the future.

The EPA's report ultimately highlights the main challenges of reducing air pollution from key sources such as particulate matter emissions from solid fuel burning (e.g. peat, coal and wood) in the residential sector and NO_x emissions from vehicles in the transport sector. Also, of note is the emissions to air from agriculture activity. The 2020 *Ag Climatise* roadmap the *National Emission Ceilings Directive* establishes limit values for five air pollutants to help mitigate their impact on populations. One such pollutant is ammonia. In Ireland agriculture accounts for 99% of ammonia emissions linked to three main causes: the management of animal manures (housing, slurry storage and land spreading); grazing animals, and spreading of synthetic fertilizer²⁸.

In addition to regional air quality measurements, the EPA oversees an *Air Quality Index for Health (AQIH)* indicator. The index is based from one to 10. A reading of 10 means the air quality is very poor and a reading of one to three inclusive means that the air quality is good. The AQIH index is based on measurements of five air pollutants all of which can harm health - ozone gas, nitrogen dioxide gas, sulphur dioxide gas, PM_{2.5} particles and PM₁₀ particles. The index in giving real-time data indicates how air quality at a given time may affect a person's health.

5.6.2. Kerry Data

There are now two EPA national air quality monitoring stations in the country. One is located in the Valentia Observatory in Cahirciveen, Co Kerry and the other was installed in Tralee town in 2019 as part of the EPA's expansion of the AAMP. Real-time data can be viewed through the EPA's website airquality.ie.

Nationally it is known local air quality is influenced by car emissions and domestic/commercial heating and fuel consumption. Of interest to this ER is evidence from localised studies undertaken by the EPA and other research institutes on air quality. These studies particularly focused in urban areas typical of many counties outside of our main cities. One such report by the EPA was undertaken between 2011-2012 and reported in 2015 in *Assessing the Impact of Domestic Solid Fuel Burning on Ambient Air Quality in Ireland, Assessment of Particulate Air Pollution and Polycyclic Aromatic Hydrocarbons Associated with Solid Fuel Usage in Four Towns in Ireland*. The report included Tralee and Killarney where currently there are bans in place on the sale and use of bituminous coals. It provides an interesting insight in local trends in both towns.

Measurements of particulate air pollution were undertaken during 2011–2012, specifically Black Smoke (BS), PM_{2.5} and PM₁₀. All three were selected as they are associated with residential solid fuel burning. At no time during the monitoring did any of the measured pollution parameters exceed their respective EU air quality limits. However, Tralee was above the lower

²⁸ <https://www.teagasc.ie/publications/2020/ammonia-emissions-in-agriculture-sources-importance-and-mitigation.php>

WHO guideline values for PM2.5 and close to the EU limit values for PM2.5. It was also close to the WHO guideline values for PM10. Of note at the time was that air quality at certain times were worse when compared to similar data taken at a Dublin monitoring site. The report concluded that as traffic densities are significantly higher in Dublin than in any of the towns involved in this study, evidence clearly indicated that traffic was not the main driver of the higher particulate pollution levels. Rather they concluded it was heating systems. Furthermore, the fact that higher levels of pollutants were seen in the “heating season”, this supported the hypothesis that space heating was the main driver of the particulate pollution levels.

A notable conclusion of the report was that for all of the measured parameters, the levels measured during the heating season were between two and four times higher than those for the non-heating season at each location. The report suggests that space heating, in the form of coal and other solid fuel usage, is the largest contributor to the observed air pollution levels.

Another localised survey undertaken by the Centre for Research into Atmospheric Chemistry, UCC, continues to support the above conclusions. Their 2014 survey findings, which included Killarney, was presented in the 2020 *Source Apportionment of Particulate Matter in Urban and Rural Residential Areas of Ireland (SAPPHIRE)* report to the EPA. Results for Killarney noted levels of PM2.5 during evening hours were often an order of magnitude higher than those measured during the day. Significant spikes in pollution were regularly observed when wind speeds were low. The report found that almost 75% of PM2.5 was due to residential solid fuel burning. Importantly, due to available technology they were able to “fingerprint” i.e. distinguish between combustion particles produced from the main solid fuels – coal, peat and wood. Peat particles accounted for 31% of the PM2.5 mass in Killarney; wood was the second most dominant combustion source at 17% followed by coal at 16%. Based on Irish census data, the report noted that all three fuels appear to be popular choices for domestic space heating in Killarney. However, the results presented indicate that particles from the combustion of all three fuel types were nonetheless present in the town. As there was no one clearly dominant solid fuel combustion emissions source, the report notes that measures such as a smoky or low-smoke coal ban in these areas may be only partly successful in reducing PM2.5 concentrations. They finally note that any future efforts to improve air quality in towns similar to Killarney, will need to address how domestic residences are heated in general, rather than attempting to discourage the use of one specific fuel.

A review of “real-time” data from the Tralee monitoring site in January 2021 indicates the trends noted above continue. The EPA records show in January 2021 7 daily exceedances of PM10 levels, for example, occurred in Tralee town. To compare, Dublin Port had 3 over the same time period²⁹. In contrast the Valentia monitoring station does appear in the most recent exceedance data from the EPA³⁰. As a rural station located close to the coastal outside an urban centre, lower limits of air pollutants would be expected.

Under the EU Framework for Directive on Air Quality (1996/62/EC) legislation on air quality requires that member states divide their territory into zones for the assessment and management of air quality. In Ireland there are four air quality Zones A, B, C and D. Zone A is the Dublin conurbation, Zone B is the Cork conurbation with Zone C comprising 21 large towns in Ireland with a population >15,000. Zone D is the remaining area of Ireland³¹. Tralee MD is divided into two Zones. Tralee is in Zone C and the plan area (Masterplan area) the falls into Zone D.

²⁹ <http://www.epa.ie/air/quality/reports/pm10/> (accessed 11/3/21)

³⁰ <http://www.epa.ie/air/quality/reports/pm10/> (accessed 11/3/21)

³¹ <http://www.epa.ie/air/quality/data/va/> [accessed 21/11/17]

An awareness around the national lack of information on local air quality, particularly in linking same to health, underpins the EPA's *Ambient Air Quality Monitoring Programme* (AAMP), launched in November 2017. The AAMP is built around three pillars: improved national monitoring scheme; improved modelling and forecasting and citizen engagement. Citizen engagement will highlight the links between air quality, health and the actions or clean air choices that can be taken by citizens to directly impact and improve their local air quality. Reflecting the two key impacts on air quality – fossil fuel and transport - two key solutions are offered – a move towards cleaner, more efficient home fuel and a transition in modes of transport from car dependency to alternative modes of transport. Both responses are also linked to Ireland's responsibilities towards climate change challenges i.e. mitigation but also adaptation.

Most common pollutants in an Irish context - particulate matter and NO/SO₂ - relate to the burning of solid fuel for heating and transport, respectively. Kerry with its dispersed rural population reliant on high rates of car usage and traditional forms of home heating would be vulnerable to both pollutants. With the lack of regional/local information, national trends can certainly be applied to the county and trends for the MD extrapolated accordingly. Applying trends for example from the EPA's AQIH and data from its real time air quality monitoring station (based in Caherciveen and Tralee), the following assumptions³² could be made for the Tralee MD area:

- overall air quality is *good* however on average 20-30 days per year air quality is fair, poor or very poor,
- in rural areas fair air quality is mainly caused by the pollutant ozone,
- in small towns and large towns (namely Tralee), fair air quality is usually due to ozone or particulate matter (PM10 and PM2.5). In these areas, the most significant local source of particulate matter is domestic use of solid fuel, e.g. coal and wood. Air quality will be poor or very poor on about 10 days per year - most likely during periods of cold and still weather.
- Finally, Tralee as a large urban town with high rates of car usage and commuting for work and education is likely to suffer from localised air quality impacts from traffic specifically at peak commuting hours. Impacts from home heating has been mitigated to some degree as bituminous coal is banned for marketing, sale and distribution under the Air Pollution Act 1987.

5.6.3. Existing Environmental Problems/Sensitivities

There are no specific values for air quality for the Masterplan area. The existing environmental problem relating to air quality in the plan are the localised air quality issues that arise predominately in a village setting, though to a lesser extent, given the size and coastal location of the settlement. Past research by the EPA in Tralee and Killarney indicates localised exceedance of air pollutants while the new monitoring station in Tralee provides real-time data on air pollutants. A notable conclusion from research is that space heating, in the form of coal, peat and wood, is the largest contributor to the observed air pollution levels in these towns. Tralee and Killarney are the county's largest towns. However, it could be extrapolated that other urban centres suffer from similar but unrecorded air pollution events. Kerry as a county is reliant on traditional fossil fuels for heating. Housing schemes that use district heating schemes based on bioenergy technology such as wood-chip burners are limited to date with the exception of Tralee.

As outlined local air quality in Ireland is also particularly influenced by transport associated fuel consumption. Considering the settlement patterns in the Tralee MD area and associated high dependency of car travel, it can be expected that air quality within the MD is influenced by both

³² <http://www.epa.ie/air/quality/pro/>

emissions associated with travel and solid fuel burning and most likely occurs at a very local/spatial level.

In the context of a land use plan and the proposed amendment to it here, travel times/commuting distances to work and amenity/recreational activities is heavily influenced by settlement strategies. Sustainable settlements where people work and live in close proximity is a pre-requisite for reduced transport times. It also allows for sustainable forms of energy use such as district heating schemes coupled with a move away from fossil fuel. The Masterplan seeks to facilitate the development of housing on a central site within an established village with existing services and facilities.

5.7. Climatic Factors

5.7.1. Baseline Assessment

Planning for climate change has become central to national policy in recent years further to the publishing of the *National Policy Position on Climate Action and Low Carbon Development* in 2014; the *Climate Action and Low Carbon Development Act* of 2015; the *National Energy and Climate Action Plan (NECAP) 2021-2030*, the *Climate Action and Low Carbon Development (Amendment) Act 2021*³³ and most recently the publishing of Carbon Budgets and the 2021 *Climate Action Plan, Securing our Future (CAP21)*³⁴ (which expands targets from the 2019 CAP). The 2021 Act specifically require the State to pursue the “national 2050 climate objective”, namely the transition to a *climate resilient, biodiversity rich and climate neutral economy* by the end of 2050.

A key challenge is to integrate (or mainstream) this climate objective into all levels of national, regional and local decision-making including policies, plans and programmes and strategies (PPPS). This is envisaged by the parallel national dual strategies of mitigation - of greenhouse gas emissions (GHG), and adaptation - to the impacts of climate change. Nationally responses are now being led by Government through evolving climate policy with Local Government identified as a key leader in driving climate action.

5.7.2. Mitigation

In line with international consensus, the key focus of mitigation is reduction of greenhouse gas (GHG) emissions. Internationally, energy-related emissions of carbon dioxide (CO₂) dominate global GHG emissions with methane (CH₄) and Nitrous Oxide (N₂O) also playing a significant role. Reducing emissions underpins the mitigation of climate change. In Europe the EU has set its member states legally binding reductions, based on the Paris Agreements³⁵, in GHG emissions. Member States must reduce GHGs by 20% by 2020; 40% by 2030 and 80-95% by 2050 relative to 1990 levels³⁶. In 2019 the EU through the *European Green Deal* and subsequent *European Climate Law* has committed to more ambitious emissions cuts of 50-55% by 2030.

³³ <https://www.gov.ie/en/publication/984d2-climate-action-and-low-carbon-development-amendment-act-2021/>

³⁴ <https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/>

³⁵ The *Paris Agreement* (12 December 2015) commits 196 countries to the mitigation goal of limiting the increase in global temperature to well below 2°C above pre-industrial levels. The agreement also includes a long-term adaptation goal which refers to enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change in a manner that does not threaten food production.

³⁶ <https://www.seai.ie/about/irelands-energy-targets/>

National policy laid out in CAP19 and now expanded in CAP21 outlines how Ireland will achieve its targets to 2030 while providing a trajectory towards achieving targets to 2050. Ireland is committed to three significant targets to 2030, since scaled up with the CAP21: (1) a 51%–cut in GHG emissions; that (2) 80% of our electricity needs will come from renewable sources (up from 30% as of 2019) and (3) a 32.5% increase in energy efficiency. The *Programme for Government (2020)* commits Ireland to a 7% annual reduction in overall emissions from 2021-2030. In Ireland five key areas where GHGs are emitted are identified as Agriculture, Transport, Electricity, Built Environment, and Industry. Carbon budgets for each sector have now been issued to Government by the Climate Change Advisory Council³⁷.

Ireland's CAP19/21 identifies the significant challenges facing Ireland in reducing its GHG emissions in these 5 key sectors. All areas are of relevance to any proposed amendment to the Tralee MD LAP, in particular, the reduction in emissions needed in heat; transport and energy production are significant in the content any land use plans. It is acknowledged that carbon sequestration through Land Use, Land-Use Change, and Forestry (LULUCF) measures will have an evolving but significant role in the future national land-use management policy.

5.7.3. Adaptation

In line with national climate policy the statutory *National Adaptation Frameworks (NAF)* was published in 2018³⁸. It mandated the production of key, climate sensitive, sectoral adaptation plans – for e.g. forestry, energy, transport and also local government. The statutory plans are seen as dynamic, iterative processes that will need regular review as climate change policy evolves in the decades towards 2030 and onto 2050. Of interest to this report is that the strategy acknowledges the role of the Planning Authority in responding to climate change via informed spatial and physical planning. It notes that more compact, less energy-intensive forms of urban development are crucial in the adaptation to climate change specifically at a local level.

A number of technical supports have been produced to assist in the development of local level adaptation strategies including the Local Authority Adaptation Strategy Development Guidelines, commissioned by the EPA in 2016. This culminated with the drafting of KCC first Climate Change Adaptation Strategy (CCAS) in 2019. The strategy was adopted by KCC in September 2019 and runs until 2024.

The CCAS outlines 6 themes/high level goals around adaptation. These goals identify the desired outcomes anticipated through the effective implementation of the climate change adaptation strategy. They are supported by specific objectives and actions to achieve their desired outcomes. Nearly all the themes, corresponding objectives and action are applicable but specifically theme 3 and 6 as they relate to *Landuse and Development* and *Community Health and Well Being*, respectively. 'A Profile of Local Government Climate Actions in Ireland (2011 - 2018)' was published in early 2020. It outlines for the first time the range of actions Local Authorities have undertaken to tackle climate change and promote climate action.

Of note is that the *Climate Action and Low Carbon Development (Amendment) Act 2021* requires LAs to produce their own *Climate Action Plan*. This is to cover both mitigation and adaption.

³⁷ <https://www.climatecouncil.ie/>

³⁸ *National Adaptation Framework, Planning for a Climate Resilient Ireland, 2018*, DCCAE available at <https://www.dccae.gov.ie>

5.7.4. Climate Action in the context of the MD LAP and proposed amendment.

Many of the challenges and proposed responses to climate change outlined in the NMP/NAF are strategic in nature and will involve commitments at National, European and boarder International level. Nonetheless, as stated the NMP and NAF acknowledge that local government are envisaged to play a key role in meeting national climate change challenges. Both reports for example state that at an immediate level LAs are pivotal in both planning for and responding to severe climatic events such as flooding or storms events. LAs also have extensive local knowledge of their geographical areas including the natural and man-made environments. This coupled with existing inter-community communication links, implies LAs are best placed to lead in driving awareness and engagement within the community around climate action. Leading a climate change agenda in the public realm is elaborated on in the NAF.

Of relevance to this report however is the reiteration in both the NMP and NAF that spatial planning is a key player in climate change action - particularly adaptation. The NMP notes spatial planning can *shape new and existing developments in ways that reduce greenhouse gas emissions, increase resilience to the impacts of climate change and enable renewable energy obligations to be met. A strong spatial plan will also help to prioritise the development of crucial infrastructure such as public transport that can deliver optimum national benefits in relation to the national transition objective for 2050*³⁹. This is reinforced in the NAF which states more compact, less energy-intensive forms of urban development are crucial in the adaptation to climate change specifically at a local level.

This “integration” of climate action into planning policy has already commenced. In 2010 amendments to the Planning and Development Act, specifically Section 10(2)(n), required the inclusion of objectives to mitigate against climate change and reduce reliance on fossil fuels. Objectives were subsequently included in the KCDP adopted in 2015 and into the Draft Kerry County Development Plan 2022-2028. As the next land use plan in the hierarchy of planning policy as outlined in Section 2 (**Error! Reference source not found.**), the Tralee MD LAP augments this integration – directly through policies and objectives that support climate action but also indirectly through spatial and physical planning. The latter dictates a vision for the future development of the MD that for example supports local transport initiatives; provision of green infrastructure; appropriate zoning/development of lands and addressing of flooding issues. Taken in combination these clear synergies between plan making and the implementation of preferred adaptation options will ultimately and cumulatively form part of the local, regional and ultimately national response to climate action.

5.7.5. Existing Environmental Problems/Sensitivities

Besides flooding (see SFRA prepared as part of the Tralee MD LAP for more detailed discussion on same in relation to the Tralee MD Plan) there is little research on the impacts of climate change at local or regional areas in Ireland. Nationally however climate research predicts certain trends and associated impacts from climate change⁴⁰. Observations show that Ireland’s climate is changing in terms of sea level rise, increases in average air and sea temperature, changes in precipitation patterns and weather extremes. Associated likely impacts are increased flows to river catchments, water shortages in summer; increased risk of new pests and diseases; adverse impacts on water quality; and changes in the distribution and time of lifecycle events of plant and animal species on land and in the oceans⁴¹. Climate

³⁹ *National Mitigation Plan, July 2017*, DCCAE available at <http://www.dccae.gov.ie/en-ie/climate-action/consultations/Pages/National-Mitigation-Plan-.aspx> [accessed 11/4/17]

⁴⁰ See <https://www.climateireland.ie/#/>

⁴¹ *Draft National Adaptation Framework, Planning for a Climate Resilient Ireland, September 2017*, DCCAE available at <https://www.dccae.gov.ie/en-ie/climate-action/consultations/Pages/Public-Consultation-on-Draft-National-Adaptation-Framework.aspx> [accessed 11/10/18]

change will therefore have a diverse and wide-ranging impact on Ireland's environment, society, economic and natural resources. These include managed and natural ecosystems, water resources, agriculture and food security, human health and coastal infrastructures and zones. These changes are projected to continue and increase over the coming decades.

Looking at the key issues facing Ireland outlined above certain extrapolations can be made on possible impacts on Kerry and specifically the Tralee MD area and Masterplan area. The most obvious is impacts from severe weather events coupled with sea rise. Coastal flooding is a particular concern along the MD coastline specifically low-lying soft coastlines around Ballyheigue beach, Banna beach, Barrow harbour, Carrahane and Fenit. Flooding is specifically addressed in the SFRA that accompanied the Tralee MD LAP 2018-2024.

Temperature changes – in air and aquatic environments - may also affect the MD area resulting in changes or shifts in local biodiversity. Increase in temperatures of watercourses for example will impact on fisheries habitat and species that evolved in temperate environments.

As noted that main response to climate action that is integrated in to all the Local Authority's plans is an emphasis on compact, less energy-intensive forms of urban development. Section 4.2 provided an overview of settlement patterns in the Tralee MD area in the inter-census period of 2011-2016. Two main trends predominate. Firstly, the stagnation and/or decline of settlement in urban centres, including the main town of Tralee and secondly, the increase in developments (one-off housing) in rural areas. These trends are at variance with the settlement patterns required for a response to climate change. It is particularly prevalent in an Irish context where transport is a key area of failure in meeting targets associated with mitigation. Dispersed rural settlement implies greater car dependency with people not living in the places where they work, go to school or access services. The Masterplan seeks to promote compact development within an established settlement with existing services and amenities.

5.8. Material Assets

5.8.1. Baseline Assessment

In the context of the SEA, the EPA defines material assets as the critical infrastructure essential for the functioning of society. Material assets can be both natural and man-made. The former has been previously identified in other sections of this report – such as soil, water, ecology and landscapes of both scenic and cultural significance. In this section material assets will specifically focus on man-made infrastructure including: water infrastructure (supply & wastewater treatment), transportation infrastructure (road, rail, air and sea); communications infrastructure; and energy infrastructure.

Water supply and waste-water treatment are intrinsically linked to Sections on water and human health. However, as infrastructure for both are identified as a material asset they will be discussed in this section.

5.8.1.1. Water Infrastructure

The settlement hierarchy outlined in the Tralee MD LAP is based on the Core Strategy of the KCDP 2015-2021. It essentially allocates population growth into three main settlements in the MD area – Tralee, Ardfert and Fenit. This is based on the waste water capacity within the three settlements. Fenit has planning permission for a new waste water plant at the existing site located outside the village. Since the adoption of the LAP, Irish Water has committed to the construction of this new plant and funding has been allocated under its 'Small Towns and

Villages Growth Programme'. However, until such time as the plant is operational there will be constraints on new development within the village.

5.8.1.2. Transport Infrastructure

The localised upgrading of the R558, Tralee to Fenit Road infrastructure project as proposed in the Tralee MD LAP is also set out as part of the Masterplan. Fenit port and harbour is recognised as key infrastructure in the Tralee MD LAP and Regional Spatial and Economic Plan for the Southern Region and there are several commitments in the plan to improve access to/from the port. In line with improvements for traffic management is the parallel requirement to improve public infrastructure for non-vehicular transport including greenways, the Tralee-Fenit Greenway is nearing completion. (The Masterplan seeks to develop an overall vision for the seafront site, where the greenway terminates in Fenit village.) More recently the concept of blueways developing along the county coastline has grown in popularity.

The port/harbour, blue flag marina, blue flag beach and the proposed terminus for the Tralee-Fenit greenway makes the entire area an important local amenity for both the community and visitors. Fenit village, along with the entire coastline of the MD, falls within the scope of the *Wild Atlantic Way*.

5.8.1.3. Telecommunication/Broadband Infrastructure

The Tralee Town Metropolitan Area Networks or 'MANS', which are wholesale fibre ring networks, are operated by eNet in Tralee town. In relation to the MD area locally based Internet Service providers (ISP's) continue to provide both wireless and fibre broadband.

The countywide availability of high speed broadband is ultimately linked to the National Broadband Plan (NBP). It is a Government policy initiative which aims to deliver high-speed broadband to every household and business in Ireland within 3-5 years of commencement of the large-scale rollout. Work is on-going in terms of delivery.

There are several objectives in the MD plan to support the NBP – including facilitating the development of digital hubs; the establishment of start-up enterprise space in existing unoccupied buildings and facilitating homeworking and development of co-working Hubs.

5.8.2. Waste Infrastructure

North Kerry Landfill (NKL) is located in the townland of Muingnaminnane c.8km northeast of Tralee. The former waste disposal site commenced operating in 1994 closing to waste in 2015. During this period of operation 888,400 tonnes of non-hazardous waste was collected and stored at the facility in a series of cells. The restoration and after care of the site is managed by KCC under a *landfill for non-hazardous waste licence* granted from the EPA⁴². Environmental monitoring is ongoing undertaken in accordance with the aforementioned waste licence. This includes monitoring of: the surface and groundwater both on-site and off-site; the perimeter gas wells to ensure there is no migration of gas off site and noise and dust levels. The full suite of monitoring required including frequencies to be undertaken are conditioned in the licence. Compliance with monitoring is managed by the Environment Section of KCC.

5.8.3. Existing Environmental Problems

Considering the position of the Tralee MD LAP and the proposed amendment to it in the policy framework outlined in Section 2, infrastructure within the MD LAP is guided to a large degree by higher level plans notably the KCDP 2015-2021 but also the strategic national plans of for example Irish Water and educational facilities such as the Institutes of Technology. Nonetheless, the Tralee MD LAP and any proposed amendment to it plays a pivotal role in

⁴² Licence W0001-04, information available at http://www.epa.ie/licences/lic_eDMS/090151b2804dcc17.pdf

supporting objectives for local infrastructure including works to the local road network; car parks and other public infrastructure, zoning for public infrastructure and the facilitation of the provision of broadband infrastructure.

5.9. Cultural Heritage

Heritage within the LAP predominately includes archaeological heritage, built heritage and cultural.

5.9.1. Baseline Environment – Archaeological

The archaeological heritage of the county, including the Tralee MD area and the proposed amendment to it, is protected via the National Monuments (Amendment) Act 1994. It makes provision for the compilation of a record of all known monuments in the county - The Record of Monuments and Places (RMP). This list is provided in the KCDP 2015-2021 and in the Draft Kerry County Development Plan 2022-2028. In addition, Kerry has a number of specific archaeological landscapes where the landscape setting and character of monuments are protected. These archaeological special protection areas are listed in the KCDP 2015-2021 and Draft Kerry County Development Plan 2022-2028. Finally, underwater archaeology is another resource recognised within the county and specifically applies to the Tralee MD area.

There are 1131 monuments listed in the RMP for the whole of the Tralee MD. The SMR contains 1170 monuments, only a slight increase on that listed in the RMP. These new monuments are mainly located around Tralee. Of these recorded monuments seven are National Monuments in state ownership or guardianship (Table 5-12). A further eight are National Monuments subject to a preservation order (Table 5-13).

Table 5-12 National Monuments in State Ownership or Guardianship

Townland	Description	Status	RMP No.	Nat Mon No.
Annagh	Church	Ownership	Ke038 003001	56
Ardfert	Cathedral & Two Churches	Ownership	Ke020 046002 Ke020 046001 Ke020 046007	54
Ardfert	Friary	Ownership	Ke020 047	358
Beheenagh Caherconree	Inland Promontory Fort	Ownership	Ke037 048	184
Killelton	Church	Guardianship	Ke037 025002	593
Ratass	Church & Ogham stone	Ownership	Ke029 157001 Ke029 157002	57
Tullygarran	Ogham stones	Guardianship	Ke029 132 Ke029 241	295

Table 5-13 National Monuments Preservation Order

PO ID	PO NO	DATE	DESCRIPTION	TOWNLAND	RMP NO
401	2/98	28/05/98	Cave (Burials)	Cloghermore	Ke030 089
141	194	16/12/53	Ringfort	Ballyroe	Ke029 009/048
457	1/83	24/2/84	Oratory	Killelton	Ke037 025
149	222	17/10/55	Earthwork	Liscahane	Ke020 017002
455	5/70	23/7/70	Three Wedge Tombs	Maumnahaltora	Ke045 013
142	60	27/5/38	Ringfort & Souterrain	Rathcrihane	Ke020 054
153	186	28/11/49	Lismore Fort	Rathkenny	Ke021 087
138	35/76	19/8/76	Ringfort	Tullygarran	Ke029 144

The following information on the archaeological resources within the Tralee MD area is based on information, unless otherwise stated, from the County Archaeologist. There are no national monuments located within the Masterplan area.

Early History

There is no definitive evidence for settlement within the Tralee MD area in the Mesolithic though the estuary of the River Lee does have potential for such early settlement. There is certainly evidence for the continuous settlement of the Tralee area from the early Neolithic to the present day. The houses excavated at Gortatlea and Cloghers and the significant passage tomb at Ballycarty illustrate both life and death during the Neolithic while radiocarbon dates for excavated features in the Tralee area also indicate settlement in the fourth millennium BC. Further passage type tombs are likely to occur in the Ballycarty area as well as under unopened cairns in the Sliabh Mish and upland areas to the east.

The late Neolithic/Early Bronze Age transition sees increased evidence for settlement in the Tralee area while monuments like the embanked enclosure at Carrigeenwood near Brosna indicate settlement outside of the clearly important Tralee focus. Beaker pottery has been recovered from a number of locations within the district while Early Bronze Age metalwork in the form of axeheads is known from Ardfert, Ballyard, Kilmore & Parkearagh with a bronze knife recorded from Tonavane. Wedge tombs are recorded in the area with the cluster of three tombs at Maumnahaltora being an important focus of activity at this time.

Middle and Late Bronze Age houses have been recorded at Killierisk and Cloghers in the Tralee area. The heaviest concentration of barrows in the county is to the east and south of Tralee while the same area has one of the highest densities of burnt mounds or fulachtaí fiadh with a second concentration of such monuments in the east of the municipal district area. Standing stones, rows or circles are uncommon in comparison to the peninsulas though there are a number of single standing stones and a few rows in the area south of Tralee extending along the coastal fringe towards Derrymore with a significant group associated with enclosures and barrows at Annagh.

The Late Bronze Age is the period where hierarchical societies and tribal groupings begin to develop based around trade as evidenced in the construction of hillforts and hilltop enclosures. The area contains three of the most important such monuments in the region at Glanbane, Knockanacraig and Caherconree with the Knockanacraig example being unusual in that it is within an urban area and under significant development pressure. Indeed this hillfort with its controlling position over the inner bay and routes to the north could well be interpreted as the beginning of Tralee as a trading centre. The inland promontory fort at Caherconree is likely to have been a tribal gathering centre or citadel rather than occupied all year round.

Late Bronze Age metalwork is known from the area particularly the important hoard of bronze horns from Clogherclemin Bog east of Tralee and the bronze cauldron from Ballinvariscal both probably best interpreted as votive offerings placed in a bog/pond.

The Iron Age saw the continued development of the large tribal centres focused on the hillforts and the smaller local centres that are the hilltop enclosures. There is a distinct cluster of probable hilltop enclosures around Tralee with a notable example at the eastern side of the area in Meenyvoughaun.

Historic Period

The arrival of Christianity in the 5th century created a new dynamic and while conversion was a gradual process early monastic foundations took root quickly. Early enclosures are rare in the area though two of the largest examples, the probable example at Ratass and that at Brosna, occur in the district. Ratass grew into an important ecclesiastical centre with its 11th century stone church with later insertions. The major ecclesiastical complex at Ardfert dates to at least the 12th century though its origins are probably older. The extant remains consist of a 12th

century cathedral and church and a 15th century church with evidence for the former existence of a round tower. Later medieval monastic orders to open foundations in the area include the Franciscans at Ardfert, the Cistercians at Abbeydorney and the Dominicans at Tralee.

The ubiquitous ringfort was the farmstead of the medieval period and is a clear indicator of the settlement patterns of the time. Particularly large bivallate and trivallate forts occur to the north of Tralee at Knockanush and Garrane as well as to the north and east of Ardfert at locations like Rathkenny and Tuibrid. All of these sites occur on well drained agricultural soils. In general ringforts occur across the district while souterrains, the underground refuges and storage areas associated with many ringforts, are also well documented.

Early Anglo-Norman castles were located in Tralee though none are now extant. Later 15th century tower houses occur at Fenit, Ballymullen, Bealagrellagh, Ballyplimoth, Kilmurry etc.

Archaeological Landscapes

The Tralee MD contains several archaeological landscapes. They occur around the ecclesiastical and Bronze Age monuments near Brosna, the landscape around the passage tomb and associated monuments at Ballycarty and the significant landscape around the inland promontory fort at Caherconree as well as part of the landscape around the regionally significant hillfort at Glanbane. These archaeological landscapes are areas of at least regional importance and in the case of Caherconree and Ballycarty national importance. The sites are further described in more detail and mapped in the KCDP 2015-2021 and in the Draft Kerry County Development Plan 2022-2028. The Masterplan area does not contain any identified archaeology landscapes.

Underwater Archaeology

The Tralee MD area has a maritime coastline based around the inner reaches of Tralee Bay but also including Barrow Harbour and the coastline stretching north towards Ballyheigue and westward along the Dingle Peninsula to Carrigaharoe Point with numerous recorded shipwrecks from the early 1600s to relatively recent times. Significant coastal wetlands and salt marshes occur at Annagh and Akeragh Lough while extensive mudflats occur where the River Lee enters Tralee Bay, between Tralee and Derrymore and in Barrow Harbour. All of these areas have obvious high archaeological potential but so too do the larger rivers like the Lee as well as the numerous smaller rivers, streams, and pond. The medieval origins of Tralee and the importance of the port of Blennerville to the town and Tralee Bay as an access point throughout prehistory and the early mediaval period as well, indicate the potential of the mudflats around the River Lee and Blennerville where fish traps have already been identified. There is also the possibility that the small lakes/ponds, rivers and streams contain finds or features relating both to sites located onshore and activity within/on the lakes and rivers themselves – bridges, fish-traps, platforms etc. Artefacts may be deposited in lakes and rivers as part of a ritual deposition or may end up there as a result of accidental loss, particularly at crossings or fording points.

5.9.2. Baseline Environment – Architectural

The architectural heritage of the county, including the Tralee MD area is provided on a *Register of Protected Structures*, also listed in the KCDP 2015-2021 and Draft Kerry County Development Plan 2022-2028. The *National Inventory of Architectural Heritage* (NIAH) provides additional information on the architectural heritage of the county and sites in the Tralee MD are included in the inventory. Overall the range of buildings afforded protection in the RPS in the Tralee MD is extensive, and reflects the variety of structures worthy of protection in the Tralee MD area. In addition to PSs there are a 11 Architectural Conservation Areas (ACAs) in the Tralee MD area (Table 5-14). There are no protected structures within the

proposed Masterplan area. There is one designated ACA in Fenit (Central Block) within close proximity to the Central Core site.

Table 5-14 ACAs in the Tralee MD plan.

ACA	Areas included
Brosna	The Square and block on both sides of Main Street
Farmers Bridge	Three structures
Fenit	Central block
Knocknagashel	Central triangle
Blennerville	Village area
Tralee Town	<ul style="list-style-type: none"> • Town Park/ Denny Street/ St. John's Church Area, The Square and Precinct, • Dominican's Church/ Day Place Area, • Rock Street/ Ashe Street, • Edward Street, Ashe Street, Castle Street, • Caherina Cottages, and • Urban Terrace, Rock Street

The following information on the architectural heritage of the Tralee MD area is based on information, unless otherwise stated, from the County Conservation Officer.

The Tralee Municipal District's agricultural character coupled with the mercantile, judicial and political role of Tralee as County town, has influenced the area's growth and morphological development in terms of buildings, layout and type of agricultural holdings. The architectural character of the Tralee Municipal District has been influenced by the area's topography and its agricultural past, with a strong vernacular heritage evident in rural areas of the municipal district. Urban settlement is concentrated in Tralee town; a Geraldine town with thirteenth century origins but which is now, predominantly characterised by Victorian architecture laid out along a meandering medieval street pattern, interspersed with fine examples of Georgian architecture.

Remaining urban settlements include rural villages of Camp, Knocknagoshel, Lyracrumpane and Brosna which evolved to serve a strong agricultural hinterland and are characterised by two storey terraced developments primarily dating to the late nineteenth and early twentieth century. The village of Ardfert evolved around the religious hub of the Franciscan Friary and later the landlord Crosbie family and Fenit, which developed following the arrival of the railway and which included a hotel, constabulary barracks, church, railway station, lifeboat house, coast guard station and post office in the latter half of the nineteenth century. Blennerville was once the port of Tralee and is named after the Blennerhassett family. The village has several protected structures dating to the eighteenth and nineteenth century and is home to the iconic Kerry landmark, Blennerville Windmill, one of few grain windmills in the country. Both Church of Ireland and Roman Catholic churches along with their accompanying rectories and presbyteries are also widely evident throughout the MD area, often acting as the fulcrum around which a settlement evolved. The opening of the railway line from Killarney to Tralee in 1859, the Tralee to Listowel line in 1880, the Tralee to Fenit line in 1887 and the Tralee to Dingle line which opened in 1891 has left a lasting imprint on the built heritage of the area, with a variety of railway buildings, limestone embankments, tunnels, railway bridges and local railway stations.

The Tralee Municipal District's vernacular domestic architecture is characterised by three main types; the single and two storey farmhouse, often as part of an agricultural setting or farmyard cluster, the two and three storey terraced town house, often parallel to the streets in the area's towns and villages, and the multi-storey large country house and garden, often associated with the eighteenth and nineteenth century landed classes of the area. These grand residences, were often classical in their proportion and plan form, reflecting the architectural style and fashion of the day.

During the seventeenth and eighteenth centuries, the Tralee MD rural area was characterised by sparse linear development alongside a dense road and lane network and dense field pattern. With an explosion of population before the famine, the clachan form emerged and clusters of housing and outbuildings became a common feature of the rural landscape. Following the Famine, from the mid to late nineteenth century, the pattern of rural development was significantly changed with consolidation of previously subdivided holdings and huge changes to dwelling density, location and size evident. Development patterns were concentrated around cross roads, rather than along roads and lanes. While once ubiquitous in the landscape, the traditional farmhouse building type is under threat, particularly in areas subject to development pressure. The architectural style of the historic farmyard layout comprises a single storey dwelling house with agricultural outbuildings arranged in a courtyard type layout, where the house and outbuildings are usually separate from one another. Most dwellings were direct entry types, usually with the kitchen centrally located on plan and bedrooms to either side. Plan depth is consistent with variety in length often the only differing feature. The improvement in economic conditions in the latter half of the nineteenth century and early twentieth century led to additions at first floor level and extensions in length of the house, often due to conversion of byres and sheds to residential accommodation. It was during this time that many of the houses which were previously thatched were reroofed in corrugated metal sheeting or slate. The two storey farmhouse now became part of the vernacular heritage of the area, characterised in the Tralee MD by a centrally located front door, gable ended chimneys and a steeply pitched A roof. The single storey thatched farmhouse is now a rarity in the Tralee MD area and there are none on the RPS for the Tralee MD area.

Industrial Heritage

Of particular note in the Tralee MD area are a number of former mills structures in Tralee town. Tralee's mills and warehouses mostly date from the mid to the late nineteenth century and offer a reminder of the richness of Tralee's industrial heritage. Tralee's mill buildings included corn, flour, saw mills, breweries and warehouses associated with Tralee's industrial activity throughout the nineteenth century. These mills were constructed in response to the industrialisation of agriculture, with crops grown for food production and the clothing industry. Grain stores, flour mills, and linen and cotton mills were traditionally built close to the crops that supplied them. There are few remaining examples of this industrial heritage. The excerpts below from the National Inventory of Architectural Heritage describes some of these remaining structures:

- **Blennerville Windmill:** Freestanding circular-plan tapered single-bay five-storey windmill, built c. 1790, having cantilevered timber platform to first floor and timber lattice sails.
- **Kelliher's Mills (Former Corn Mill), NCR:** Detached seven-bay five-storey warehouse, built 1887, with four-storey extension to rear and two-storey extension to right hand side.
- **Blackpool Building (next to Former Alms House):** Detached eight-bay five-storey warehouse, built 1882, with single-bay three-storey extension to north east corner.
- **Hanbridges Gas Supplies:** Corner-sited seven-bay five-storey former warehouse, built c. 1835, now in use as retail outlet and workshops.
- **Ballymullen (former Brewery):** Detached eight-bay three-storey former warehouse, built c. 1870,

5.9.3. Baseline Environment – Cultural

The Tralee MD area also includes *Sliabh Luachra* an area noted for its rich unique musical heritage. The area is not clearly defined but incorporates rural communities at the County bounds of Kerry, Cork and Limerick. It includes, but is not limited to, the villages of Scartaglin, Cordal, Brosna, Rockchapel, Newmarket, Ballydesmond, Gneeveguilla and Knocknagree.

Sliabh Luachra has become synonymous with a unique style of traditional Irish music that forms a distinct part of the area's cultural heritage.

5.9.4. Existing Environmental Problems

Considering the position of the Tralee MD LAP (and the proposed amendment to it) and the policy framework outlined in Section 2, cultural heritage is to a large degree protected by over-arching policies and objectives as outlined in the KCDP 2015-2021, the Draft Kerry County Development Plan 2022-2028 and other applicable legislation. Significant problems or sensitivities around cultural heritage are localised and there is a range of existing legislation in place to manage sites within best practices. The LAP also contains objectives for tourism and recreation which may affect local sites by increasing visitor numbers etc. In relation to architectural heritage, there are pressures from development on vernacular forms of architecture specifically the traditional farmhouse building and associated outbuildings and development can impact on the setting of protected structures or ACAs. However, given the location of the sites of the proposed Masterplan and the absence of sensitive heritage therein and the existing protective measures in the Tralee MD LAP, no negative impact on the environment is considered likely.

5.10. Landscape

5.10.1. Baseline Assessment

The KCDP 2015-2021 and Draft Kerry County Development Plan 2022-2028 outlines scenic routes, zoning designations and views and prospects throughout the county. The Tralee MD LAP includes the zoning objectives for the Fenit area and the proposed Masterplan sites. Urban settlements "landscape" is linked to town and/or streetscapes and the development of the public realm. ACAs, which seek to protect the architectural significance of streetscapes, are discussed in the previous section.

5.10.2. Existing Environmental Problems

Considering the position of the proposed amendment to the Tralee MD LAP as outlined in the policy framework in Section 2, landscape is both influenced and protected by over-arching policies and objectives outlined in the KCDP 2015-2021 and the Tralee MD LAP. The LAP has influence over local landscapes specific urban landscapes within the settlements contained in the LAP area. Proposed zoning and associated development for example have the potential to impact on landscapes/view and prospects in the LAP area. Village design statements, public realm plans and other locally led masterplans can form part of a response to integrating development with local landscapes. The proposed amendment -masterplan does not provide for the zoning of lands but rather is consistent with the established land-use zonings set out in the adopted Tralee MD LAP. The proposed Masterplan has been prepared to respond positively to the local surrounding landscape.

5.11. Interrelationships between Environmental Factors

The environmental factors assessed in the preceding sections are populations and human health; biodiversity (flora and fauna); soil and geology; water and hydrogeology; air quality; climatic factors; material assets; cultural assets and landscape. All factors are interlinked with many depending on or influencing other factors in complicated and complex interrelationships. This is particularly evident in the interrelationship between water/hydrogeology; biodiversity and soil/geology. More recent research has heightened an awareness of the linkage between air quality and human health. Air quality in turn is heavily influenced in Ireland (including Kerry and the MD area) by air pollution – specifically from transport and burning fossil fuels for heat. Sprawling developments with increased dependence on car travel is significant in Ireland's challenges around climate action including mitigation but specifically adaptation.

5.12. Evolution of the Baseline Environment without the proposed amendment to the Tralee MD LAP

SEA legislation requires that consideration is given to the likely evolution of the current environment baseline where implementation of the proposed amendment does not take place. This is presented below in Table 5-15.

Table 5-15 Likely of key environmental factors in the absence of the proposed Amendment

Environmental Parameter	Likely Evolution in the Absence of the Plan
Population/human health	<ul style="list-style-type: none"> • Settlement patterns would still be governed by the Core Strategy as outlined in the KCDP 2015-2021 and Tralee MD LAP 2018-2024 • The MD LAP supports the roll out of masterplans and other objectives that seek to promote the rejuvenation of urban centres to make these places attractive places to work and reside in. The absence of a masterplan may inhibit or slow development at the two sites identified. • In the absence of a masterplan, development may proceed more on a piecemeal basis. • The lack of a masterplan may reduce opportunities to link into funding streams available.
Biodiversity (flora, fauna)	<ul style="list-style-type: none"> • Various legislation in place manage biodiversity, specifically European sites as set out in the County Development Plan and the Tralee MD LAP, • The Tralee MD Plan plays an integral part in the spatial planning of developments specifically within towns and villages, • In the absence of an agreed masterplan there may be a lack of overall agreed spatial planning vision for these two key sites identified in Fenit.
Geology/soils	<ul style="list-style-type: none"> • In the absence of the agreed masterplan the soils, geology and hydrogeology would continue to exist in much the same pattern. There is currently little or no legislation relating directly to soils and soil protection.
Water/hydrogeology	<ul style="list-style-type: none"> • Various legislation namely the WFD to manage water resources in the MD. The roll out of the 2nd cycle and subsequent cycles of the WFD would continue in the absence of an agreed masterplan. • The Tralee MD LAP will continue to play an integral part in planning sustainable settlements, including settlements that have sufficient water capacity – both waste water and drinking water. The absence of an agreed masterplan will not impact on that. • Integration of protection of watercourses -water dependent habitats and species – integral to proper planning and sustainable development would not be affected in the absence of an agreed masterplan.
Air quality/climatic factors	<ul style="list-style-type: none"> • Air quality in the Fenit area is not likely to be affected by the absence of an agreed Masterplan. The existing adopted Tralee MD LAP however can impact on air quality through effecting settlement patterns and therefore travel/commuting patterns. • In the context of a land use plan, travel times/commuting distances to work and amenity/recreational activities is heavily influenced by settlement strategies. Sustainable settlements where people work and live in close proximity in a pre-requisite for reduced transport times. It also allows

Environmental Parameter	Likely Evolution in the Absence of the Plan
	<p>from sustainable forms of energy use such as district heating schemes coupled with a move away from fossil fuel.</p> <ul style="list-style-type: none"> • Spatial planning is also a key player in climate change action - particularly adaptation. The existing Tralee MD LAP promotes more compact, less energy-intensive forms of urban development. • The absence of an adopted Masterplan would not impact on aims and objectives of the Tralee MD LAP.
Material assets	<ul style="list-style-type: none"> • Large scale infrastructure projects will continue to be implemented in the absence of an agreed Masterplan, • However, the masterplan seeks to develop an overall vision for the seafront site - the location of the terminus of the Greenway and the Masterplan provides the public with an opportunity to comment on two possible route options for the localised re-alignment of the R558.
Cultural assets (architecture, archaeology)	<ul style="list-style-type: none"> • National legislation applies to both archaeological and architectural heritage and will continue to apply in the absence of any agreed masterplan. • Existing architectural heritage protected in the Tralee MD LAP through a number of measures will continue to apply in the absence of an agreed Masterplan.
Landscape	<ul style="list-style-type: none"> • Existing protection occurs with the Development Plan/existing development planning processes. • The Tralee MD LAP contains objectives that promote the protection/enhancement of local streetscapes and townscapes and the protection of architectural heritage as key component of the MD's urban fabric. The absence of an agreed masterplan would not impact on this.

6. PROPOSED ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS FOR THE STRATEGIC ENVIRONMENTAL ASSESSMENT

6.1. Introduction

SEA uses a combination of objectives, targets and indicators to describe and monitor change and predict impacts of proposed plans and programmes on the environment. Objectives and targets set aims and thresholds that should be taken into account when assessing the impact of proposed plans on the environment. Targets usually underpin objectives and have a timeline and/or threshold which once breached, would trigger remedial action and thereby providing an early warning signal. Indicators are used to illustrate and communicate impact in a simple and effective manner. Indicators can also be used to form the basis of a monitoring programme for the plan, the results of which will inform the next review. The way in which monitoring data will be available and from where, is presented below.

6.2. Development of SEA environmental objectives and targets

The initial list of potential environmental objectives and targets to be used in the environmental report is outlined in Table 6-1. The list is based on the environmental topics set out in Annex 1 (f) of the SEA Directive, which might be significantly impacted upon by the Plan. These include: population and human health, biodiversity (flora & fauna), water/hydrogeology, geology/soil, air quality, climatic factors, material assets, cultural heritage, landscape and the interrelationship between these factors. Flooding was specifically addressed in the SFRA that accompanied the original drafting of the LAP. The effects on these topics will address the positive and negative, short, medium and long-term, permanent and temporary, cumulative and synergistic impacts.

6.3. Development of SEA indicators

The purpose of indicators is to monitor the effectiveness of the Plan in meeting the SEA environmental objectives and targets. The proposed methodology for the development and selection of the SEA indicators is based on:

- Overarching policies from plans/programmes of relevance to each environmental parameter
- Identifying existing environmental problems, which will inform the development of SEA objectives and indicators
- A limited number of objectives and indicators will be used, which will keep the assessment and monitoring manageable and strategic

The final determination of the set of indicators for this SEA was subject to review further to the SEA scoping with statutory consultees undertaken in January/February 2022. The final set of objectives/targets/indicators presented below in Table 6-1 are however determined by the availability of existing data, relevance, monitoring programmes and the scale of application. The EOs were also influenced by the NPF, 2018.

Table 6-1 List of environmental SEA objectives, targets and indicators for the Tralee MD LAP and any proposed amendment to it

SEA Topic	Objective	Target	Indicators
Population	P1: Guide the future development of Fenit in a sustainable manner that reflects the existing character and amenities of the area and improves the quality of life for the existing and future populations.	That populations in the Fenit area have access to high quality residential, amenity and public infrastructure with sustainable travel patterns.	<ul style="list-style-type: none"> • Provision of public facilities over lifetime of the plan – amenity, recreational/green infrastructure • Design statements/public realm plans submitted with housing developments/undertaken • Masterplan completed • Travel patterns within Fenit area • Population of Fenit over lifetime of Tralee MD LAP
Human Health	HH1: Protect the public from threats to health and wellbeing across the functions of relevance to the MD LAP	That the quality of the local environment that is governed by the MD LAP protects the health and wellbeing of the population	<ul style="list-style-type: none"> • As above – equally applicable to human health • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc for discharges (including under the Urban Waste Water Directive for Tralee WWTP), noise, odour and/or air quality • Health Impact Assessments/relevant sections of EIA submitted with planning applications
Biodiversity (Flora/Fauna)	B1: Protect biodiversity including ecosystem services	That biodiversity is integrated into all decision making across the functions of the MD LAP	<ul style="list-style-type: none"> • Sustainable integration/provision of green infrastructure and blueways • Compliance of plans/projects/activities originating from the MD plan with Article 6 of the Habitats Directive • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc. for discharges • Landscaping plans for developments – native species/ecological networks/planting for pollinators • Ecological reports submitted with planning applications • Invasive species management plans

SEA Topic	Objective	Target	Indicators
Geology/Soil	S1: Protect soils against pollution, and prevent degradation of the soil resource	That the soil/geology and the geological heritage of the Plan area is protected	<ul style="list-style-type: none"> • % change of land use in settlements in the plan area • Impacts to GSC sites from development • Quantity of brownfield/infill sites developed • Geological reports/relevant sections of EIA submitted with planning applications.
Water	W1: Ensure that the status of waterbodies is protected, maintained and improved in line with the requirements and implementation plans of the WFD	That the functions governed by the MD LAP support compliance with the objectives of the WFD for all waterbodies within the LAP, especially AFAs	<ul style="list-style-type: none"> • Compliance with existing legislation/regulations/conditions for relevant licences, permits • Provision and funding in place of approved WWTP in Fenit • Relevant reporting from the WFD including reporting on AFAs identified in the plan • Compliance of plans/projects/activities originating from the MD plan with Article 6 of the Habitats Directive • Water/hydrogeology reports/relevant sections of EIA submitted with planning applications
Air Quality	AQ1: Protect local air quality from emissions that are harmful to human health and the local environment	That the quality of the local environment governed by the functions of the MD LAP protects local air quality	<ul style="list-style-type: none"> • Compliance with existing legislation/regulations/conditions for air quality • Traffic patterns within the Fenit area • Integration/provision of green infrastructure • % of <i>new/proposed residential zoning</i> developed including within town/village cores • Quantity of brownfield/infill sites developed • Air quality/emissions/odour reports/relevant sections of EIA submitted with planning applications
Climatic Factors	C1: Ensure the MD LAP as amended mitigates and adapts to Climate Change over the lifetime of the plan	That mitigation and adaptation to climate change inform the functions/decision making governed by the MD LAP	<ul style="list-style-type: none"> • % of <i>new/proposed residential zoning</i> developed including within town/village cores • Quantity of brownfield/infill sites developed • FRA reports undertaken • Implementation of SuDS & similar technologies • Integration/provision of green & blue infrastructure • Population of Fenit settlement over lifetime of

SEA Topic	Objective	Target	Indicators
			<p>MD LAP</p> <ul style="list-style-type: none"> • Traffic patterns within the Fenit area. • Renewable energy projects • Impacts on natural carbon sink (eg peat soil) • Provision of greenways/walkways/cycleways • Implementation of <i>Smarter Travel Programme</i>.
Material Assets	M1: Protect the material assets of the Plan area while optimising new assets to match proposed growth and sustainable development.	That the Plan promotes sustainable development that matches existing and new infrastructure with the proposed population growth in the MD area.	<ul style="list-style-type: none"> • Completion of infrastructure projects identified in the MD LAP • Growth in Fenit with new waste water infrastructure as per the Core Strategy • Hubs/co-working offices linked to the roll out of National Broadband Plan • Provision of public facilities over lifetime of the plan – amenity, recreational/green infrastructure • Master plan completed • Quantity of brownfield/infill sites developed.
Cultural Heritage	CH1: Protect the cultural heritage of Plan area.	That protection of the LAP's cultural heritage informs the functions/decision making of the MD LAP.	<ul style="list-style-type: none"> • Design statements/public realm plans undertaken • Village Renewal schemes/projects undertaken • Master Plan completed • Archaeological Impact Assessments, and/or archaeological investigations undertaken • Architectural Impact Assessments/Surveys undertaken for PS/ACAs • Visitor numbers for iconic cultural heritage sites including WAW. • Number of literary, musical, artistic and other cultural initiatives undertaken in the MD Area.
Landscape	L1 Protect the landscape of the Plan area	That landscapes identified in the Plan area, including local urban townscapes and streetscapes, are protected and enhanced by good design principles.	<ul style="list-style-type: none"> • Design statements/public realm plans undertaken • Village Renewal schemes/projects undertaken • Visual Impact Assessments/relevant sections of EIA submitted with planning applications • Architectural Impact Assessments undertaken for PS/ACAs

SEA Topic	Objective	Target	Indicators
Flooding	F1 Protect the public and infrastructure from inappropriate development in areas at risk of flooding	That sustainable flood risk management practices are implemented in the Plan area in adherence to DOEHLG's <i>Guidelines on Flood Risk Management</i>	<ul style="list-style-type: none"> • Flood Risk Assessment reports submitted with planning applications in compliance with the SFRA • Implementation of SuDS & similar technologies • Integration/provision of green & blue infrastructure over the lifetime of the plan

7. LIKELY SIGNIFICANT EFFECTS ON THE ENVIRONMENT FROM PROPOSED AMENDMENT NO. 1 TO THE TRALEE MD LAP

7.1. Introduction

This section gives an overview of the significant effects of implementing the proposed amendment no. 1 to the Tralee MD LAP. A more detailed assessment of the preferred alternative from Chapter 4 will be assessed against the EOs established in Chapter 6. The process of evaluating the detailed policies/objectives enables the likely significant effects of implementing a proposed plan to be identified and allows for mitigation measures to be incorporated to avoid, reduce, repair or compensate.

Typically, a plan would consist of several policies and objectives however in the case of this proposed amendment for a Masterplan there is only one new objective proposed which is in essence to support the implementation of the Masterplan. Additional text is also proposed to be inserted into the Tralee MD LAP- to give a brief outline of the nature of the proposed Masterplan as set out again below:

New text proposed to be inserted into the Tralee MD LAP 2018-2024

Fenit Village Design Masterplan, sets out proposals for the redevelopment of the core of the village, primarily from the central green area to the beachfront. The Masterplan provides for the development of two key sites in the village: the greenfield site including O' Sullivan's Bar (the Central Core) and the seafront public realm centred on the playground, greenway terminus and entrance to the beach (the Terminus) and the realignment of the public road (R558) serving the port.

New objective FT-GO-08;

Facilitate the delivery of the Fenit Village Design Masterplan to guide the development and prosperity of the area in a sustainable manner.

Mitigations measures are discussed in more detailed in Chapter 7. In assessing the likely significant effects of the proposed amendment no. 1 to the Tralee MD Plan the full range of effects as set out in Annex I of the SEA Directive are considered. These are secondary, cumulative, synergistic, short, medium and long term, permanent, temporary, positive, negative, indirectly positive, neutral, negative, indirectly negative and uncertain (as detailed in Schedule 2B, SI 436 of 2004).

The screening of the proposed new objective included as part of the proposed amendment to the Tralee MD LAP is provided in Appendix 2.

7.2. Screening of the proposed Amendment no. 1 to the Tralee MD LAP 2018-2024

The table below screens the proposed amendment no.1 of the Tralee MD LAP 2018-2024 for possible significant effects.

Section 3.4, Page 76	
New Objective and Text	LIKELY SIGNIFICANT EFFECTS
<p><i>Fenit Village Design Masterplan, sets out proposals for the redevelopment of the core of the village, primarily from the central green area to the beachfront. The Masterplan provides for the development of two key sites in the village: the greenfield site including O’ Sullivan’s Bar (the Central Core) and the seafront public realm centred on the playground, greenway terminus and entrance to the beach (the Terminus) and the realignment of the public road (R558) serving the port.</i></p> <p>New objective FT-GO-08; <i>Facilitate the delivery of the Fenit Village Design Masterplan to guide the development and prosperity of the area in a sustainable manner.</i></p>	<p>Objective promotes sustainable strategic planning through masterplanning. Development proposed as part of this masterplan implies possible significant effects on environmental receptors. In context of the Tralee MD LAP and the proposed amendment this includes the potential for impacts on nearby Natura 2000 sites, designated coastal areas; potential archaeological sites; sensitive landscapes; geological heritage and cultural heritage.</p> <p>Indicative development set out in this masterplan also a potential positive impact on local community providing a new public realm space and other infrastructure in terms of housing and road improvement. Positive impacts on climatic factors and air quality and health/wellbeing. Also opens up possible tourism related business opportunities.</p>

8. MITIGATION MEASURES

8.1. Introduction

Mitigation is a measure to avoid/prevent/lessen/minimise or reduce as fully as possible significant adverse effects on the environment. Where significant effects are identified the first aim is always to prevent or avoid effects. However, if this is not possible then the next step is to lessen the effects by mitigation measures. Mitigation measures can vary across a spectrum of removing impacts (avoidance) to reducing their magnitude (reduction) to putting in place measures to remedy effects (repair) or undertake measures to compensate for the effects (compensatory). This chapter will outline the mitigation measure proposed to offset the potential significant environmental effects identified in the implementation of the proposed amendment no. 1 to the Tralee MD LAP. Providing mitigation measures is required under Schedule 2B of the SEA Regulations.

Mitigation measures for individual objectives and/or policies is already provided and integrated into the overall Tralee MD LAP in order to mitigate any significant adverse effects the implementation of the LAP would have on the environment. Due to the synergistic nature of many environmental factors, mitigation measures overlap, particularly those relating to soil/geology; water/hydrogeology and biodiversity.

In relation to mitigation, it should be noted that certain terminology has already also been integrated into the Tralee MD LAP to ensure protection of environmental parameters outlined in Chapter 5. *Sustainable/Sustainable development* and/or the term *sustainability* imply adherence to the principles of protection of the environment. In addition, *at appropriate locations* and *subject to environmental assessment* were integrated into both objectives and/or policies that promote development throughout the Tralee MD LAP. The principles of *sustainable development* underpin the Tralee MD LAP and this is prefaced at the start of the LAP, specifically in Section 1.5 which states:

It should be noted that any reference to development in this plan should be considered to refer to 'sustainable development'. Similarly, the conservation of species and habitats in accordance with the requirements of the EU Habitats and Birds Directives is considered to be an important component of sustainable strategies, policies and objectives of the plan.

Finally, of relevance to this section is that the Tralee MD LAP already includes measures to protect the natural and cultural heritage and the social fabric of the MD Area. This is also ensured the fact that all the policies and objectives must comply with the principles of proper planning and sustainable development and are also compliant with the Kerry County Development Plan 2015-2021. The County Development Plan outlines objectives and policies for the protection the natural environment, water quality (specifically in relation to the roll out of the WFD), landscape and the built and cultural heritage.

As this is a proposed amendment to the Tralee MD LAP all the provisions of sustainable development and safeguards already integrated in that LAP and in the Kerry County Development Plan 2015-2021 still apply.

8.2. Mitigation of Objective highlighted as having a possible significant effect on the environment

8.2.1. Fenit

New additions to Page 76 of Tralee MD LAP		
OBJECTIVE	LIKELY SIGNIFICANT EFFECTS	MITIGATION
<p><i>Insert new text on page 76 of Tralee MD LAP</i> <i>Fenit Village Design Masterplan, sets out proposals for the redevelopment of the core of the village, primarily from the central green area to the beachfront. The Masterplan provides for the development of two key sites in the village: the greenfield site including O’ Sullivan’s Bar (the Central Core) and the seafront public realm centred on the playground, greenway terminus and entrance to the beach (the Terminus) and the realignment of the public road (R558) serving the port.</i></p> <p>New objective FT-GO-08; <i>Facilitate the delivery of the Fenit Village Design Masterplan to guide the development and prosperity of the area in a sustainable manner.</i></p>	<p>Text and Objective promotes the implementation of a masterplan for two key sites in the village. The masterplan promotes co-ordinated sustainable development within Fenit – possible impacts on local landscape, built heritage, archaeology.</p> <p>Developments also however of benefit to local community providing enhanced public realm, amenities and promoting cycling and walking route, through enhanced recreational facilities to support greenway. Positive impacts on climatic factors and air quality.</p> <p>New housing in central village location is a positive impact for achieving sustainable settlement pattern.</p> <p>Masterplan includes two route options for the localised improvement of the R558. The route is close to various sensitive environmental receptors including Natura 2000 sites; coastal water; geological heritage, archaeological sites, built heritage and landscapes.</p> <p>Road development has the potential for localised possible impacts on human health/air quality and climate factors (increased traffic)</p>	<p>Yes- any proposed development will be subject to proper planning and sustainable development in compliance with the Tralee MD plan, and KCDP 2015-2021 Draft Kerry County Development Plan 2022-2028. Mitigation of possible significant effects therefore addressed in existing planning policies and objectives at strategic (CDP and LAP) and project level (development management).</p> <p>When the preferred route is identified, planning permission will be required which will necessitate the assessment of the potential for any significant effects on the environment and on any Natura 2000 sites identified. The project will be subject to the proper planning and sustainable development in compliance with the Tralee MD LAP and CDP.</p>

9. MONITORING MEASURES

9.1. Introduction

Under Article 10 and Section (i) of Schedule 2B of the SEA Regulations, monitoring is required in order to identify at an early stage any unforeseen adverse effects caused by the Plan. This allows remedial action to be taken. Monitoring prevents the actual impacts of the Plan to be measured against those that were predicted. It allows major problems to be identified and dealt with in a timely fashion, and environmental baseline information to be gathered for future Plan reviews. It also ensures that proposed mitigation measures are carried out and that no unforeseen impacts occur.

The methodology used in the development of the monitoring programme for the proposed amendment no.1 to the Tralee MD Plan is based on the use of indicators and targets, the assignment of responsibilities and the setting of appropriate time lines. It also includes intervention in the event of an unforeseen occurrence. Monitoring is carried out by reporting on the set of indicators and targets drawn up for the various environmental aspects and used to describe future trends in the baseline, which enable positive and negative impacts on the environment to be measured. The indicators that are used show changes that would be attributable to implementation of the Plan. In particular, indicators can also in certain circumstances act as an early warning system should unforeseen impacts occur or conditions deteriorate further or faster than anticipated.

Monitoring will focus on aspects of the environment that are likely to be significantly impacted by the Plan. Indicators and targets have been identified for the main environmental issues in the study area as outlined in Chapter 5. The indicators chosen are at a level, which is relevant to the Plan, and are collated and reported on by a variety of Government Agencies, such as EPA, OPW, NPWS and different sections within Kerry County Council. Much of the indicator information required is already being actively collected and reported at a level sufficient to meet the needs of this Plan. The frequency of monitoring is set by relevant legislation.

Table 9-1 List of environmental SEA objectives, targets, indicators and associated monitoring for the proposed Amendment to the Tralee MD LAP

SEA Topic	Objective	Target	Indicators	Monitoring Data Available & Who/Where
Population	P1: Guide the future development of the Plan area in a sustainable manner that reflects the existing character and amenities of the area and improves the quality of life for the existing and future populations.	That populations in the Plan area have access to high quality residential, amenity and public infrastructure with sustainable travel patterns	<ul style="list-style-type: none"> • Provision of public facilities over lifetime of the plan – amenity, recreational/green infrastructure • Design statements/public realm plans undertaken • Master Plans completed • Social Housing provided • Travel patterns within Plan area • Population of settlement over lifetime of MD LAP • Quantity of development on central sites over lifetime of the plan. 	Yes – information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; MD office/r, KCC; Capital Infrastructure Unit (CIU), KCC; Irish Water and CSO data.
Human Health	HH1: Protect the public from threats to health and wellbeing across the functions of relevance to the Plan area	That the quality of the local environment that is governed by the Plan protects the health and wellbeing of the population	<ul style="list-style-type: none"> • As above – equally applicable to human health • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc for discharges (including under the Urban Waste Water Directive for Tralee WWTP), noise, odour and/or air quality • Health Impact Assessments/relevant sections of EIA submitted with planning applications 	Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; MD office/r, KCC; Capital Infrastructure Unit (CIU), KCC; Irish Water and CSO data. Also, Enforcement & Environment Sections KCC/EPA
Biodiversity (Flora/Fauna)	B1: Protect biodiversity including ecosystem services	That biodiversity is integrated into all decision making across the functions of the Plan.	<ul style="list-style-type: none"> • Sustainable integration/provision of green infrastructure and blueways • Compliance of 	Yes- information available from variety of sources including Forward Planning Unit & Development Management

SEA Topic	Objective	Target	Indicators	Monitoring Data Available & Who/Where
			<p>plans/projects/activities originating from the Plan with Article 6 of the Habitats Directive</p> <ul style="list-style-type: none"> • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc for discharges (including under the Urban Waste Water Directive for Tralee WWTP) • Landscaping plans for developments – native species/ecological networks/planting for pollinators • Ecological reports submitted with planning applications • Invasive species management plans 	<p>Unit, KCC; EDU (Economic Development Unit) KCC; Environmental Assessment Unit (EAU); MD office/r; Irish Water.</p> <p>Also, Enforcement & Environment Sections KCC/EPA</p> <p>IFI and NPWS data also available.</p>
Geology/Soil	S1: Protect soils against pollution, and prevent degradation of the soil resource	That the soil/geology and the geological heritage of the Plan area is protected	<ul style="list-style-type: none"> • % change of land use in settlements in the plan area • Impacts to GSC sites from development • Quantity of brownfield/infill sites developed • Geological reports/relevant sections of EIA submitted with planning applications. 	<p>Yes - information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC.</p> <p>GSI data also available.</p>
Water	W1: Ensure that the status of waterbodies is protected, maintained and improved in line with the requirements and implementation plans of the WFD	That the functions governed by the LAP support compliance with the objectives of the WFD	<ul style="list-style-type: none"> • Compliance with existing legislation/regulations/conditions for relevant licences, permits etc for discharges • Provision of approved WWTP in Fenit • Relevant reporting from the WFD including reporting on 	<p>Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; Environmental Assessment Unit (EAU) and Irish Water.</p>

SEA Topic	Objective	Target	Indicators	Monitoring Data Available & Who/Where
			<ul style="list-style-type: none"> AFAs identified in the plan Compliance of plans/projects/activities originating from the MD plan with Article 6 of the Habitats Directive Water/hydrogeology reports/relevant sections of EIA submitted with planning applications 	<p>Also, Enforcement & Environment Sections KCC/EPA</p> <p>Also, data available from WFD/LAWCO/EPA</p> <p>IFI and NPWS data also available.</p>
Air Quality	AQ1: Protect local air quality from emissions that are harmful to human health and the local environment	That the quality of the local environment governed by the functions of the LAP protects local air quality	<ul style="list-style-type: none"> Compliance with existing legislation/regulations/conditions for air quality Traffic patterns within the Plan Area Integration/provision of green infrastructure Quantity of development sites developed Air quality/emissions/odour reports/relevant sections of EIA submitted with planning applications 	<p>Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC.</p> <p>Also, Enforcement & Environment Sections KCC/EPA</p>
Climatic Factors	C1: Ensure the integration of Climate action - mitigation and adaptation in to Plan	That mitigation and adaptation to climate change inform the functions/decision making governed by the LAP	<ul style="list-style-type: none"> % of key sites developed FRA reports undertaken Implementation of SuDS & similar technologies Integration/provision of green & blue infrastructure Population of Fenit over lifetime of MD LAP Traffic patterns within the Plan Area Renewable energy projects Impacts on natural carbon sink (e.g. peat soil) Provision of 	Yes- as above

SEA Topic	Objective	Target	Indicators	Monitoring Data Available & Who/Where
			<p>greenways/walksways/cycle ways</p> <ul style="list-style-type: none"> • Implementation of <i>Smarter Travel</i> initiatives 	
Material Assets	M1: Protect the material assets of the Plan while optimising new assets to match proposed growth and sustainable development	That the Plan promotes sustainable development that matches existing and new infrastructure with the proposed population growth in the Plan area	<ul style="list-style-type: none"> • Completion of infrastructure projects identified in the Plan • Growth in settlement with sufficient waste water infrastructure as per the Core Strategy • Provision of public facilities over lifetime of the plan – amenity, recreational/green infrastructure • Masterplan completed and taken up • Quantity of sites developed 	Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; MD office/r; Broadband Officer, KCC; Operational Section, KCC, KCC NRDO; Irish Water and CSO.
Cultural Heritage	CH1: Protect the cultural heritage of Plan area	That protection of the Plan's cultural heritage informs decision making.	<ul style="list-style-type: none"> • Design statements/public realm plans undertaken • Masterplan completed and taken up • Archaeological Impact Assessments, and/or archaeological investigations undertaken • Architectural Impact Assessments/Surveys undertaken for PS/ACAs • Number of literary, musical, artistic and other cultural initiatives undertaken in the Plan Area 	<p>Yes- information available from variety of sources including Forward Planning Unit & Development Management Unit, KCC; EDU (Economic Development Unit) KCC; Environmental Assessment Unit (EAU); MD office/r; Conservation Officer and County Archaeologist, KCC.</p> <p>Also, Tourism Office, Arts Office, KCC and date from Fáilte Ireland/OPW/NPWS/KCC and Fáilte Ireland WAW monitoring data.</p>
Landscape	L1 Protect the landscape of the Plan area	That landscapes identified in the Plan area, including local urban townscapes and	<ul style="list-style-type: none"> • Design statements/public realm plans undertaken • Village Renewal 	Yes- information available from variety of sources including Forward Planning Unit &

SEA Topic	Objective	Target	Indicators	Monitoring Data Available & Who/Where
		streetscapes, are protected and enhanced by good design principles.	<p>schemes/projects undertaken</p> <ul style="list-style-type: none"> • Visual Impact Assessments/relevant sections of EIA submitted with planning applications • Architectural Impact Assessments undertaken for PS/ACAs 	Development Management Unit, KCC; Conservation Officer, KCC.
Flooding	F1 Protect the public and infrastructure from inappropriate development in areas at risk of flooding	That sustainable flood risk management practices are implemented in the Plan area in adherence to DOEHLG's <i>Guidelines on Flood Risk Management</i>	<ul style="list-style-type: none"> • Flood Risk Assessment reports submitted with planning applications in compliance with the SFRA • Implementation of SuDS & similar technologies • Integration/provision of green & blue infrastructure over the lifetime of the plan 	<p>Yes- information available from Forward Planning Unit & Development Management Unit, KCC.</p> <p>Also, CFRAM data and OPW.</p>

10. NEXT STAGE

10.1. ER Consultation

Ongoing consultation forms an integral part of the SEA methodology. Further statutory consultation will be undertaken as the SEA progresses from this ER stage to the final preparation of the SEA Statement. Consultation will inform the proposed amendment no. 1 to the Tralee MD LAP as appropriate.

The consultation period will run from Wednesday 6th April to Wednesday the 18th May both dates inclusive. Submissions, observations or comments on this ER are welcomed and can be on line at <https://consult.kerrycoco.ie/> or by post marked **Fenit Village Design Masterplan** to the following address: **Senior Planner, Planning Policy Unit, Kerry County Council, Rathass, Tralee, Co. Kerry, V92 H7VT.**

11. APPENDIX 1 RELEVANT INTERNATIONAL/NATIONAL P/Ps

International P/P	National P/P
<p>SEA Directive (2001/42/EC), EIA Directive (85/337/EC as amended), EU Habitats Directive (92/43/EEC), EU Birds Directive (2009/147/EC- codified version of 79/409/EEC), EU Water Framework Directive (2000/60/EC) and associated directives which have been subsumed as follows: Drinking Water Abstraction Directive; Sampling Drinking Water Directive; Exchange of Information on Quality of Surface Freshwater Directive; Shellfish Directive; Freshwater Fish Directive; Groundwater (Dangerous Substances) Directive; and Dangerous Substances Directive. EU Drinking Water Directive (98/83/EC); EU Bathing Water Directive(revised) 2006 [2006/7/EC]; Groundwater Directive (2006/118/EC), EU Sewage Sludge Directive (86/278/EEC); EU Urban Waste Water Treatment Directive (91/271/EEC); EU Nitrates Directive (91/676/EC); EU Integrated Pollution Prevention Control Directive (2008/1/EC); EU Plant Protection (Products) Directive 2009/127/EC; EU Floods Directive (2007/60/EC) EU Marine Strategy Framework Directive (2008/56/EC) EU Renewables Directive (2009/28/EC); EU Biofuels Directive (2003/30/EC); Indirect Land Use Change Directive (2012/0288(COD)); Alternative Fuels Infrastructure Directive 2014/94/EU; EU Energy Efficiency Directive (2012/27/EU). EU Seveso Directive <u>2012/18/EU</u>; EU Soils Directive; and EU Air Framework Directive 2008/50/EC.</p>	<p>Project Ireland 2040 – National Planning Framework (Feb 2018) (NFP) National Development Plan 2018-2027 Regional Planning Guidelines for the South-West 2010-2022 Regional Spatial and Economic Strategy for the Southern Region (in prep) Rebuilding Ireland – Action Plan for Housing and Homelessness, 2016 National Policy Position on climate action and low carbon development, 2014 National Mitigation Plan, July 2017 National Adaptation Framework, 2018 Local Authority Adaptation Strategy, Development Guidelines, 2016 National Climate Change Adaptation Framework 2012; National Clean Air Strategy [in prep] Irish Water Investment Programme up to 2021 and beyond Water Services Strategic Plan 2015; National Water Resources Plan [in prep]; Lead Mitigation Plan 2016; National Wastewater Sludge Management Plan 2016; Regional Waste Management Plans 2015; Sustainable Development: A Strategy for Ireland (1997) (DEHLG); Sustainable Rural Housing Guidelines; The National Biodiversity Plan 2017-2021; National Peatlands Strategy 2011; National Bioenergy Plan [in prep]; NPWS Conservation Plans and/or Conservation Objectives for SAC and SPAs; National Heritage Plan (2002); Government Policy on Architecture 2009-2015 National Landscape Strategy for Ireland 2015 – 2025. Renewable Electricity Plan [in prep]; Marine Strategy Framework Programme of Measures 2016 Maritime Spatial Plans (in prep and due in 2021) Seafood Operation Programme 2014; Aquaculture Plan 2015; Wind Energy Guidelines; Rural Development Programme (RDP) 2014-2020; Forestry Programme 2014-2020; Foodwise 2025;</p>

International P/P	National P/P
	<p>Green Low-Carbon Agri-Environment Scheme (GLAS); Organic Farming Scheme; Teagasc Better Farm Program; National Renewable Energy Action Plan (NREAP); Strategy for Renewable Energy 2012-2020; Offshore Renewable Energy Development Plan; Smarter Travel 'A New Transport Policy for Ireland' 2009-2020; National Cycle Policy Framework 2009-2020, Investing in our transport future – A Strategic Framework for Investment in Land Transport.</p>

12. APPENDIX 2 OBJECTIVE LEVEL SCREENING FOR SIGNIFICANT EFFECTS

The following table present the screening for significant effects of the objective listed in the proposed amendment to the Tralee MD LAP 2018-2024. There is only one new objective to be included as an amendment to the Tralee MD LAP and it has not been deemed to have a significant effect on the environment.

12.1. Screening for significant effects of the proposed amendment no. 1 to the Tralee MD LAP 2018-2024

Proposed Amendment to Tralee MD LAP 2018-2024				
Likely significant Effect - Environmental Protection Objectives	+	-	+/-	0
<p><i>Addition 1:</i> <i>Fenit Village Design Masterplan, sets out proposals for the redevelopment of the core of the village, primarily from the central green area to the beachfront. The Masterplan provides for the development of two key sites in the village: the greenfield site including O' Sullivan's Bar (the Central Core) and the seafront public realm centred on the playground, greenway terminus and entrance to the beach (the Terminus) and the realignment of the public road (R558) serving the port.</i></p> <p>New objective FT-GO-08; <i>Facilitate the delivery of the Fenit Village Design Masterplan to guide the development and prosperity of the area in a sustainable manner.</i></p>	<p>P1 HH1 B1 W1 S1 AQ1 C1 M1 L1 CH1 FI</p>		<p>CH1</p>	