

# SEA ENVIRONMENTAL REPORT APPENDIX II

## NON-TECHNICAL SUMMARY

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FOR THE

### WILD ATLANTIC WAY OPERATIONAL PROGRAMME 2015-2019

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## Table of Contents

<b>Section 1</b>	<b>Introduction and Terms of Reference.....</b>	<b>1</b>
<b>Section 2</b>	<b>The Programme.....</b>	<b>2</b>
2.1	Introduction.....	2
2.2	Background and Context.....	2
2.3	Programme Area and Route .....	6
2.4	Route Development.....	7
2.5	Wild Atlantic Way Vision and Goals .....	7
2.6	Relationship with other relevant Plans and Programmes .....	8
<b>Section 3</b>	<b>Relevant aspects of the current state of the environment.....</b>	<b>11</b>
3.1	Introduction.....	11
3.2	Likely Evolution of the Environment in the Absence of the Plan .....	11
3.3	Biodiversity and Flora and Fauna .....	12
3.4	Population and Human Health .....	18
3.5	Soil .....	18
3.6	Water.....	18
3.7	Air and Climatic Factors .....	20
3.8	Material Assets.....	21
3.9	Cultural Heritage .....	23
3.10	Landscape .....	26
3.11	Appropriate Assessment.....	29
3.12	Strategic Environmental Objectives .....	29
<b>Section 4</b>	<b>Effects of Alternatives and the Plan.....</b>	<b>30</b>
4.1	Description of Alternatives .....	30
4.2	Evaluation of Alternatives.....	31
4.3	Summary of Assessment of Individual Operational Programme Provisions .....	38
<b>Section 5</b>	<b>Mitigation and Monitoring Measures .....</b>	<b>40</b>
5.1	Mitigation .....	40
5.2	Monitoring .....	42

## **Section 1 Introduction and Terms of Reference**

This is the Non-Technical Summary of the Strategic Environmental Assessment (SEA) Environmental Report for the Wild Atlantic Way Operational Programme 2015-2019. The purpose of the Environmental Report is to comply with SEA legislation and provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Programme.

### **What is an SEA?**

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

### **Why is it needed?**

The SEA was carried out in order to comply with the provisions of the SEA Regulations as amended and in order to contribute towards environmental management and sustainable development. The output of the process is an Environmental Report and an SEA Statement, both of which should be read in conjunction with the Operational Programme.

### **How does it work?**

Relevant aspects of the current state of the environment were assembled and presented to the team who prepared the Programme. This helped them to devise a Programme that protects whatever is sensitive in the environment. To decide how best to make a Programme that helps to protect the environment as much as possible, Fáilte Ireland examined different alternatives for the initiative. This helped to highlight where conflicts could occur and facilitated the development of mitigation measures which will help to avoid/reduce adverse environmental effects.

### **What is included in the Environmental Report which accompanies the Programme?**

The Environmental Report contains the following information:

- A description of the relevant aspects of the current state of the environment;
- A description and assessment of alternatives;
- An assessment of Programme provisions; and,
- Mitigation measures which set out to aid compliance with important environmental protection legislation - e.g. the Water Framework Directive, the Habitats Directive - and which will help to avoid/reduce the adverse environmental effects of implementing the Programme.

### **What happens at the end of the process?**

On finalisation of the Programme, an SEA Statement has been prepared and made available. The SEA Statement includes information on how environmental considerations were integrated into the Programme and why the preferred alternative was chosen for the Programme.

## Section 2 The Programme

### 2.1 Introduction

The Wild Atlantic Way (WAW) is a new tourism brand for the west of Ireland. The most tangible expression of the brand comprises the coordination and linking of a number of existing touring routes stretching approximately 2,500km along the Atlantic coast from Donegal to West Cork (see Figure 2.2). Along the route, candidate Discovery Points (viewing points and lay-bys), all of which are existing and in use, in addition to 28 Embarkation Points to the 26 off-shore islands, are identified. Fáilte Ireland is co-ordinating future WAW works relating to the Discovery Points through the Operational Programme, but not developing any of these works – they will be developed by the relevant local authorities (Part 8 requirements as set out in the Planning and Development Act as amended still apply) and others. The route and the candidate Discovery Points may change if the environmental monitoring strategy produces results that show that visitor activity and/or visitor intensification is predicted or observed to result in a negative impact on the environment in particular locations. For this reason, a mid-term review of the route and the candidate Discovery Points has been built into the Operational Programme.

The Operational Programme for the Wild Atlantic Way sets out a strategy and a framework and programme – including goals and objectives – for sustainable implementation over the period 2015-2019.

The Operational Programme is the first in a series of strategies which will set out a vision for the continued evolution of the Wild Atlantic Way over the decades to come.

The Operational Programme, together with future Programmes, will constitute an iterative process which will continually adapt to meet the needs of visitors, the local community and culture, the environment and the tourism industry and trade, while striving all the time to strike a balance between them.

Fáilte Ireland's evidence is that well managed tourism can lead to better protection of sensitive environments. The proposed environmental management of the Wild Atlantic Way will help it to:

- Become an international brand of quality;
- Deliver real benefits for local communities and businesses in the west of Ireland;
- Provide visitors with unforgettable experiences; and
- Provide a focus for the protection of the environment.

### 2.2 Background and Context

#### 2.2.1 Introduction

Tourism is a critical component of the economic health of the West of Ireland with the accommodation and hospitality sectors a key driver of employment. Indirectly, tourism supports key service sectors including retail, transport and food producers. It is also a sector that delivers substantial social and community benefits. International tourism to the West of Ireland declined significantly in both visitor numbers and share of holiday visits to Ireland in the period 2007 -2010. This was further compounded by the challenging economic climate in Ireland since 2008.

In order to arrest and reverse this decline, overseas growth in tourism is required. In an attempt to achieve this, Fáilte Ireland has developed the Wild Atlantic Way as a tourism initiative of scale and singularity which will play a pivotal role in the delivery of Fáilte Ireland's overall strategic objectives of generating incremental international tourist revenues and job creation.

## 2.2.2 Background to Tourism Growth and Development in Ireland

Tourism and its promotion are existing and long-established activities in Ireland.

It is important to understand that all WAW routes are existing and long-established touring routes, on existing and long established public roads that have been subject both to recent and long-established promotion activities. Thus the routes, their promotion and the intensity of their use are not new.

Many are unaware of the long-established pattern of tourism promotion in Ireland – and in the west of Ireland, in particular. The first promotion of Irish tourism is generally credited to Thomas 4th Viscount Kenmare who began to promote Killarney and its environs in the 1750s. Touring guides to Ireland date to the late 18<sup>th</sup> century<sup>1</sup> and large-scale touring in Ireland dates back to the latter part of the 19th century. At that time railways and associated large hotels<sup>2</sup> offered access to areas, such as the West of Ireland, that had hitherto been remote and inaccessible. Indeed one major part of the WAW (between Killarney & Glengarriff) has been in existence since the 1860's – when it was known as *The Prince of Wales Route* (see Figure 2.1).

Many of the routes and viewing points that are proposed as part of the Wild Atlantic Way were also included in a range of itineraries contained in the 1914 edition of the Michelin *Guide to the British Isles*, and have featured in numerous annual travel guides since then.

By the beginning of the 20th century, tourism was being actively branded and promoted on a national scale, initially by the Irish Tourism Association and subsequently by Bord Fáilte since 1955 – who have continually and consistently promoted Ireland as a tourist destination – both as a country and as specific local/iconic destinations.

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<sup>1</sup> *A Tour in Ireland 1776-1779* Arthur Young.

<sup>2</sup> Killarney Great Southern Hotel (1854) was one of the first, followed by others at Parknasilla, Waterville and Caragh Lake. In the West, the Midland, Great Western Railway built hotels at Galway (Eyre Square), Recess and Mulranny.



**Figure 2.1 Tourists motoring past Long Tunnel Cottage, Glengarriff, Co. Cork, circa 1906/07. NLI ref. LCAB 08742**

### 2.2.3 Intensity of Tourism

Visitors consist of both domestic and international travellers and their numbers can vary significantly from year-to-year in response to factors such as the economy and consumer confidence. Additional factors such as weather can have a further influence on domestic visitors.

Tourist numbers in Ireland peaked at 7.7 million in 2007 but by 2013 had declined 14% to 6.6 million. This is also reflected in the numbers visiting counties hosting the WAW<sup>3</sup> which peaked at 3.3 million in 2007 and experienced a 13% decline to 2.9 million by 2013.

Preliminary data indicate a 7% increase in tourist numbers to 7.2 million in 2014, still 7% below peak levels of 2007.

It should also be noted that WAW counties received 42% of overseas visitors in 2007, and 43% in 2013, implying that the growth in visitor numbers to the WAW counties to date is following the national trend.

Notwithstanding these trends there is also evidence of individual sites experiencing counter-cyclical trends – such as the Cliffs of Moher Visitor Experience in County Clare (opened in 2007) which has been growing significantly since 2010<sup>4</sup>. This is an example of 'internal displacement' of visitors that can lead to local growth contrary to regional or national trends.

Name of Attraction	Visitor Numbers per Annum							
	2007	2008	2009	2010	2011	2012	2013	2014
Cliffs of Moher Visitor Centre	808,310	763,758	720,574	809,474	873,988	960,134	940,455	1,000,000+

**Table 2.1 Visitor Numbers at the Cliffs of Moher Visitor centre 2007 - 2014<sup>5</sup>**

<sup>3</sup> Donegal, Leitrim, Sligo, Mayo, Galway, Clare, Limerick, Kerry, Cork

<sup>4</sup> The Cliffs of Moher Visitor Experience exceeded the one millionth visitor mark in October 2014

<sup>5</sup> Table 2.1 is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

## 2.2.4 Effects of Branding and Promotion

As stated above, visitor numbers respond to a variety of macro and micro drivers – these may be further influenced by branding and promotion activities.

The good weather in 2014 and the effects of previous promotion initiatives (*The Gathering*) may also have influenced some of the growth from overseas markets as word of mouth and recommendation from family and friends inform the choice of about one third (36%) of our holidaymakers. The good weather in Ireland in 2014 and evidence of improvement in the national economy may also have encouraged the domestic market to holiday at home.

The international promotion of the WAW – beginning in 2014, was intended to have an effect on bookings during late 2014 – with resultant visitors beginning to arrive in Spring 2015 - at the earliest.

Evidence from localised trends within these patterns – such as at the Cliffs of Moher – suggest that some growth has been occurring since well before the WAW branding exercise began.

The West of Ireland has been marketed overseas for over 150 years. Sites such as the Cliffs of Moher (see visitor numbers above), are elements of the iconic imagery of Ireland in the minds of overseas markets and as such have been used in the promotion of Ireland as a tourist destination long before the development of the WAW concept.

New promotional activity - centred about building the “brand” of the WAW is part of a long term strategy that will take time to take hold before effects that can be readily differentiated from the long established endeavour of promoting the west of Ireland as a tourism destination.

## 2.2.5 Conclusion on Tourism and Promotion

Tourism numbers in Ireland as a whole, and also in the counties hosting the WAW, are growing but this growth appears to represent a recovery to a peak experienced more than 6 years ago. Thus growth, to date, appears to be part of an existing national and international trend that has been occurring for a number of years rather than as a result of a promotion exercise intended for visitors arriving in 2015.

## 2.3 Programme Area and Route

The Wild Atlantic Way encompasses the coastline and hinterland of the nine coastal counties of the West of Ireland – Donegal, Leitrim, Sligo, Mayo, Galway, Clare, Limerick, Kerry and Cork. The route itself stretches for almost 2,500km from the village of Muff on the Inishowen Peninsula in County Donegal to Kinsale in West Cork.

The route (see Figure 2.2) has been selected through the consideration of different options and extends from the northern end through the village of Muff in County Donegal and from the southern end through the town of Kinsale in County Cork.

The immediate catchment of the Wild Atlantic Way is the area surrounding the spine of the route itself, the landmass to the west of the route as far as the coast and the immediate landmass to the east of the route.

While the immediate catchment of the WAW is the coastal zone, the Programme Area for the purpose of the Operational Programme is the totality of the nine coastal counties. This aids with monitoring and measuring given that most data, including tourism and environmental data sets, are most readily available at the level of the county.

In addition, a number of urban centres have been identified as gateways to the Wild Atlantic Way, namely; Cork, Killarney, Limerick, Ennis, Galway, Westport, Sligo, Donegal and Letterkenny, which,

even though some are not located directly on the route, have an important role to play as key accommodation hubs which service the wider area in addition to having an appeal in their own right.

## 2.4 Route Development

In mid-2012, Fáilte Ireland initiated a collaborative and consultative process to identify the route of the Wild Atlantic Way. In May 2013, the Route Identification Report was published, which documents the process followed in identifying the route. Four Regional Steering Groups were established which comprised representatives from Fáilte Ireland, the Local Authorities, the Leader Companies, Údarás na Gaeltachta and the Western Development Commission. Four meetings of each group were held to advise on the route options, following which an extensive public consultation process was undertaken.

The route was identified by primarily 'stitching' together a number of pre-existing touring routes, where appropriate, and providing linkages between them to form a contiguous touring route from Donegal to West Cork. While it was considered that all of this route had the capacity to accommodate two-way car and camper van traffic, it was not considered wide enough to accommodate larger coaches. In particular, 31% of the route was identified as not being able to accommodate coach traffic. For this reason, a separate coach route was identified, which diverts from the main 'independent travellers route', taking coaches onto roads that have the capacity to accommodate them. This approach to the use of existing roads allowed for the avoidance of adverse effects that could have occurred were new roads to be developed or existing roads widened. The route identification process also identified 161 candidate Discovery Points (viewing points and lay-bys), all of which are existing and in use, in addition to 28 Embarkation Points to the 26 off-shore islands.

A key objective of the Operational Programme is to identify a series of loops off the main route to further encourage visitors to explore the wider region and to increase the dwell time of international visitors. The reason why this wasn't done immediately was because it was considered that it would result in a dilution of the brand during the formative years if a large portion of the route was in-land as opposed to predominately coastal and, thereby, not directly 'on-brand'.

## 2.5 Wild Atlantic Way Vision and Goals

The vision for the Wild Atlantic Way brand is as follows:

To create a world class, sustainable and un-missable destination brand that engages and energises the visitor so that they become powerful advocates and leaves them wanting to return for more.

The goals for the Wild Atlantic Way brand are as follows:

1. To ensure that the Wild Atlantic Way brand is compelling to our target market segments and that the Wild Atlantic Way itself becomes a world-class visitor experience.
2. To ensure that the Wild Atlantic Way delivers balanced and sustainable revenue and jobs growth with greater geographic and seasonal spread.
3. To ensure that the Wild Atlantic Way delivers benefits to local communities in the west of Ireland and contributes to a better place to live for everyone.
4. To ensure that the implementation of the Wild Atlantic Way Operational Programme protects, enhances and raises awareness of the environment of the west of Ireland – as the fundamental asset that is the basis of the Wild Atlantic Way.

## 2.6 Relationship with other relevant Plans and Programmes

The Programme sits within a hierarchy of strategic actions such as plans and programmes, including the following:

- Habitats Directive (92/43/EEC)
- Birds Directive (2009/147/EC)
- European Union Biodiversity Strategy to 2020
- The Clean Air for Europe Directive (2008/50/EC)
- Fourth Daughter Directive (2004/107/EC)
- UN Kyoto Protocol and the Second European Climate Change Programme (ECCP II)
- EU 2020 climate and energy package
- Flood Directive (2007/60/EC)
- Water Framework Directive (2000/60/EC)
- Groundwater Directive (2006/118/EC)
- Bathing Water Directive (2006/7/EC)
- Drinking Water Directive (98/83/EC)
- Urban Waste Water Treatment Directive (91/271/EEC)
- Environmental Liability Directive (2004/35/EC)
- SEA Directive (2001/42/EC)
- EIA Directive (2011/92/EU as amended by 2014/52/EU)
- Marine Strategy Framework Directive (2008/56/EC)
- Infrastructure and Capital Investment 2012-16: Medium Term Exchequer Framework
- Sustainable Development – A Strategy for Ireland (1997)
- Wildlife Act of 1976
- Wildlife (Amendment) Act, 2000
- Actions for Biodiversity 2011-2016 Ireland's National Biodiversity Plan, 2011
- Smarter Travel Initiative 2012-2016
- Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)
- Ireland's First National Cycle Policy Framework (2009)
- Scoping Study for a National Cycle Network (NCN)
- National Climate Change Strategy 2007 – 2012 (2007)
- Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)
- National Renewable Energy Action Plan
- National Energy Efficiency Action Plan for Ireland 2007 – 2020 (2007)
- The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)
- European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)
- European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)
- European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)
- European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)
- Water Pollution Acts 1977 to 1990
- Groundwater Protection Schemes
- Water Quality Management Plans
- European Communities (Urban Waste Water Treatment) Regulations 2001 (S.I. No. 254/2001)
- Water Services Act 2007
- Water Services (Amendment) Act 2012
- Water Services Act 2013
- National Spatial Strategy 2002-2020 (2002)
- Grid25 Implementation Programme
- Water Services Strategic Plan
- National Landscape Strategy 2015-2025

- National Rural Development Programme (draft/in preparation)
- National Forestry Programme 2014-2020
- National Peatlands Strategy (draft/in preparation)
- Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas
- Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme (draft/in preparation)
- Our Great Outdoors – The Outdoor Recreation Action Plan for Northern Ireland
- Draft Tourism Strategy for Northern Ireland to 2020
- Harvest 2020
- Agri-vision 2015 Action Plan
- Rural Environmental Protection Scheme (REPS)
- Agri-Environmental Options Scheme (AEOS)
- Green, Low-Carbon, Agri-environment Scheme (GLAS)
- Regional Planning Guidelines
- Regional Development Strategy 2035 (Northern Ireland)
- Development Plans including those for Donegal, Sligo, Mayo Galway, Clare, Limerick, Kerry and Cork
- Northern Ireland Areas Plans (Derry Area Plan 2011)
- Regional & County Green Infrastructure Plans/Strategies
- River Basin Management Plans and associated Programmes of Measures
- Biodiversity Action Plans
- Heritage Plans
- County Landscape Character Assessments
- Freshwater Pearl Mussel Sub-Basin Management Plans
- Local Catchment Flood Risk Management Plans
- Strategic Integrated Framework Plan for the Shannon Estuary
- Shellfish Pollution Reduction Programmes

The Programme must comply with relevant higher level strategic actions and may, in turn, guide lower level strategic actions.

The Programme is subject to a number of high level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section 3.12. Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status by 2015.

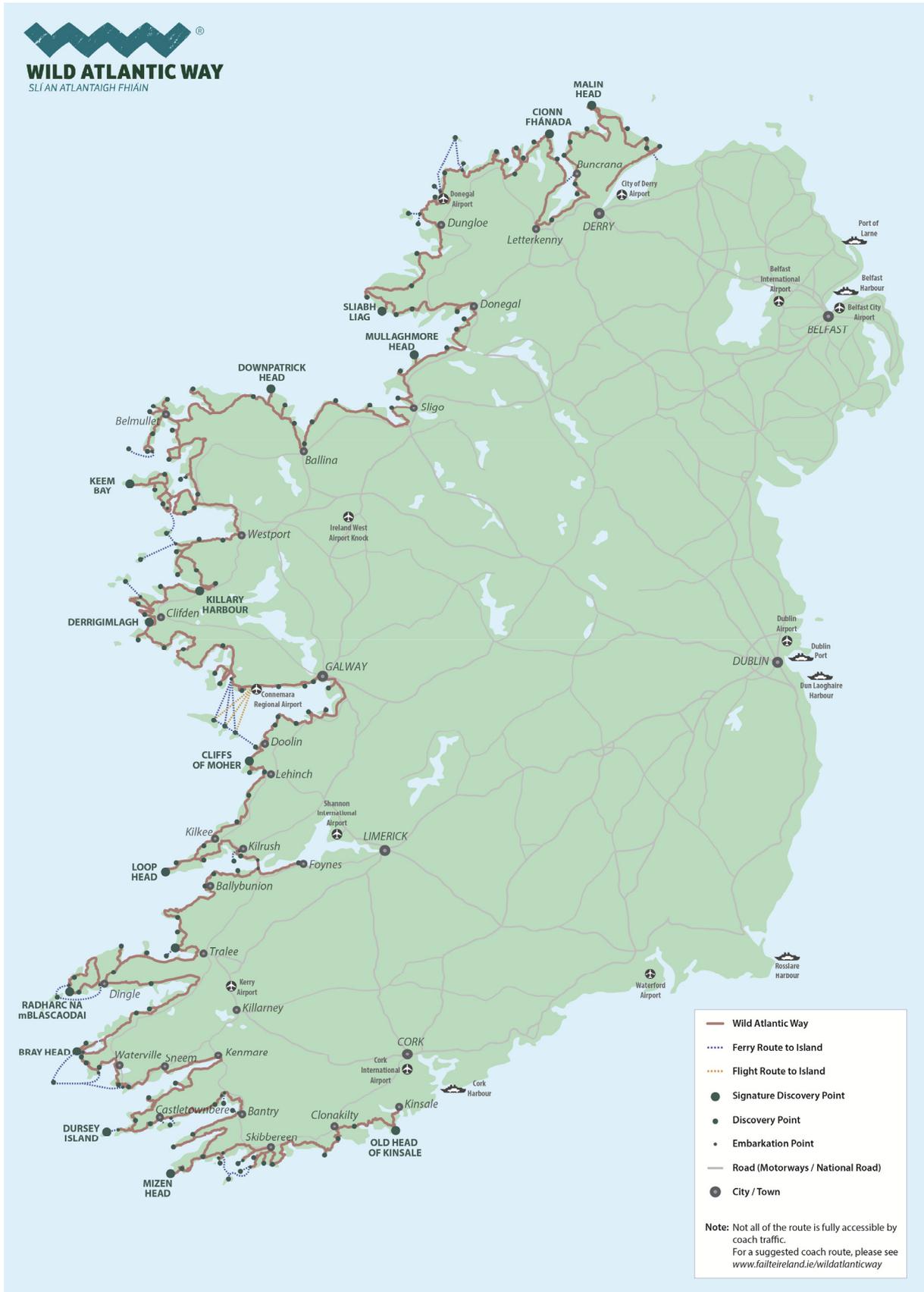


Figure 2.2 Wild Atlantic Way Route

## **Section 3 Relevant aspects of the current state of the environment**

### **3.1 Introduction**

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

Information which is relevant to lower tier environmental assessments and decision making is identified (note that Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, requires that the Environmental Report includes the information that may reasonably be required taking into account, inter alia, the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment).

The information identified will be used by local authorities and others to inform lower tier environmental assessments and decision making.

As noted previously, while the immediate catchment of the WAW is the coastal zone, the Programme Area for the purpose of the Operational Programme is the totality of the nine coastal counties (Donegal, Leitrim, Sligo Mayo, Galway, Clare, Limerick, Kerry and Cork). This aids with monitoring and measuring given that most data, including tourism and environmental data sets, are most readily available at the level of the county.

### **3.2 Likely Evolution of the Environment in the Absence of the Plan**

The likely evolution of the environment in the absence of a new Programme would resemble Option 1 'Continuation of Uncoordinated Approach' which is summarised under Section 4 of this report.

This option would involve continued uncoordinated trend growth of visitor numbers with associated promotion maintenance, repair and development of tourism projects over 35 touring routes.

This option would not contribute towards improvements in environmental management and protection and would be the most likely option whereby significant residual adverse environmental effects would occur.

Works would be undertaken by a variety of local groups, private landowners and local authorities outside of a framework resulting in the proliferation of viewing points and associated developments – potentially including new and improved access roads – along the entirety of the route. Impacts and mitigation along the western seaboard would not be considered as a whole, only on a case by case basis where works are part of formal consenting procedures.

### 3.3 Biodiversity and Flora and Fauna

The Operational Programme includes robust measures to contribute towards the protection of biodiversity and flora and fauna.

Information on biodiversity and flora and fauna which is relevant to the Operational Programme and lower tier assessments and decision making by local authorities and others includes available information on designated ecological sites and protected species, ecological connectivity (including stepping stones and corridors) and non-designated habitats.

Ecological designations include:

- Candidate Special Areas of Conservation<sup>6</sup> (cSACs) and Special Protection Areas<sup>7</sup> (SPAs);
- UNESCO World Heritage and UNESCO Biosphere sites<sup>8</sup>;
- Ramsar Sites<sup>9</sup>;
- Salmonid Waters<sup>10</sup>;
- Shellfish Waters<sup>11</sup>;
- Freshwater Pearl Mussel catchments<sup>12</sup>;
- Flora Protection Order<sup>13</sup> sites;
- Wildlife Sites (including Nature Reserves<sup>14</sup>);
- Certain entries to the Water Framework Directive Register of Protected Areas<sup>15</sup>;
- Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs)<sup>16</sup>;

<sup>6</sup> cSACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) by the DECLG due to their conservation value for habitats and species of importance in the European Union. The sites are *candidate* sites because they are currently under consideration by the Commission of the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000.

<sup>7</sup> SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - by the DECLG due to their conservation value for birds of importance in the European Union.

<sup>8</sup> United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage List comprises sites of outstanding universal value: cultural, natural or mixed. The UNESCO Biosphere Reserves List comprises areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use.

<sup>9</sup> Ramsar sites are designated and protected under the Convention of Wetlands of International Importance, especially as Water Fowl Habitat, which was established at Ramsar in 1971 and ratified by Ireland in 1984. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares. The objective of a Ramsar site is the conservation of wetlands for wildfowl. While Ireland ratified the Ramsar Convention in 1984 there is no legal backing for Ramsar sites unless they are also Nature Reserves or SPAs and as such are protected by the Wildlife Acts 1976 and 2000 or the Birds or Habitats Directives.

<sup>10</sup> Salmonid waters are designated and protected as under the European Communities (Quality of Salmonid Waters) Regulations 1988 (SI No. 293 of 1988). Designated Salmonid Waters are capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*).

<sup>11</sup> In order to protect existing shellfish waters and to ensure the future protection of these areas, the European Union introduced the Shellfish Waters Directive (2006/113/EC). The purpose of this Directive is to put in place concrete measures to protect waters, including shellfish waters, against pollution and to safeguard certain shellfish populations from various harmful consequences, resulting from the discharge of pollutant substances into the sea. The Directive applies to the aquatic habitat of bivalve and gastropod molluscs only (includes oysters, mussels, cockles, scallops and clams). It does not include crustaceans such as lobsters, crabs and crayfish.

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

<sup>13</sup> The current list of plant species protected by Section 21 of the Wildlife Act, 1976 is set out in the Flora (Protection) Order, 1999.

<sup>14</sup> A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private landowners.

<sup>15</sup> In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by wildlife have been listed on Registers of Protected Areas (RPAs). RPAs include those for Protected Habitats or Species, Shellfish, Salmonid, Nutrient Sensitive Areas, Recreational Waters and Drinking Water.

<sup>16</sup> NHAs are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. pNHAs

- Wildfowl Sanctuaries (see S.I. 192 of 1979)<sup>17</sup>; and
- Tree Preservation Orders (TPOs)<sup>18</sup>.

Relevant ecological designations in Northern Ireland include:

- Natura 2000 Sites (these are European Sites – see description above);
- Areas of Special Scientific Interest<sup>19</sup>;
- Nature Reserves<sup>20</sup>; and
- Ramsar Sites (see description above).

Protected Species include:

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

The following information is relevant to ecological networks and connectivity and non-designated habitats:

- CORINE land cover mapping (including areas likely to contain a habitat listed in annex 1 of the Habitats Directive)<sup>21</sup>;
- Watercourses, wetlands and peatlands;
- Other relevant County Development Plan designations;
- The EPA's Framework National Ecological Network for Ireland<sup>22</sup>; and
- Other sites of high biodiversity value or ecological importance, e.g. BirdWatch Ireland's 'Important Bird Areas' (Crowe et al., 2009).

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

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were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats.

<sup>17</sup> Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries.

<sup>18</sup> TPOs are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected by a TPO.

<sup>19</sup> Areas of Special Scientific Interest (ASSIs) are protected areas that represent the best of Northern Ireland's wildlife and geological sites that make a considerable contribution to the conservation of Northern Ireland's most valuable natural places.

<sup>20</sup> Nature reserves are chosen from among the very best examples of Northern Ireland's wildlife, habitats and geology. They contain a wide range of species, communities and geology and their designation is a public recognition of their importance.

<sup>21</sup> The CORINE land cover mapping classifies land cover under various headings. This dataset allows for the identification of lands that are likely to be most valuable to biodiversity including those which are likely to contain a habitat listed in Annex 1 of the Habitats Directive e.g. natural grasslands, peat bogs, salt marshes. CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

<sup>22</sup> The EPA's Framework National Ecological Network provides a classification of the relative importance of areas by virtue of the biodiversity and flora that they contain and the connectivity they provide. Many of the areas identified are corridors.

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained.

Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats can also be important.

The Department of Arts, Heritage and the Gaeltacht's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (2013) identifies many Irish habitats to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. The report identifies that the majority of EU-protected species are, however, in "Favourable" status in Ireland, and stable, although a small number are considered to be in "Bad" status and continue to require concerted efforts to protect them.

### **Natura 2000 Sites and Zone of Influence**

Figure 3.1 maps Natura 2000 sites within 15km of the Wild Atlantic Way in Ireland and Northern Ireland. Also shown on Figure 3.1 are the borders of River Basin Districts including those which are shared with Counties Derry, Tyrone and Fermanagh in Northern Ireland.

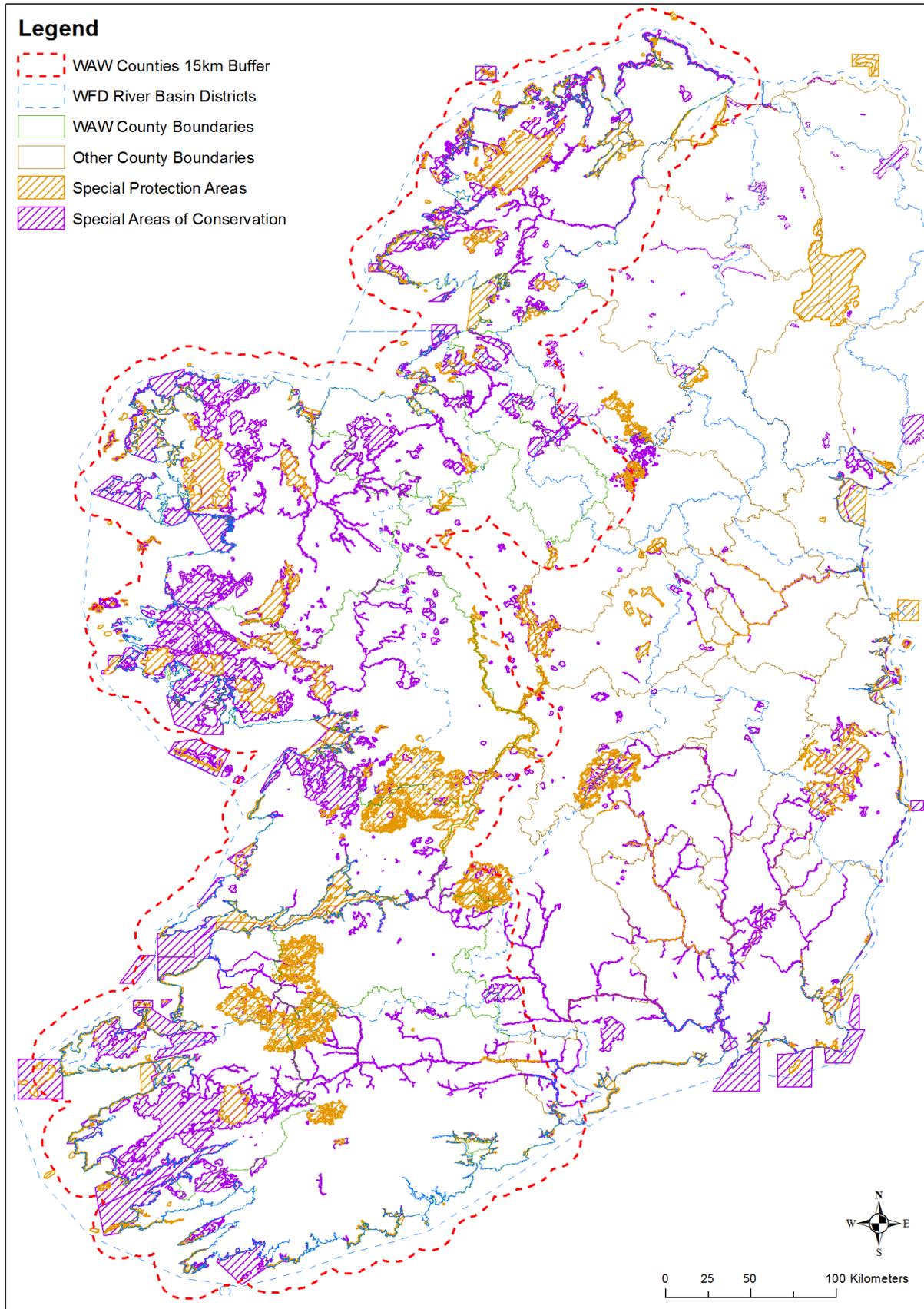
The Zone of Influence of the Programme with respect to potential impacts upon ecology via surface waters can be estimated to be all River Basin Districts either wholly within or partially within the study area, including estuarine and coastal water bodies.

### **Regional Spatial Assessment of Natural Heritage**

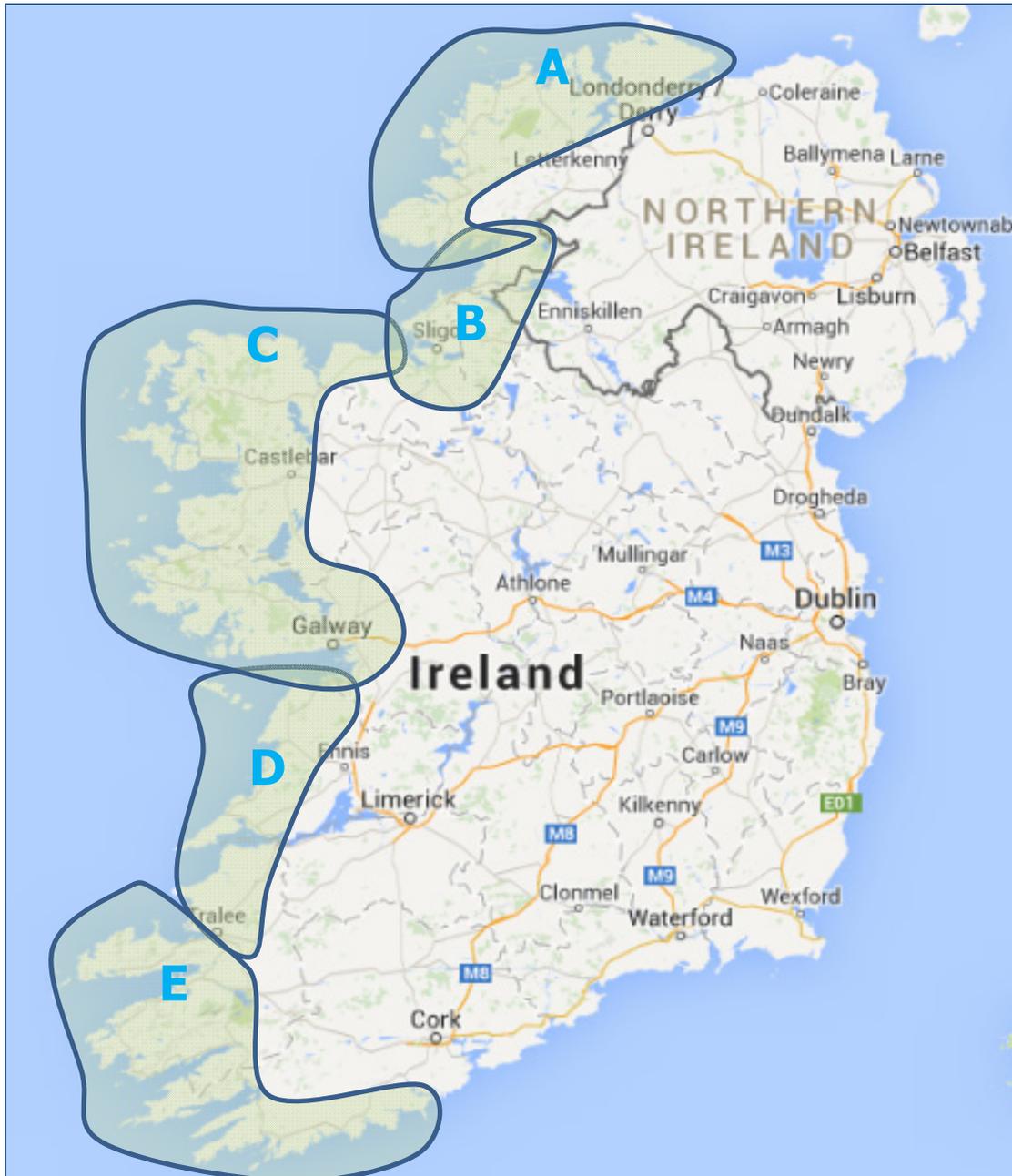
A regional spatial assessment of Natural Heritage (prepared as part of this SEA) is provided at Figure 3.2 and Table 3.1. This very high-level assessment identified two types of zones with regionally similar areas of natural heritage; Zones B and D – which dominantly comprise the working landscapes and largely settled coastal plains of Sligo, Clare and North Kerry. Zones A, C and E which dominantly consist of peninsular environments of mountains, bogs, rocky coasts and scattered farming with scattered settlements. All of these are highly sensitive – but also highly designated. Most of the major habitat designations cross both county boundaries and WFD River Basin District boundaries. This means that the management plans and conservation objectives are well integrated – both spatially and thematically – ensuring consistent protection at a regional scale.

At a very general level, the coastal plains are more robust landscapes with a higher capacity for new developments and uses to be readily absorbed by existing settlements and infrastructure – which is more widespread in these areas. By contrast the natural heritage in the peninsular environments is significantly more sensitive with correspondingly little capacity to absorb new development outside the immediate environs of the limited number and extent of areas of existing settlement and infrastructure.

The Assessment notes that no significant adverse residual effects are likely at a regional level if uses and developments conform with existing regulatory requirements and Fáilte Ireland Guidelines.



**Figure 3.1 Natura 2000 sites within 15km of the Wild Atlantic Way Programme Area and River Basin Districts**



**Natural Heritage**

**Zone Characteristic Features**

- A.** Mountains, bogs, rocky coasts, islands and scattered farming [Western lowland blanket bog, wet heaths, permanent lowland wet meadows, lowland grasslands and coastal communities]
- B.** Coastal farming, Mixed sandy and rocky coasts, mountains, bogs [Lowland Grasslands, wet heaths, permanent lowland wet meadows and coastal communities and western lowland blanket bog]
- C.** Mountains, bogs, rocky coasts, islands and scattered settlements [Western lowland blanket bog, wet heaths, permanent lowland wet meadows and coastal communities]
- D.** Coastal farming Rocky Coasts, Bogs [Lowland and marginal grasslands and wetlands and wet heaths]
- E.** Mountains, bogs, rocky coasts, islands and scattered farming [Western lowland blanket bog, dry heather, wet heaths and heathy grassland, lowland grasslands]

**Figure 3.2 Natural Heritage Regional Zones**

<b>Regional Natural Heritage Assessment</b>				
<b>Zone</b>	<b>Character</b>	<b>Sensitivity</b>	<b>WAW Effects</b>	<b>Mitigation</b>
<b>A</b>	<b>Donegal Peninsular</b> Mountains, bogs, rocky coasts and scattered farming with scattered settlements. Contains extensive areas of designated habitats, species and features.	Generally high sensitivity both to new development and activities associated with maintenance and renewal of existing developments. Sensitivity is highest outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>B</b>	<b>Sligo Coastal Plain</b> Coastal farming, Mixed sandy and rocky coasts, mountains, bogs – this zone is characterised by many types of different habitats and species in very close proximity	Generally robust with locally high sensitivity – often with transitions between significantly different habitats over very short distances.	Developments within working landscapes and established settlements will have little discernible effect – care required in the vicinity of individual sites.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>C</b>	<b>Mayo/Galway Peninsular</b> Mountains, bogs, rocky coasts and scattered farming with scattered settlements. Contains extensive areas of designated habitats, species and features.	Generally high sensitivity both to new development and activities associated with maintenance and renewal of existing developments. Sensitivity is highest outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>D</b>	<b>Clare / North Kerry Coastal Plain</b> Coastal farming, Mixed sandy and rocky coasts, mountains, bogs – this zone contains large-scale areas of designated habitats, species and features	Generally robust with locally high sensitivity in the unique Burren landscapes and nearby large-scale coastal sea-cliff complexes.	Developments within working landscapes and established settlements will have little discernible effect – care required in the vicinity of individual sites.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>E</b>	<b>South Kerry/ West Cork Peninsular</b> Mountains, bogs, rocky coasts and scattered farming with scattered settlements. Contains extensive areas of designated habitats, species and features.	Generally high sensitivity both to new development and activities associated with maintenance and renewal of existing developments. Sensitivity is highest outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines

**Table 3.1 Regional Assessment of Natural Heritage**

### 3.4 Population and Human Health

The impact of implementing the Programme on population and human health is influenced by the impacts which the Programme will have upon environmental vectors. Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings. Population and human health has the potential to interact with:

- The quality of water bodies (see Section 3.6);
- Flood risk (see Section 3.6); and
- The appropriateness and adequateness of infrastructure (see Section 3.8).

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

### 3.5 Soil

Information sources relevant to the environmental component of soil which may be used in lower tier assessments and decision making by local authorities and others includes:

- Soil types (2006) published by Teagasc, Geological Survey of Ireland (GSI), Forest Service & EPA;
- Soils and Subsoils Class (2006) published by Teagasc, GSI, Forest Service & EPA (2006);
- Sites of Geological Interest which have been published for some counties and provisional information on same for other counties (both available from GSI);
- Other datasets published by and available from GSI including those relating to Bedrock Geology, Quaternary Geology, Mineral deposits, Groundwater Resources and Landslides; and
- Datasets on contaminated soils which may be kept by local authorities (these occur most often in urban areas).

### 3.6 Water

#### Water Framework Directive

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving "good status" by 2015.

For the purpose of implementing the WFD, Ireland has been divided into eight River Basin Districts (RBDs) or areas of land that are drained by a large river or number of rivers and the adjacent estuarine/coastal areas. Within each RBD - for the purpose of assessment, reporting and management - water has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies. The Wild Atlantic Way Programme area covers part of four of the eight WFD RBDs on the island of Ireland: the North Western International RBD; the Shannon International RBD; the Western RBD; and the South Western RBD.

River Basin Management Plans have been prepared for each RBD which are being implemented in order to help protect and improve all waters. The Management Plans provides specific policies for individual river basins in order to implement the requirements of the WFD.

## Sources of Information

WFD Monitoring Programmes are undertaken in Ireland by the EPA<sup>23</sup> and in Northern Ireland by the Department of the Environment/Northern Ireland Environmental Agency (DoE/NI)<sup>24</sup>. Overviews of the status for monitored waterbodies are published and made available online.

The EPA undertook an assessment of the 2013 water quality monitoring data in Ireland. It also includes overall national statistics. The DoE/NI publish an annual Northern Ireland Environmental Statistics Report which includes information on the status of waterbodies. These assessments present and assess the latest monitoring data with a focus on key issues that affect water quality.

Subject to exemptions provided for by Article 4 of the WFD<sup>25</sup>, based on available water data, certain surface and groundwater bodies will need improvement in order to comply with the objectives of the WFD.

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife. The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g. Salmonid areas; Special Areas of Conservation (SACs); and, Special Protection Areas (SPAs).

For bathing waters, Mandatory and Guide Values are set out for bathing waters in the 2006 EU Bathing Water Directive. Mandatory Values are values which must be observed if the bathing area is to be deemed compliant with the Directive. Compliance with Guide Values exceeds guidance with Mandatory Values and can be regarded as quality objectives which bathing sites should endeavour to achieve. Bathing quality was reported as been of extremely high status in 2014 with 94% of bathing waters complying with new stricter EU standards and achieving at least 'Sufficient' water quality status in 2014. Along the entire length of the Wild Atlantic Way, only two beaches failed to comply with mandatory/guide values and received Poor Water Quality Status in 2014. The Office of Environmental Enforcement (OEE), within the EPA, follows up on the cause of any bathing area failing the minimum EU mandatory values and the measures being taken by the relevant local authority to bring the bathing water into compliance. In Northern Ireland the only monitored bathing water that failed to comply with mandatory/guide values was Carnlough.

## Flooding

Flooding is an environmental phenomenon which, as well have causing economic and social impacts, could in certain circumstances pose a risk to human health. The existence of flood risk across the country is illustrated by the mapping of locations of historical flooding events - accessible from the Office of Public Works' (OPW), the lead Authority on flooding in the country, National Flood Hazard Mapping website. In addition to this historic mapping there is predictive, modelled Preliminary Flood Risk Assessment mapping available from the OPW.

The OPW commenced a National Catchment Flood Risk Assessment and Management (CFRAM) programme in 2011. CFRAM studies are currently being carried out for all River Basin Districts and predictive, modelled CFRAM flood risk maps were published in draft format in 2015.

<sup>23</sup> [www.epa.ie](http://www.epa.ie)

<sup>24</sup> [www.doeni.gov.uk/niea/water-home/wfd.htm](http://www.doeni.gov.uk/niea/water-home/wfd.htm)

<sup>25</sup> Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the relevant river basin management plan.

## 3.7 Air and Climatic Factors

### Climatic Factors

The key issue involving the assessment of the effects of implementing the Plan on climatic factors relates to greenhouse gas emissions arising from transport.

By providing for a driving route intended primarily for motorised transport, the Programme would be likely to contribute towards increases in greenhouse gas emissions. In the longer term, the Programme allows for increases in walking and cycling levels and integration of existing and planned walkways and greenways of local authorities into the route. Overtime therefore the route could allow for contributions towards sustainable mobility.

The Programme would be likely to contribute towards travel related emissions to air as a result of visitors getting to Ireland and to the west coast. Although transport policy is currently not the subject of SEA in Ireland, the Monitoring Strategy that is being implemented (see Section 5.2) will provide information relating to journeys by visitors to Ireland by air – this information will be made available to transport planning and associated environmental assessments.

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

1. Noise;
2. Air emissions; and
3. Energy use (39% of Total Final Energy Consumption in Ireland in 2012 was taken up by transport, the largest take up of any sector)<sup>26</sup>.

Between 2008 and 2011, Ireland's greenhouse gas emissions decreased across all sectors due to the effects of the economic downturn with emissions falling by 15.2% between 2008 and 2011. However, 2012 saw emissions rise by 1.2% when compared with 2011<sup>27</sup>.

Maximising sustainable mobility will help Ireland meet its emission target for greenhouse gases under the 2020 EU Effort Sharing target which commits Ireland to reducing emissions from those sectors that are not covered by the Emissions Trading Scheme (e.g. transport, agriculture, residential) to 20% below 2005 levels.

The EPA 2015 publication *Ireland's Greenhouse Gas Emission Projections 2014-2035*, identifies that:

- Under the 'worst case' scenario, Ireland is projected to cumulatively exceed its obligations by 4 Mtonnes of CO<sub>2</sub>eq over the period 2013-2020.
- Under the 'best case' scenario, Ireland is projected to cumulatively meet its compliance obligations over the 2013-2020 period and meet its 2020 target. This takes into account the overachievement of the annual limits in the period 2013- 2017 which is banked and used in the years 2018-2020. The report identifies that achieving the outlook under the 'best case' scenario will require focus and effort which includes meeting renewable targets for transport and heat as well as energy efficiency targets.

### Ambient Air Quality

The EPA's (2014) *Air Quality in Ireland 2013* identifies that air quality in Ireland continues to be good.

<sup>26</sup> Sustainable Energy Ireland (2014) *Energy in Ireland 1990 – 2012*

<sup>27</sup> EPA (2014) *Ireland's Greenhouse Gas Emissions in 2012*

## 3.8 Material Assets

### Introduction

Resources that are valued and that are intrinsic to specific places are called 'material assets'. Material Assets relevant to this SEA include:

- Existing roads;
- Waters of economic value;
- Water services; and
- Waste management services.

Other material assets covered by the SEA include archaeological and architectural heritage (see Section 3.9) natural resources of economic value, such as water and air (see also Sections 3.6 and 3.7).

### Existing Roads

Existing roads provide an opportunity to align the Wild Atlantic Way route without requiring new built development. The route was identified by primarily 'stitching' together a number of pre-existing touring routes, where appropriate, and providing linkages between them to form a contiguous touring route from Donegal to West Cork. While it was considered that all of this route had the capacity to accommodate two-way car and camper van traffic, it was not considered wide enough to accommodate larger coaches. In particular, 31% of the route was identified as not being able to accommodate coach traffic. For this reason, a separate coach route was identified, which diverts from the main 'independent travellers route', taking coaches onto roads that have the capacity to accommodate them. This approach to the use of existing roads allowed for the avoidance of adverse effects that could have occurred were new roads to be developed or existing roads widened.

### Waters of Economic Value

Waters of economic value include those which are valuable to tourism and those which facilitate commercial fishing and recreational activities. Fáilte Ireland's have identified waters of national tourism significance in a report entitled *Determination of Waters of National Tourism Significance and Associated Water Quality Status (2009)*. Over 70 of 104 water bodies identified in this report are located within counties through which the WAW route is aligned.

The fishing industry along the West Coast of Ireland relates not only to commercial fishing (at sea and inland) but also to tourism and recreational activities. The various harbours provide fishing year round and are used as recreational and amenity harbours.

The marine resource is very important to West Coast as it supports a significant number of water based activities, both work and pleasure related. These include boat hire, yachting, adventure sports, pier/shore angling, sea angling, dolphin, whale and bird watching, hiking, visiting heritage sites and festivals. A number of embarkment points also provide boat trips and sail from the mainland to the various islands during the year.

### Water Services

The delivery, integration and implementation of strategic water and waste water projects and infrastructural improvements are now the responsibility of the newly established State body Irish Water. The function and role of Irish Water includes:

- Abstracting and treating water;
- Delivering water and waste water services to homes and businesses;
- Installing water meters and billing domestic and business customers;
- Raising finance to fund improvements and repairs in the water system; and
- Maintaining and operating the water system.

Water services infrastructure and services are planned and permitted through specific processes which are informed by, inter alia, the needs of land use plans including County Development Plans and Local Area Plans which are required to take into account fluctuating needs, such as those that may arise as a result of existing and future numbers of residents and tourists.

### **Waste Water Compliance**

Infrastructure capacity and effluent quality are compliant in the majority of areas surveyed, though a minority of settlements and areas still report the need for further improvement. These are described below to provide a context.

Key findings of the EPA's recent assessment of waste water treatment capacity in urban areas<sup>28</sup> relating to infrastructure and effluent quality include:

#### ***Effluent quality***

- *124 of 162 (77%) larger urban areas complied with the mandatory European Union effluent quality and sampling standards.*
- *312 of all 441 (71%) secondary treatment plants achieved the European Union effluent quality and sampling standards for the water quality indicator parameters of BOD, COD and suspended solids.*
- *16 out of 441 secondary treatment plants did not return a sufficient number of effluent samples in 2013.*

#### ***Infrastructure***

- *9 out of 162 large urban areas did not meet the European Union Directive requirement to provide secondary treatment.*
- *8 out of 162 large urban areas did not comply with European Union Directive requirements to provide infrastructure to reduce nutrients and did not meet nutrient quality standards.*
- *50% of 350 infrastructural improvements required in EPA licences before the end of 2013 were not completed. Works that were completed include the cessation of 70 discharges and upgrades to 30 waste water treatment plants.*

### **Drinking Water**

The EPA's most recent (2015) report on the provision and quality of drinking water in Ireland<sup>29</sup> identifies that in Ireland, 82.1% of the population is provided with drinking water from one of 978 public supplies. The remaining population is served by public or private group water schemes, small private supplies (7.4% of the population) and private wells (serving 10.6% of the population). The report identifies that in public water supplies:

- *99.82 % of samples comply with microbiological parameters.*
- *99.51 % of samples comply with chemical parameters.*
- *40 Boil NoOces and 4 Water Restriction Notices were issued, affecting 30,519 people.*
- *E. coli was detected at least once in 10 supplies, up 3 on 2012.*
- *Trihalomethanes limit was exceeded in 61 supplies, down 35 on 2012.*

### **Waste Management**

For the purposes of waste management planning, Ireland is now divided into three regions: Southern, Eastern-Midlands and Connacht-Ulster. Waste management plans for the three regions came into force in 2015. The EPA publishes data on waste generation and management in the National Waste Report and bulletins. The most recent National Waste Report was published in August 2014, reporting waste information for 2012, identified that in 2012, Ireland achieved all its EU obligations across a broad range of waste legislation.

<sup>28</sup> EPA (2014) *Focus on Urban Waste Water Treatment in 2013*

<sup>29</sup> EPA (2015) *The Provision and Quality of Drinking Water in Ireland: A Report for the Year 2013*

## 3.9 Cultural Heritage

### Archaeological Heritage

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

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

### Architectural Heritage

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

Records of Protected Structures are legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 as amended.

In addition to Protected Structures, the Planning and Development Act, 2000 provides the legislative basis for the protection of Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan.

### Regional Spatial Assessment of Cultural Heritage

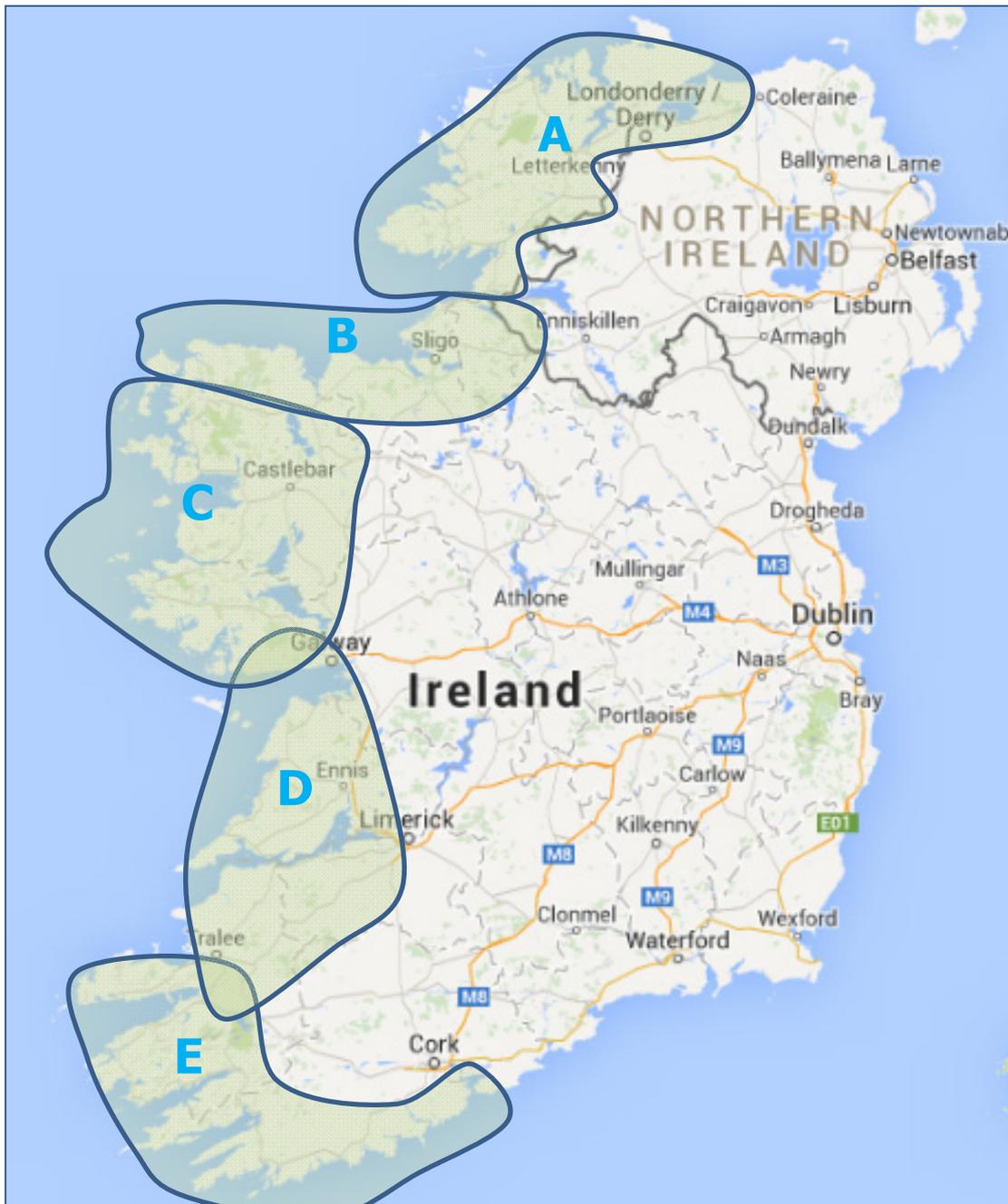
A regional spatial assessment of cultural heritage (prepared as part of this SEA) is provided at Figure 3.3 and Table 3.2.

This very high-level assessment identified two types of zones with regionally similar areas of cultural heritage; Zones B and D – which dominantly comprise the working landscapes and largely settled coastal plains of Sligo, Clare and North Kerry. These contain complexes of monuments and large and protected heritage landscapes - in contexts of working landscapes and extensive areas of settlement –that have occupied in most major prehistoric and historic periods. Zones A, C and E which dominantly consist of peninsular environments of lithic monuments in slow changing open landscapes.

At a very general level, the coastal plains are more robust landscapes with a higher capacity for new developments and uses to be readily absorbed by existing settlements and infrastructure – which is more widespread in these areas.

By contrast the cultural heritage in the peninsular environments is significantly more sensitive to change with correspondingly little capacity to absorb new development outside the immediate environs of the limited number and extent of areas of existing settlement and infrastructure.

The Assessment notes that no significant adverse residual effects are likely at a regional level if uses and developments conform with existing regulatory requirements and Fáilte Ireland Guidelines.



**Cultural Heritage - Regional Features**

**Zone Characteristic Features**

- A.** Iron Age, Early Christian, Medieval, Irish Language, Music
- B.** Megalithic, Early Christian, Medieval, Music
- C.** Early Christian, Medieval, Irish Language, Music
- D.** Megalithic, Iron Age, Early Christian, Medieval, 18th Century, Music
- E.** Megalithic, Iron Age, Early Christian, Irish Language, Music

**Figure 3.3 Cultural Heritage Regional Zones**

<b>Regional Cultural Heritage Assessment</b>				
<b>Zone</b>	<b>Character</b>	<b>Sensitivity</b>	<b>WAW Effects</b>	<b>Mitigation</b>
<b>A</b>	Donegal Peninsular Lithic Monuments in slow changing open landscapes with scattered settlements.	Generally high sensitivity to development outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>B</b>	Sligo Coastal Plain Complex of monuments and large and protected heritage landscapes in contexts of working landscapes and extensive areas of settlement - that have been occupied in most major prehistoric and historic periods	Generally robust with locally high sensitivity – especially Neolithic landscapes south of Sligo	Developments within working landscapes will have little discernible effect – care required in the vicinity of individual sites.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>C</b>	Mayo/Galway Peninsular Lithic Monuments in slow changing open landscapes	Generally high sensitivity to development outside of established settlements and existing road network	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>D</b>	Clare / North Kerry Coastal Plain Complex of monuments and large and protected heritage landscapes in contexts of working landscapes and extensive areas of settlement - that have been occupied in most major prehistoric and historic periods	Generally robust with locally high sensitivity especially Neolithic landscapes of the Burren	Developments within working landscapes will have little discernible effect – care required in the vicinity of individual sites.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>E</b>	South Kerry/ West Cork Peninsular Lithic Monuments in slow changing open landscapes	Generally high sensitivity to development outside of established settlements and existing road network	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines

**Table 3.2 Regional Assessment of Cultural Heritage**

### **3.10 Landscape**

Landscapes are areas which are perceived by people and are made up of a number of layers: landform, which results from geological and geomorphological history; landcover, which includes vegetation, water, human settlements, and; human values which are a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

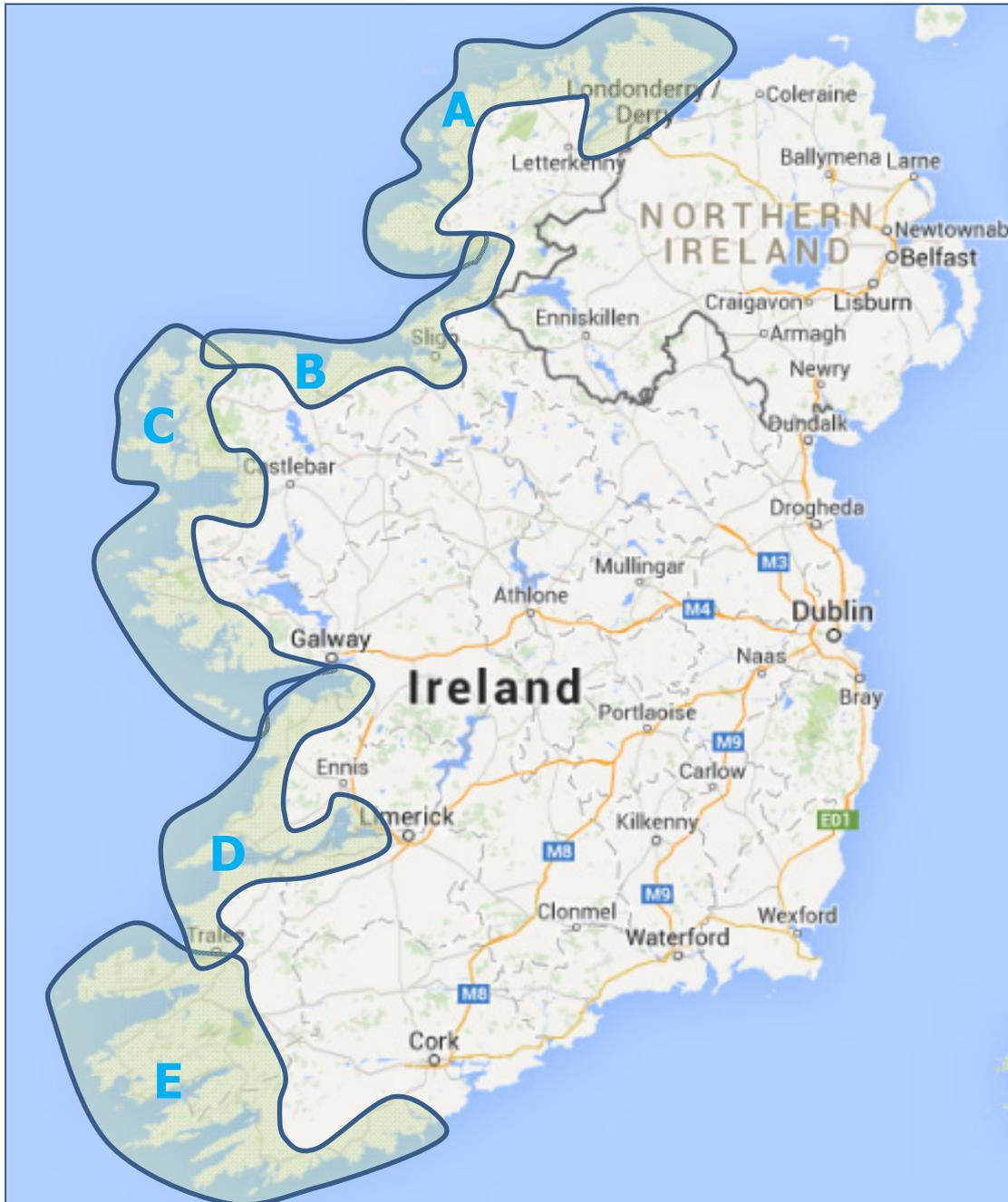
A regional spatial assessment of landscape (prepared as part of this SEA) is provided at Figure 3.4 and Table 3.3.

This very high-level assessment identified two types of zones with regionally similar areas of landscape; Zones B and D – which dominantly comprise the working landscapes and largely settled coastal plains of Sligo, Clare and North Kerry. These contain complexes of monuments and large and protected heritage landscapes – in contexts of working landscapes and extensive areas of settlement – that have occupied in most major prehistoric and historic periods. Zones A, C and E which dominantly consist of peninsular landscapes comprising coastal communities within a larger landscape of very rugged bogs and uplands contain extensive areas of designated landscapes and protected views.

At a very general level, the coastal plains are more robust landscapes with a higher capacity for new developments and uses to be readily absorbed by existing settlements and infrastructure – which is more widespread in these areas.

By contrast the landscapes of the peninsular environments is significantly more sensitive to change with correspondingly little capacity to absorb new development outside the immediate environs of the limited number and extent of areas of existing settlement and infrastructure.

The Assessment notes that no significant adverse residual effects are likely at a regional level if uses and developments conform with existing regulatory requirements and Fáilte Ireland Guidelines.



**Landscape**

**Zone Characteristic Features**

- A.** Coastal communities – often dense – within a larger landscape of very rugged bogs and uplands and islands
- B.** Well-spaced coastal settlements and farming areas – with nearby rugged uplands
- C.** Scattered small communities concentrated between a complex coastlines and islands and extensive empty interiors of bogs and mountains
- D.** Settled mature agricultural communities with large towns interspersed with singular landscape features.
- E.** Very scattered coastal communities within a larger landscape of very rugged bogs, uplands islands and rocky peninsulas

**Figure 3.4 Landscape Regional Zones**

<b>Regional Landscape Assessment</b>				
<b>Zone</b>	<b>Character</b>	<b>Sensitivity</b>	<b>WAW Effects</b>	<b>Mitigation</b>
<b>A</b>	<b>Donegal Peninsular</b> Coastal communities – often dense – within a larger landscape of very rugged bogs and uplands. Extensive areas of designated landscapes and protected views.	Generally high sensitivity to new development Sensitivity is highest outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>B</b>	<b>Sligo/North Mayo Coastal Plain</b> Well-spaced coastal settlements and farming areas – with nearby rugged uplands. Extensive areas of designated landscapes and protected views.	Generally robust with locally high sensitivity – some areas of nationally significant iconic landscapes [e.g. Ben Bulbin]	Developments within working landscapes will have little discernible effect – extreme care required in the vicinity of nationally significant iconic landscapes	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>C</b>	<b>Mayo/Galway Peninsular</b> Scattered small communities concentrated between a complex coastlines and extensive empty interiors of bogs and mountains. Extensive areas of designated landscapes and protected views	Generally high sensitivity to new development Sensitivity is highest outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>D</b>	<b>Clare / North Kerry Coastal Plain</b> Settled mature agricultural communities with large towns interspersed with singular landscape features. Extensive areas of designated landscapes and protected views	Generally robust with locally high sensitivity – some areas of nationally significant iconic landscapes [e.g. Burren and Cliffs of Moher]	Developments within working landscapes will have little discernible effect – extreme care required in the vicinity of nationally significant iconic landscapes	None required if use and development conform with existing regulatory requirements and FI Guidelines
<b>E</b>	<b>South Kerry/ West Cork Peninsular</b> Very scattered coastal communities within a larger landscape of very rugged bogs, uplands and rocky peninsulas Extensive areas of designated landscapes and protected views	Generally high sensitivity to new development. Sensitivity is highest outside of established settlements and existing road network.	Developments or use of an inappropriate scale or intensity – even of a small scale – can have disproportionately extensive effects.	None required if use and development conform with existing regulatory requirements and FI Guidelines

**Table 3.3 Regional Assessment of Landscape**

### 3.11 Appropriate Assessment

Stage 2 Appropriate Assessment (AA) has been undertaken alongside the preparation of the Operational Programme. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The AA concluded that the Programme will not affect the integrity of the Natura 2000 network<sup>30</sup>.

The preparation of the Programme, SEA and AA has taken place concurrently and the findings of the AA have informed both the Programme and the SEA. All recommendations made by the AA were integrated into the Programme.

### 3.12 Strategic Environmental Objectives

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

- *B1 To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species<sup>31</sup>*
- *B2 To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species*
- *B3 To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites<sup>32</sup> and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species*
- *PHH1 To protect populations and human health from exposure to incompatible landuses*
- *S1 To avoid damage to the hydrogeological and ecological function of the soil resource*
- *W1 To maintain and improve, where possible, the quality and status of surface waters*
- *W2 To prevent pollution and contamination of groundwater*
- *W3 To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities*
- *C1 To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport*
- *M1 For new Wild Atlantic Way related development to be served with adequate and appropriate waste water treatment*
- *M2 For new development to be served with adequate drinking water that is both wholesome and clean*
- *M3 To reduce waste volumes, minimise waste to landfill and increase recycling and reuse*
- *M4 To maximise the use of existing infrastructure*
- *CH1 To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context*
- *CH2 To protect architectural heritage including entries to the Records of Protected Structures and Architectural Conservation Areas and their context*
- *L1 To avoid conflicts with the appropriate protection of statutory designations relating to the landscape, including those included in the land use plans of local authorities*

<sup>30</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) No alternative solution available;
- (b) Imperative reasons of overriding public interest for the programme to proceed; and
- (c) Adequate compensatory measures in place.

<sup>31</sup> 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

<sup>32</sup> The Planning and Development Act 2000 as amended defines a 'wildlife site'. See Section **Error! Reference source not found.**

## Section 4 Effects of Alternatives and the Plan

### 4.1 Description of Alternatives

As per the requirements of the SEA Directive, this SEA considers reasonable alternatives, which are capable of being implemented for the Wild Atlantic Way Operational Programme, taking into account the objectives and the geographical scope of the Programme.

The alternatives are evaluated in Section 4.2 resulting in the identification of potential effects and informing the development of the Programme. The evaluation of alternatives will inform the decision-making framework for future projects.

#### 4.1.1 Rational for Alternative Development

As the National Tourism Development Authority, Fáilte Ireland needed to respond to the significant decline in international bednights and revenue in the west of Ireland that had occurred between 2007 and 2010 with a marketing initiative that would help to arrest and eventually begin to reverse this decline.

A wide range of options were open to the Authority and all were considered, as detailed below.

#### 4.1.2 Alternatives

##### 4.1.2.1 Option 1: Continuation of Uncoordinated Approach

Option 1 was to continue with a regional approach to tourism development in the west, with each of four regions competing with one another for market share, but all contributing to a large mix of destination brands which have previously struggled for attention in the international marketplace.

In terms of touring routes, over 35 were identified which touched upon the west coast, but only three of which crossed a county boundary.

Any of the existing brands in the west of Ireland lacked the scale and singularity required to be noticed in overseas markets.

##### 4.1.2.2 Option 2: Further Growth of Popular Centres

Option 2 was to focus future growth on those centres that are currently popular with visitors and try to grow them further. This option would involve the development of a single attraction of sufficient scale to focus attention on the west coast. Such an attraction would be of a scale similar to that of the recently developed Titanic Visitor Centre in Belfast.

##### 4.1.2.3 Option 3: Single Overarching Brand - Coastal Touring Routes

Option 3 was to have a single, overarching brand for the west of Ireland which would equip it with a greater potential to achieve 'cut-through' in target overseas markets by developing the concept of the Wild Atlantic Way as both a brand and a touring route. Comparator experiences such as the Great Ocean Road (Australia), the Garden Route (South Africa) and the Big Sur (North America) were all examined.

The brand was tested and consumer groups responded very positively to it. In order to deliver on the brand proposition, the route identified had to be a coastal route.

##### 4.1.2.4 Option 3a Greenway Route

As part of this option, the development of a single walking route or greenway (including cycling) was considered. The model for this was the Wales Coast Path which was in development at the time.

#### **4.1.2.5 Option 3b Most Scenic Driving Routes only**

Option 3b was considered as part of the route identification process and involved only including those roads that were most scenic or which had largely unbroken views of the coast. This was the approach taken in identifying the 16 National Touring Routes in Norway.

#### **4.1.2.6 Option 3c Single, Continuous Route**

Option 3c was to identify a single, contiguous route along the entire west coast, from Co. Donegal to Co. Cork. It was deemed that this would create the necessary scale and singularity required for a brand that was to be visible in key overseas markets.

It was decided as part of this option to eventually identify and include a number of loops inland off the main spine within the first five years of operation. The reason why this wasn't done immediately was because it was considered that it would result in a dilution of the brand during the formative years if a large portion of the route was in-land as opposed to predominately coastal and, thereby, not directly 'on-brand'.

One of the key considerations in the route identification process, which included collective stakeholder decision-making and public consultation, was to ensure that the route to be chosen had to have the capacity to take two-way car, camper van and minibus traffic, while separate sections of the route were identified for coaches, as appropriate. This was to avoid the selection of routes in sensitive areas that would require expansion or renewal works. Where roads along the coast with continuous sea-views were deemed to be too narrow, spurs from a wider road which ended in an existing beach car park or viewing point ('Discovery Point') were identified. This meant that even if the chosen route did not closely follow the coast due to capacity issues, the visitor was never very far at any one time from a view of the Atlantic.

Within Option 3c 'Single, Continuous Route' there are three sub-options for the provision of Discovery Points (viewing points and lay-bys) as follow:

##### **3c (i) No Discovery Points, continuation of uncoordinated tourism projects**

The Programme under this alternative does not provide for Discovery Points but allows for the continuation of new, uncoordinated tourism projects along the western seaboard undertaken by a variety of local groups, private landowners and local authorities.

##### **3c (ii) New Discovery Points**

The Programme under this alternative provides for a coordinated set of new Discovery Points.

##### **3c (iii) Restriction of new development, Limit in number of Discovery Points**

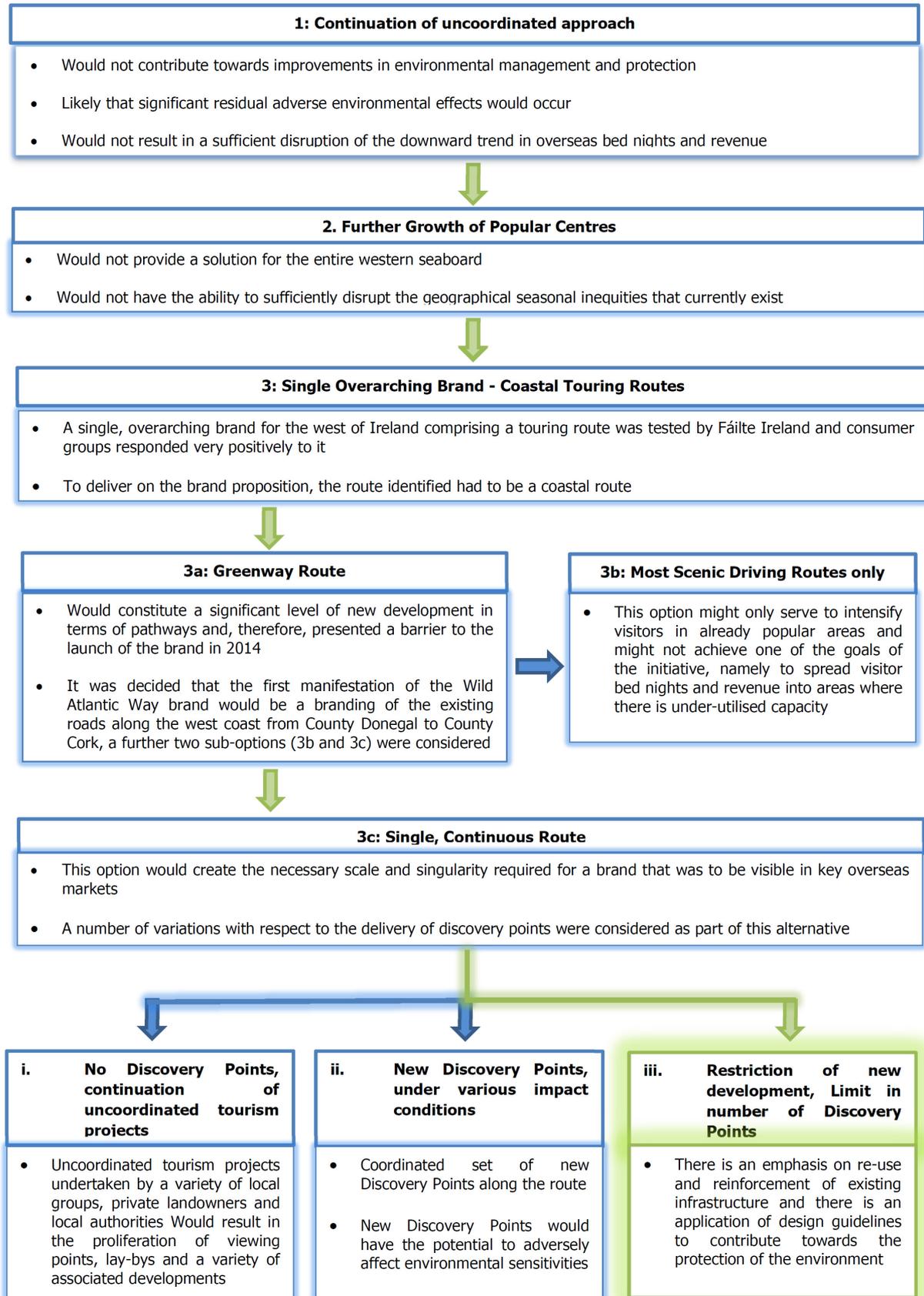
The Programme under this alternative facilitates a restriction of new development and limits the number of Discovery Points. There is an emphasis on re-use and reinforcement of existing infrastructure and there is an application of design guidelines to contribute towards the protection of the environment.

## **4.2 Evaluation of Alternatives**

### **4.2.1 Overview**

A schematic decision tree for the process of arriving at the selected alternative (which has been informed by the evaluation of environmental effects) is provided at Figure 4.1 overleaf.

Further detail on the evaluation of environmental effects is provided on subsequent pages.



**Figure 4.1 Decision Tree for Selected Alternative**

## 4.2.2 Effects as a result of Development and Needs External to the Route

Effects as a result of development and needs external to the route taken by tourists along the western sea board arising from implementation of the Programme are influenced by the extent of growth in visitor numbers. Higher growth does not necessarily result in a greater number and extent of potential effects – some of the options have the ability to accommodate growth by spreading it over various locations and away from the traditional summer peak visitor time.

The Programme will comprise one of many factors which could attract visitors to the west coast.

All alternatives would contribute towards travel related emissions to air as a result of visitors getting to Ireland and to the west coast. Although transport policy is currently not the subject of SEA in Ireland, the Monitoring Strategy that is being implemented (see Section 5) will provide information relating to journeys by visitors to Ireland by air – this information will be made available to transport planning and associated environmental assessments. Traffic issues are dealt with by county/regional assessment of land use plans – there are currently no SEA provisions for air, port and rail traffic. Site management is only an SEA issue at site level – traffic management on public roads is a matter for local authorities and Gardaí and its growth is a part of management and planning at county level – which already includes tourism traffic – and is subject to its own assessment.

Each of the alternatives could, in combination with land use plans (which provide for the needs associated with tourism e.g. accommodation, infrastructural capacity) and other sectoral plans (which take account of fluctuations in population due to tourism e.g. plans for water services which are the responsibility of Irish Water) result in various potential adverse effects on all parts of the environment.

With regard to built development, such as that relating to accommodation, bars or restaurants, these are planned and permitted through land use plans including Regional, County and Local Plans which are required to take into account fluctuating needs, such as those that may arise as a result of existing and future numbers of residents and tourists. These land use plans are required to undergo SEA and comply with environmental legislation.

With regard to infrastructure and services, such as those relating to water services, these are planned and permitted through specific processes which are informed by, inter alia, the needs of land use plans including Regional, County and Local Plans which are required to take into account fluctuating needs, such as those that may arise as a result of existing and future numbers of residents and tourists. These land use plans and plans from other sectors are required to undergo SEA and comply with environmental legislation.

## 4.2.3 Option 1: Continuation of Uncoordinated Approach

This option would involve continued uncoordinated maintenance, repair and development of tourism projects over 35 touring routes.

This option would not contribute towards improvements in environmental management and protection and would be the most likely option whereby significant residual adverse environmental effects would occur.

Works would be undertaken by a variety of local groups, private landowners and local authorities outside of a framework resulting in the proliferation of viewing points and associated developments – potentially including new and improved access roads – along the entirety of the route. Impacts and mitigation along the western seaboard would not be considered as a whole, only on a case by case basis where works are part of formal consenting procedures.

There would be little or no management of visitors:

- At a macro spatial level in terms of what sections of the western seaboard could accommodate increases in visitors;
- At a micro spatial level in terms of what areas adjacent to viewing points, lay-bys etc. should be avoided; and
- In terms of time; it is likely that the summer peak would be accentuated.

This lack of coherent planning and management would have the potential to contribute towards increasing stresses on sensitive environments (including ecology, water resources, landscapes and cultural heritage) and infrastructure.

In addition to the above, Fáilte Ireland considered that pursuing this option would not result in a sufficient disruption of the downward trend in overseas bed nights and revenue that was the case at the time. It was this 'status quo' option that had been in force when the decline occurred so there is no evidence to suggest that it would have the ability to arrest or reverse the decline.

#### **4.2.4 Option 2: Further Growth of Popular Centres**

This option would: focus growth currently popular centres with the objective of making them more popular; and involve the development of a single attraction of sufficient scale to focus attention on the west coast.

The Programme for this option would theoretically present an opportunity to contribute towards improvements in environmental management and protection; however this opportunity would be severely constrained by the main objective of the Programme, focusing visitors into currently popular locations. It is unlikely that real improvements in environmental management and protection would be achieved.

Visitors would be directed to the most popular locations along the most popular sections of the western seaboard. This would lead to the need to develop clusters of new viewing points and associated developments – potentially including new and improved access roads. The construction of these new developments would present potential adverse environmental effects which would be concentrated in the most popular locations. Significant increases in pressure upon sensitive environments (including ecology, water resources, landscapes and cultural heritage) and increases in demand on infrastructure could lead to direct, indirect and cumulative environmental effects in these locations.

The Programme could mitigate impacts by managing visitors across the tourist season so that growth is sought in times outside of the summer peak; the extent to which this would be successful is uncertain due to the focus on a small number of already popular locations as well as a single attraction of sufficient scale to focus attention on the west coast.

In addition to the above, Fáilte Ireland considered such an approach would not provide a solution for the entire western seaboard and would not have the ability to sufficiently disrupt the geographical seasonal inequities that currently exist along the west coast. It was also considered that it would be more appropriate as part of a tourism development strategy for a large urban centre, as the Titanic Visitor Centre was for Belfast.

## 4.2.5 Option 3: Single Overarching Brand - Coastal Touring Routes

Options 3a, 3b and 3c provide for a single, overarching brand for the west of Ireland comprising a touring route.

### 4.2.5.1 Option 3a: Greenway Route

By providing for the development of a single walking route or greenway (including cycling), this route would contribute towards increases in sustainable mobility and reductions in travel related emissions to air.

The Programme for this option would present an opportunity to contribute towards improvements in environmental management and protection by allowing for both: the management of visitors at a macro spatial level (in terms of what sections of the western seaboard could accommodate increases in visitors); and the management of visitors at a micro spatial level (in terms of what areas adjacent to viewing points, lay-bys etc. should be avoided). This option would also allow for the management of visitors across the tourist season so that growth could be sought in times outside of the summer peak. There would be potential for success in this regard due to the wide extent of the route.

The above management of visitors would have the potential to both: contribute towards the protection of sensitive environments (including ecology, water resources, landscapes and cultural heritage) by minimising potential stresses; and avoid increases in infrastructural demand during the summer peak season.

The development of pathways and cycleways under this option would result in potential adverse environmental effects with respect to various environmental components (including ecology, soil, cultural heritage, water resources and landscape); careful route selection and legislative compliance would be required in order to ensure that effects are mitigated. Under this option existing and planned walkways and greenways of local authorities could be integrated into the route.

In addition to the above, Fáilte Ireland identified that this option would constitute a significant level of new development in terms of cycleways and, therefore, presented a barrier to the launch of the brand in 2014 (on-road cycling routes would not satisfy the needs or expectations of Ireland's core overseas markets). Other issues identified included land ownership and the possible requirement to seek planning permission, neither of which were insurmountable in principal, but not within the timescale allowed. It is noted that the Operational Programme supports improvements by local authorities and others to the existing level of infrastructure and facilities for walking, cycling and water-based activities along the Wild Atlantic Way.

Once it was decided that the first manifestation of the Wild Atlantic Way brand would be a branding of the existing roads along the west coast from County Donegal to County Cork, a further two sub-options (3b and 3c) were considered.

### 4.2.5.2 Option 3b: Most Scenic Driving Routes only

By only including roads that are most scenic or which have largely unbroken views of the coast this option would contribute towards the intensification of visitors in already popular areas.

The Programme for this option would present an opportunity to contribute towards improvements in environmental management and protection; however this opportunity would be constrained to some degree by focusing visitors into already popular areas where the roads are most scenic or have unbroken coastal views. Some management of visitors would be possible at a macro spatial level (in terms of what areas and roads could accommodate increases in visitors) and at a micro spatial level (in terms of what areas adjacent to viewing points, lay-bys etc. should be avoided). This option would allow for some management of visitors across the tourist season so that growth could be sought in times outside of the summer peak.

The above management of visitors would have the potential to both: contribute towards the protection of sensitive environments (including ecology, water resources, landscapes and cultural heritage) by reducing potential stresses in some areas; and reduce increases in infrastructural demand during the summer peak season.

Visitors would be directed to roads that are most scenic or which have largely unbroken views of the coast (in already popular areas). This may lead to the need to develop viewing points and associated developments – potentially including new and improved access roads. The construction of these new developments would present potential adverse environmental effects. Focusing growth could result in significant increases in pressure upon sensitive environments (including ecology, water resources, landscapes and cultural heritage) and increases in demand on infrastructure, leading to direct, indirect and cumulative environmental effects in these locations.

In addition to the above, Fáilte Ireland identified that this option might only serve to intensify visitors in already popular areas and might not achieve one of the goals of the initiative, namely to spread visitor bed nights and revenue into areas where there is under-utilised capacity.

#### **4.2.5.3 Option 3c: Single, Continuous Route<sup>33</sup>**

This option maximises the use existing infrastructure as the route would be aligned to existing roads only.

With a route extending along the entire western seaboard (and with the prospect of including a number of loops inland off the main spine within the first five years of operation), the Programme for this option would present an opportunity to contribute towards improvements in environmental management and protection by allowing for both: the management of visitors at a macro spatial level (in terms of what sections of the western seaboard could accommodate increases in visitors); and the management of visitors at a micro spatial level (in terms of what areas adjacent to viewing points, lay-bys etc. should be avoided). This option would also allow for the management of visitors across the tourist season so that growth could be sought in times outside of the summer peak. There would be potential for success in this regard due to the wide extent of the route.

The above management of visitors would have the potential to both: contribute towards the protection of sensitive environments (including ecology, water resources, landscapes and cultural heritage) by minimising potential stresses; and avoid increases in infrastructural demand during the summer peak season.

Road capacity and safety were key criteria for this option: roads for this option had to already have the capacity to take two-way car, camper van and minibus traffic, and separate sections of the route were identified for coaches, as appropriate. By using existing roads for this option which do not need to be upgraded, potential adverse effects would be avoided.

Within Option 3c 'Single, Continuous Route' there are three sub-options for the provision of Discovery Points (viewing points and lay-bys) as follow:

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<sup>33</sup> The delineation of the Wild Atlantic Way Route under this alternative was informed by a Route Identification process, the findings of which were included in a "WAW (Initial) Route Identification Report" (2013, Hogarts on behalf of Fáilte Ireland). Road capacity and safety were key criteria considered in the identification of the Route. The following lists the groups of criteria taken into account in the identification of the route:

1. Accessibility and Capacity of the Route
2. Scenic Quality of the Route
3. Points of Interest along the Route
4. Human Influences
5. Culture
6. Sports and Activities

### **3c (i) No Discovery Points, continuation of uncoordinated tourism projects**

The option allows for the continuation of new, uncoordinated tourism projects along the western seaboard undertaken by a variety of local groups, private landowners and local authorities. This would result in the proliferation of viewing points, lay-bys and a variety of associated developments along the entirety of the route.

Impacts and mitigation would not be considered for these projects along the western seaboard as a whole, only on a case by case basis where works are part of formal consenting procedures.

This lack of coherent planning and management would have the potential to:

- Contribute towards increasing stresses on sensitive environments (including ecology, water resources, landscapes and cultural heritage); and
- Reduce the effectiveness of visitor management and associated positive effects on the management and protection of the environment.

### **3c (ii) New Discovery Points**

This option facilitates a coordinated set of new Discovery Points along the route.

Impacts and mitigation could be considered along the western seaboard as a whole, through the SEA, as well as at lower tiers of environmental assessment and decision making.

The development of new Discovery Points would have the potential to adversely affect environmental sensitivities such as those relating to ecology, water resources, landscapes and cultural heritage. Such effects could be mitigated through the SEA process.

The coordination would have the potential to maximise the effectiveness of visitor management and associated positive effects on the management and protection of the environment.

### **3c (iii) Restriction of new development, Limit in number of Discovery Points**

This option facilitates a restriction of new development and limits the number of Discovery Points. There is an emphasis on re-use and reinforcement of existing infrastructure and there is an application of design guidelines to contribute towards the protection of the environment.

New works, e.g. reuse and reinforcement, at existing Discovery Points would have the potential to adversely affect environmental sensitivities such as those relating to ecology, water resources, landscapes and cultural heritage. Such effects could be mitigated through the SEA process including the application of design guidelines.

Impacts and mitigation could be considered along the western seaboard as a whole, through the SEA, as well as at lower tiers of environmental assessment and decision making.

The coordination provided for by this option would have the potential to maximise the effectiveness of visitor management and associated positive effects on the management and protection of the environment.

## 4.2.6 The Selected Alternative for the Operational Programme

The option selected for the development of the Operational Programme comprises:

- 3c: Single, Continuous Route
- (iii) Restriction of new development, Limit in number of Discovery Points<sup>34</sup>

This alternative is one of the options which would improve the protection and management of the environment, as well as having the least extent of potential adverse effects.

By complying with appropriate mitigation measures - including those which have been integrated into the Operational Programme (see summary at Section 5 of this report) – potentially significant adverse environmental effects which could arise as a result of implementing the Programme would be likely to be avoided, reduced or offset. Residual adverse environmental effects would be non-significant.

## 4.3 Summary of Assessment of Individual Operational Programme Provisions

The overall findings of the assessment are that:

- Fáilte Ireland have integrated all recommendations arising from the SEA and AA processes into the Operational Programme (see summary at Section 5 of this report);
- Some Operational Programme provisions would be likely to result in significant positive effects upon environmental management and protection. With a route extending along the entire western seaboard, the Programme facilitates contributions towards improvements in environmental management and protection by allowing for both: the management of visitors at a macro spatial level (in terms of what sections of the western seaboard could accommodate increases in visitors); and the management of visitors at a micro spatial level (in terms of what areas adjacent to viewing points, lay-bys etc. should be avoided). The Programme also facilitates the management of visitors across the tourist season so that growth can be sought in times outside of the summer peak.
- Some provisions would have the potential to result in significant negative environmental effects (these are described below), the magnitude and timing of which cannot be readily determined. The integration of detailed mitigation (including a detailed Monitoring Strategy) into the Operational Programme (see summary at Section 5 of this report) means that significant residual adverse environmental effects will not occur.
- The scope of the assessment (including description of baseline, the relationship to other plans and programmes and the evaluation of effects) has considered the environment of both Ireland and Northern Ireland. Taking into account the detailed mitigation (including detailed Monitoring Strategy) which has been integrated into the Operational Programme it has been determined that significant residual adverse environmental effects will not occur in either Ireland or Northern Ireland. The type of impacts occurring will be indistinguishable to those occurring as part of the Causeway Coastal Route drive between Belfast and Londonderry. Relevant Plans and Programmes in both Ireland and Northern Ireland are required to comply with environmental legislation including the SEA and Habitats Directives. In order to be permitted, proposals for development in both Ireland and Northern Ireland are required to comply with environmental protection legislation and relevant higher tier Plans and Programmes.

The effects of implementing the Operational Programme are summarised on overleaf.

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<sup>34</sup> It is noted that the objectives at the core of Option 3a will also be implemented over time – these have been assessed in this section and related provisions have been assessed in the main SEA Environmental Report.

**Table 4.1 Summary of Effects of Implementing the Operational Programme**

<b>Environmental Component</b>	<b>Significant Positive Effect Likely to Occur</b>	<b>Potentially Significant Adverse Effect, If unmitigated</b>	<b>Residual Non-Significant Adverse Effect</b>
<b>Biodiversity and flora and fauna</b>	<ul style="list-style-type: none"> <li>Visitor management strategy will contribute positively to advancing the attainment of conservation objectives along and adjacent to the route and existing candidate Discovery Points, thereby benefitting the management of designated sites.</li> <li>Continuation of and further contribution towards the protection of biodiversity and flora and fauna, including ecological connectivity, by: using existing routes, viewing points and lay-bys instead of developing new infrastructure; and contributing towards compliance with environmental legislation by local authorities</li> <li>Providing management material [evidence, monitoring and guidelines] to assist in the implementation of management plans for designated habitats and to assist in achieving the conservation objectives of these relevant management plans for such sites and habitats.</li> </ul>	<ul style="list-style-type: none"> <li>Arising from both construction (including reuse and reinforcement of existing viewing points and lay-bys) and operation: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna</li> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects</li> <li>Disturbance and displacement of protected species and coastal squeeze</li> </ul>	Loss of an extent of non-protected habitats arising from the replacement of semi-natural land covers with artificial surfaces
<b>Population and human health</b>	<ul style="list-style-type: none"> <li>Contribution towards the protection of human health as a result of protection of environmental vectors</li> </ul>	<ul style="list-style-type: none"> <li>Potential interactions if effects upon environmental vectors such as water are not mitigated</li> </ul>	None
<b>Soil</b>	<ul style="list-style-type: none"> <li>Continuation of and further contribution towards the protection of hydrogeological and ecological function of the soil resource by: using existing routes, viewing points and lay-bys instead of developing new infrastructure; and contributing towards compliance with environmental legislation by local authorities</li> </ul>	<ul style="list-style-type: none"> <li>Adverse impacts on the hydrogeological and ecological function of the soil resource</li> </ul>	Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces
<b>Water</b>	<ul style="list-style-type: none"> <li>Continuation of and further contribution towards the protection of water resources by: using existing routes, viewing points and lay-bys instead of developing new infrastructure; and contributing towards compliance with environmental legislation by local authorities</li> </ul>	<ul style="list-style-type: none"> <li>Adverse impacts upon the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology</li> </ul>	Flood related risks remain due to uncertainty with regard to extreme weather events
<b>Air and climatic factors</b>	<ul style="list-style-type: none"> <li>None at strategic alternative level however potential improvements in walking and cycling levels in the long-term.</li> </ul>	<ul style="list-style-type: none"> <li>Failure to contribute towards sustainable transport and associated impacts (energy usage and emissions to air including noise and greenhouse gases)</li> </ul>	Increases in greenhouse gas emissions however existing and planned walkways and greenways of local authorities could be integrated into the route overtime
<b>Material Assets</b>	<ul style="list-style-type: none"> <li>Improvement in use of existing routes, viewing points and lay-bys instead of developing new infrastructure</li> <li>Visitor management allows for growth outside of the summer peak (thereby benefitting the provision of water services).</li> </ul>	<ul style="list-style-type: none"> <li>The need to provide adequate and appropriate water services (it is the function of Irish Water to provide for such needs)</li> <li>Increases in waste levels</li> </ul>	Residual wastes to be disposed of in line with higher level waste management policies
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>Continuation of and further contribution towards the protection of cultural heritage by: using existing routes, viewing points and lay-bys instead of developing new infrastructure; and contributing towards compliance with environmental legislation by local authorities</li> </ul>	<ul style="list-style-type: none"> <li>Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation</li> </ul>	Potential alteration to the context and setting of designated architectural and archaeological heritage however these will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Programme
<b>Landscape</b>	<ul style="list-style-type: none"> <li>Continuation of and further contribution towards the protection of landscape designations by: using existing routes, viewing points and lay-bys instead of developing new infrastructure; and contributing towards compliance with environmental legislation by local authorities</li> </ul>	<ul style="list-style-type: none"> <li>Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape</li> </ul>	Minimal residual adverse effects

## Section 5 Mitigation and Monitoring Measures

### 5.1 Mitigation

#### Introduction

Tourism is one of many sectors operating in the west of Ireland. Fáilte Ireland is co-ordinating future Wild Atlantic Way works relating to the Discovery Points through the Operational Programme, but not developing any of these works – they will be developed by the relevant local authorities (Part 8 requirements as set out in the Planning and Development Act as amended still apply) and others.

With regard to interactions between tourism and the environment, the Operational Programme is expected to facilitate improvements in environmental management and protection along the western seaboard. This facilitation has come about as a result of the following:

#### Engagement by Fáilte Ireland

- Engagement on the need to facilitate environmental management and protection by Senior Management in Fáilte Ireland responsible for the Wild Atlantic Way from the very beginning of the Wild Atlantic Way concept;
  - SEA and AA team were assembled and involved during the inception of the concept.
  - This is the first time a plan/programme for the tourism sector in Ireland has undergone SEA and AA.
  - It is thought that this is the first time globally that the inception of a plan/programme for a long distance touring route has been informed from the beginning by SEA and AA processes.

#### Consultation with Environmental Authorities

- Early and ongoing consultation with environmental authorities on SEA and AA related legislation;
  - The EPA and DAHG made themselves available for numerous meetings from an early stage in the process and an SEA Scoping Workshop was attended by representatives from the DAHG, DCENR and EPA. Written submissions and recommendations made at the various meetings, at the Workshop and while the Draft Operational Programme was on public display helped in the development and refinement of the Operational Programme and the scope of the SEA and AA.

#### Early Consideration of Alternatives

- Early consideration of and integration of environmental considerations into alternatives and ultimately into the Operational Programme:
  - This included ongoing feedback on the environmental implications of various levels of alternatives including at route identification and delivery of the candidate Discovery Points.
  - When the consideration of alternatives determined that the initiative would be for a Single, Continuous Route (Option 3c), a number of criteria were taken into account through a Route Identification process, the findings of which were included in a “WAW (Initial) Route Identification Report” (2013, Hogarts on behalf of Fáilte

Ireland). Road capacity and safety were key criteria: roads had to already have the capacity to take two-way car, camper van and minibus traffic, and separate sections of the route were identified for coaches, as appropriate. By using existing roads and having more than one route in places, to cater for coaches, the Route Identification process avoided the need to develop new roads or upgrade or widen existing roads thereby avoiding potential adverse effects.

- The identification of candidate Discovery Points was done over various iterations and took into account a variety of considerations including those relating to the environment. A number of prospective sites were removed from the candidate list for a variety of reasons including: for not being existing laybys or viewing points; they were not compatible with environmental sensitivities present; and land ownership issues.

### **Iterative Approach to Preparation of the Operational Programme**

Various environmental sensitivities and issues were communicated to the Fáilte Ireland and integrated into the Operational Programme through the SEA and AA processes.

The drafting of the Operational Programme was done in an iterative manner whereby Fáilte Ireland prepared the first draft of the Programme which was provided to CAAS who made suggestions for integration into the Programme. Fáilte Ireland then reviewed the Programme to take account of the SEA/AA suggestions and sent the following revision back to CAAS for comment. Multiple revisions of the Programme were prepared before the Draft Programme was arrived at for public display. The Draft Programme and associated SEA and AA documents were updated to take account of various issues raised in submissions made during public display.

Key aspects of the Operational Programme where environmental input was integrated include:

- Visitor Management
  - With a route extending along the entire western seaboard, the Programme facilitates contributions towards improvements in environmental management and protection by allowing for both: the management of visitors at a macro spatial level (in terms of what sections of the western seaboard could accommodate increases in visitors); and the management of visitors at a micro spatial level (in terms of what areas adjacent to viewing points, lay-bys etc. should be avoided).
  - The Programme also facilitates the management of visitors across the tourist season so that growth can be sought in times outside of the summer peak.
- Focus on Paid Bednights rather than Visitors
  - The objective of growing length of stay (paid bednights) rather than number of visitors has less potential to result in adverse environmental effects.
  - Increased length of stay in the context of the touring route is likely to lead to a better geographic distribution of visitors – which will reduce environmental and infrastructural stresses and associated effects in popular areas.
  - The Programme facilitates for a better seasonal spread of bednights – which can reduce environmental and infrastructural stresses and associated effects during peak months.

- Environmental Management and Sustainability Strategy
  - The Programme’s Environmental Management and Sustainability Strategy which requires all emerging developments and activities to continue to comply with all relevant environmental and planning requirements – as well as with Fáilte Ireland Wild Atlantic Way Guidelines for the consideration, design, management and monitoring of new and existing visitor initiatives.
  - The Programme includes an ‘Environmental Management for Local Authorities and Others’ Appendix comprising various provisions which will be complied with by local authorities at lower levels of decision making in order to get funding.

### **Detailed Monitoring Strategy and Guidelines for Local Authorities**

- The development of a detailed Monitoring Strategy which is currently being implemented and will produce various data<sup>35</sup> including an indication of the types of impacting activities at Signature Discovery Points and control sites (and the extent of ecological effect zones, if present) and the type of mitigation responses which may be required.
- The route and the candidate Discovery Points may change if the environmental monitoring strategy in particular locations produces results that show that visitor activity and/or visitor intensification is predicted or observed to result in a negative impact on the environment. For this reason, a mid-term review of the route and the candidate Discovery Points has been built into the Operational Programme. The Monitoring Strategy is included as an Appendix to the Operational Programme.
- Findings from the Environmental Monitoring will be used to inform Local Authorities, through the publication of a set of guidelines, on the nature and extent of any proposed interventions at candidate Discovery Points and candidate Signature Discovery Points in order to improve visitor management at these sites, where appropriate. The guidelines will be prepared in consultation with the Environmental Authorities.
- Central to the monitoring of the Operational Programme will be the establishment of a Monitoring Group. This establishment is provided for by the Operational Programme on foot of submissions from various environmental authorities including the National Parks and Wildlife Service and the Environmental Protection Agency. The establishment of the Monitoring Group is to ensure that robust systems are in place, in appropriate existing authorities, to ensure that all key commitments made at the Programme level will be delivered effectively (including at the appropriate time), and to ensure that no adverse effects on the integrity of the environment will result.

Table 5.1 shows how potential significant effects are linked to relevant mitigation measures and indicators for monitoring.

## **5.2 Monitoring**

The Environmental Report contains proposals for monitoring the potential significant effects of implementing the Programme, if unmitigated, which are adopted alongside the Programme. Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

Monitoring is an ongoing process. The measures identified for monitoring will be further refined when the findings of the Monitoring Strategy for Operational Programme candidate Signature Discovery Points emerge. This Monitoring Strategy is included as an Appendix to the Operational Programme.

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<sup>35</sup> The programme of indicators and targets for monitoring the effects of implementing the Operational Programme included in this SEA will be further refined when the findings of the Monitoring Strategy emerge.

Central to the monitoring of the Operational Programme will be the establishment of a Monitoring Group. This establishment is provided for by the Operational Programme on foot of submissions from various environmental authorities including the National Parks and Wildlife Service and the Environmental Protection Agency. The establishment of the Monitoring Group is to ensure that robust systems are in place, in appropriate existing authorities, to ensure that all key commitments made at the Programme level will be delivered effectively (including at the appropriate time), and to ensure that no adverse effects on the integrity of the environment will result.

The Monitoring Strategy contains three elements or levels of monitoring, as follows:

1. Macro monitoring of Regional/County visitor numbers and associated level effects caused by the visitor contributions to loadings on transportation, waste and water infrastructure;
2. Site Surveys of visitor behaviour to describe general activities and associated environmental effects of visitors (including impacts on wildlife, vegetation, monuments and site features); and
3. Site Surveys to describe the specific effects on the ecology of areas that were observed to have been used/trafficked by visitors.

The Environmental Survey and Monitoring Strategy intends to produce data relating to:

- Movement patterns of visitors at sites along the route;
- Variations in visitor/traffic numbers;
- Water quality effects at tourism settlements along the route;
- Increases in tourism related planning applications;
- Patterns of visitor activity, movement and behaviour at candidate Signature Discovery Points and control sites;
- An indication of types of impacting activities at candidate Signature Discovery Points and control sites;
- An indication of extent of ecological effect zones around candidate Signature Discovery Points and control sites; and
- The need and type mitigation responses.

A stand-alone Monitoring Report on the significant environmental effects of implementing the Operational Programme will be prepared in advance of the mid-term review of the Operational Programme and in advance of the 5 year review. These reports will address the indicators set out on Table 5.1 below which may be refined when the findings of the Monitoring Strategy for Operational Programme candidate Signature Discovery Points emerge.

**Table 5.1 SEA Summary Table**

<b>Topic</b>	<b>Potentially Significant Adverse Effect, if Unmitigated</b>	<b>Mitigation Reference</b>	<b>Primary Indicator for monitoring</b> (subject to review of findings from Monitoring Strategy for Operational Programme Signature candidate Discovery Points)
<b>All – see below</b>	<b>All – see below</b>	<ul style="list-style-type: none"> <li>• Visitor Management</li> <li>• Focus on Paid Bednights rather than Visitors</li> <li>• Environmental Management and Sustainability Strategy</li> <li>• Detailed Monitoring Strategy and Guidelines for Local Authorities</li> <li>• Regulatory framework for environmental protection and management</li> <li>• Information to be considered by local authorities and others at lower levels of decision making and environmental assessment</li> <li>• Construction and Environmental Management Plan</li> <li>• Maintenance Plan</li> </ul>	All – see below
<b>Biodiversity and flora and fauna</b>	<ul style="list-style-type: none"> <li>• Arising from both construction (including reuse and reinforcement of existing viewing points and lay-bys) and operation: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna</li> <li>• Habitat loss, fragmentation and deterioration, including patch size and edge effects</li> <li>• Disturbance and displacement of protected species and coastal squeeze</li> </ul>	<ul style="list-style-type: none"> <li>• Protection of Biodiversity including Natura 2000 Network</li> <li>• Appropriate Assessment</li> <li>• Protection of Natura 2000 Sites</li> <li>• NPWS &amp; Integrated Management Plans</li> <li>• Coastal Zone Management</li> <li>• Biodiversity and Ecological Networks</li> <li>• Protection of Riparian Zone and Waterbodies and Watercourses</li> <li>• Non-Designated Sites</li> <li>• Non-native invasive species</li> </ul>	<p>B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive</p> <p>B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Programme</p> <p>B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Programme</p> <p>B3ii: Number of significant impacts on the protection of listed species</p>
<b>Population and human health</b>	Potential interactions if effects upon environmental vectors such as water are not mitigated	<ul style="list-style-type: none"> <li>• Human Health</li> </ul>	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Programme, as identified by the Health Service Executive and Environmental Protection Agency
<b>Soil</b>	Adverse impacts on the hydrogeological and ecological function of the soil resource	<ul style="list-style-type: none"> <li>• Soil Protection and Contamination</li> <li>• Areas of geological interest</li> </ul>	S1: Soil extent and hydraulic connectivity
<b>Water</b>	Adverse impacts upon the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology	<ul style="list-style-type: none"> <li>• Water Framework Directive and associated legislation</li> <li>• River Basin Management Plan</li> <li>• Bathing Water</li> <li>• Flood Risk Management Guidelines</li> <li>• Surface Water Drainage and Sustainable Drainage</li> </ul>	<p>W1i: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)</p> <p>W1ii: Mandatory and Guide values as set by the EU Bathing Water</p>

		Systems (SuDs)	<p>Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)</p> <p>W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p> <p>W3: For all lower tier assessments and decision making by local authorities to comply with the Flood Risk Management Guidelines</p>
<b>Air and Climatic Factors</b>	Failure to contribute towards sustainable transport and associated impacts (energy usage and emissions to air including noise and greenhouse gases)	<ul style="list-style-type: none"> <li>Infrastructure for Walking, Cycling and Water-based activities</li> </ul>	C1: Percentage of population using the Wild Atlantic Way travelling by non-mechanical means
<b>Material Assets</b>	<ul style="list-style-type: none"> <li>The need to provide adequate and appropriate water services (it is the function of Irish Water to provide for such needs)</li> <li>Increases in waste levels</li> </ul>	<ul style="list-style-type: none"> <li>Construction Waste</li> <li>Waste Creation</li> <li>Waste Disposal</li> <li>Irish Water</li> </ul>	<p>M1: Number of Wild Atlantic Way developments granted permission which can be adequately and appropriately served with waste water treatment, if required</p> <p>M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Programme</p> <p>M3: Preparation and implementation of construction and environmental management plans</p> <p>M4: Percentage length of the Wild Atlantic Way route aligned to existing infrastructure</p>
<b>Cultural Heritage</b>	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation	<ul style="list-style-type: none"> <li>Archaeological Heritage</li> <li>Protection of Archaeological Sites</li> <li>Consultation</li> <li>Underwater Archaeological Sites</li> <li>Architectural Heritage</li> </ul>	<p>CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from development of the Wild Atlantic Way</p> <p>CH2: Percentage of entries to the Records of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from development of the Wild Atlantic Way</p>
<b>Landscape</b>	Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape	<ul style="list-style-type: none"> <li>Landscape Designations</li> <li>Coastal Areas and Seascapes</li> </ul>	L1: Number of unmitigated conflicts with the appropriate protection of statutory designations relating to the landscape, including those included in the land use plans of local authorities