

## Dublin to Galway Greenway Plan

### Vision

Develop a segregated cycling and walking trail to international standards, extending from Dublin City to Galway which is of a scale that will allow Ireland to harness the potential of an identified growing tourism market for cycling. This route will form part of an interconnected National Cycle Network of high quality, substantially traffic free, inter urban routes, which will establish Ireland as a quality international tourism destination for a broad range of associated recreational activities and pursuits.

### Policy

To provide a segregated, substantially off road cycle route from Dublin City to Clifden via Galway City, maximising the use of - where feasible - existing and approved routes and disused railway line corridors and to also use existing plans and/or permitted projects where these have been subject to a consent process that has previously included the carrying out or screening for Strategic Environmental Assessment (SEA)/ Environmental Impact Assessment (EIA) and/or Appropriate Assessment (AA).

The development of this route shall be subject to the requirements of Habitats and EIA Directives and shall comply with the provisions detailed in Appendix I 'Environmental Management and Sustainable Development' to this Draft Plan. Where State lands are not available, land will be acquired in order to secure the use of the infrastructure for future years, thereby securing the State's investment.

### Objectives

- Establish a cycleway route connecting Dublin to Clifden via Galway City which is substantially segregated from vehicular traffic and is safe, attractive and comfortable.
- Maximise the value of existing infrastructure including canal towpaths, disused railway lines and state owned lands.
- Secure permanent access to the entire route through land acquisition if required.
- Develop a tourism experience that caters for a broad range of users in key tourism markets.
- Route to be designed and built to international best practice and in accordance with adopted standards.
- Maximise the value of existing and proposed investment in key tourism destinations.
- Facilitate regular access to visitor attractions and services along the corridor.
- Facilitate connections with public transport hubs which will provide access to the route from bus and rail.
- Provide frequent connections to towns, tourism facilities, natural amenities and other attractions in proximity to the route in collaboration with local communities and tourism providers.
- To generate ongoing economic benefits for rural and urban areas along the route.
- To maximise the number of potential commuter, leisure and tourist users.
- To facilitate the achievement of Smarter Travel targets for sustainable travel.
- To market and promote the cycleway internationally.
- To provide comprehensive route signage, mapping and distinct branding to international standards.
- To provide for maintenance of the route and monitoring of patterns of use.
- To create an economic stimulus for growth in the national and local economy, providing opportunities for new and existing businesses and communities.
- To implement the provisions detailed in Appendix I 'Environmental Management and Sustainable Development' to this Draft Plan.

### Appendix I Environmental Management and Sustainable Development

Environmental Component	Mitigating Provision included in Appendix I
<b>All</b>	<p><b>Key Measure: Environmental Constraints and Opportunity Mapping</b></p> <p>Environmental Constraints and Opportunity mapping will be prepared at project level as part of lower tier planning and environmental assessment. The mapping will allow the identification of the areas that are most sensitive with respect to the development of a greenway and those that are most suited.</p> <p>Opportunities and constraints will be overlain upon each other using a Geographical Information System, allowing for the identification of Opportunity Corridors. Planning/Environmental Assessment teams may augment the datasets to be included to ensure that they are appropriate to the parts of the project being considered and differentiation in the weighting of certain layers may be applied. Additional datasets including those detailed under Sections 4.3 to 4.10 of the SEA Environmental Report may be considered for inclusion in the mapping where relevant/appropriate or during further detailed refinement of the route.</p> <p>It is emphasised that the occurrence of constraints does not necessarily preclude development; rather it flags where specific mitigation measures may be required to ensure that adverse effects do not occur. Some components, such as a cultural heritage, for example, are included as both constraints and opportunities as these would be both attractive to greenway users and potentially sensitive to the construction of a greenway and associated development.</p> <p>The following datasets will be used by constraints mapping:</p> <ul style="list-style-type: none"> <li>• Candidate Special Areas of Conservation and Special Protection Areas;</li> <li>• Features of the landscape that provide linkages/connectivity to designated sites (e.g. watercourses, areas of semi-natural habitat such as linear woodlands etc)</li> <li>• Salmonid Waters;</li> <li>• Shellfish Waters;</li> <li>• Freshwater Pearl Mussel catchments;</li> <li>• Nature Reserves;</li> </ul>

	<ul style="list-style-type: none"> <li>• Natural Heritage Areas and proposed Natural Heritage Areas;</li> <li>• Areas likely to contain a habitat listed in annex 1 of the Habitats Directive (from CORINE land cover mapping);</li> <li>• Information on badger sets from the Department of Agriculture, Food and the Marine, relevant datasets from the National Biodiversity Data Centre and BirdWatch Ireland's 'Important Bird Areas';</li> <li>• Entries to the Record of Monuments and Places and Zones of Archaeological Potential;</li> <li>• Entries to the Record of Protected Structures;</li> <li>• Un-designated sites of importance to wintering or breeding bird species of conservation concern;</li> <li>• Architectural Conservation Areas; and</li> <li>• Relevant landscape designations.</li> </ul> <p>The following datasets will be used by opportunities mapping:</p> <ul style="list-style-type: none"> <li>• Proximity to settlements (400m<sup>1</sup> buffer to be applied around towns and villages);</li> <li>• Existing linear infrastructure (canal rights of way, river corridor rights of way, railway rights of way, motorways/roads, cycle networks along roads and through parks and tracks on state owned lands);</li> <li>• Entries to the Record of Monuments and Places;</li> <li>• Zones of Archaeological Potential;</li> <li>• Entries to the Record of Protected Structures;</li> <li>• Architectural Conservation Areas;</li> <li>• Relevant landscape designations; and</li> <li>• Slope<sup>2</sup>.</li> </ul>
All	<p><b>Key Measure: Corridor and Routeway Selection Process</b> The following Corridor and Routeway Selection Process will be undertaken for the greenway as follows:</p> <p>Stage 1 Route Corridor Identification, Evaluation and Selection</p> <p>The environmental constraints and opportunities will assist in the identification of possible route corridor options.</p> <p>Potentially feasible corridors within which a greenway could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, as determined by the relevant specialists.</p> <p>In addition to the constraints identified above, site specific field data may be required to identify the most appropriate corridor.</p> <p>Stage 2 Routeway Identification, Evaluation and Selection</p> <p>Potentially feasible routeways within the preferred corridor will be identified and assessed. The selection of the preferred routeway will avoid constraints and meet opportunities to the optimum extent, as determined by the relevant specialists, taking into account project level information and potential mitigation measures.</p> <p>In addition to the constraint identified above, site specific field data may be required to identify the most appropriate route.</p> <p>In addition to environmental considerations, the identification of route corridors and the refinement of the route line is likely to be informed by other considerations such as access to lands, perceptions of safety and attractiveness, costs and benefits and ease of maintenance.</p>
All	<p><b>Regulatory framework for environmental protection and management</b> The Department is committed to cumulatively contributing towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management. The Department will ensure, as appropriate, that plans, programmes and projects comply with EU Directives - including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (85/337/EEC, as amended) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.</p>
All	<p><b>Construction and Environmental Management Plan</b> A Construction Environment Management Plan (CEMP) shall be prepared in advance of the construction of the project and implemented throughout. This plan shall incorporate relevant mitigation measures indicated in the SEA Environmental Report and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:</p> <p>a. location of the sites and materials compound(s) including area(s) identified for the storage of</p>

<sup>1</sup> 400m is the typical accepted walking catchment in urban design e.g. referenced in Department of Transport, Tourism and Sport and Department of Environment, Community and Local Government (2013) *Design Manual for Urban Roads and Streets*

<sup>2</sup> Generally a maximum gradient of 3% is preferred where possible (steep inclines and difficult to climb and may exclude some users) and a minimum gradient of 0.5% (to facilitate drainage)  
[Manton & Clifford (2011) 'Rural cycle route design' in *Proceedings of the ITRN2011 31<sup>st</sup> August – 1<sup>st</sup> September*, University College Cork]

	<p>construction refuse,</p> <p>b. location of areas for construction site offices and staff facilities,</p> <p>c. details of site security fencing and hoardings,</p> <p>d. details of on-site car parking facilities for site workers during the course of construction,</p> <p>e. details of the timing and routing of construction traffic to and from the construction site and associated directional signage,</p> <p>f. measures to obviate queuing of construction traffic on the adjoining road network,</p> <p>g. measures to prevent the spillage or deposit of clay, rubble or other debris,</p> <p>h. alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works,</p> <p>i. details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,</p> <p>j. containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater,</p> <p>k. disposal of construction/demolition waste and details of how it is proposed to manage excavated soil,</p> <p>l. a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains,</p> <p>m. details of a water quality monitoring and sampling plan.</p> <p>n. if peat is encountered - a peat storage, handling and reinstatement management plan.</p> <p>o. measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed).</p> <p>p. appointment of an ecological clerk of works at site investigation, preparation and construction phases.</p> <p>q. details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity.</p>
<b>All</b>	<p><b>Maintenance Plan</b></p> <p>Lower tier assessments should examine the need for Maintenance Plans informed by environmental considerations to be prepared and implemented.</p>
<b>Air and climatic factors</b>	<p><b>Maximising positive effects on sustainable mobility</b></p> <p>In order to maximise positive effects on sustainable mobility (and associated benefits regarding greenhouse gas emissions, noise emissions and other emissions to air and human health), the Department will seek to, taking into account other factors such as environmental protection and planning considerations:</p> <ul style="list-style-type: none"> <li>• Maximise the length of greenway developed along existing linear infrastructure, taking into account other factors such as environmental protection and planning considerations; and</li> <li>• Maximise the number of settlements within the greenway's catchment area.</li> </ul>
<b>Material Assets</b>	<p><b>Construction Waste</b></p> <p>All waste arising during the construction phase will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts and regulations and any of the relevant Local Authorities Waste Management Plans. A Construction Waste Management Plan will be implemented to minimise waste and ensure correct handling and disposal of construction waste streams in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, July 2006.</p> <p><b>Waste Creation</b></p> <p>Support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible.</p> <p><b>Waste Disposal</b></p> <p>Safeguard the environment by seeking to ensure that residual waste is disposed of appropriately.</p> <p><b>Irish Water</b></p> <p>Co-operate with and support, as relevant and appropriate, Irish Water in its new role as the lead authority for water services.</p>
<b>Population and human health</b>	<p><b>Human Health</b></p> <p>Proposals for development shall be assessed in terms of, inter alia, potential impact on existing adjacent developments, existing land uses and/or the surrounding landscape. Where proposed development would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air, water and/or soil, the Department shall ensure the introduction of mitigation measures in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level.</p> <p>Also see measures related to soil, water quality, air quality, flooding, waste water treatment and drinking water supply and quality.</p>
<b>Biodiversity and flora and fauna</b>	<p><b>Visitor Management Strategy</b></p> <ul style="list-style-type: none"> <li>• Research by Fáilte Ireland in the Burren has shown improved environmental outcomes (improved attainment of conservation objectives) in areas with visitor management strategies. A visitor management strategy during the implementation of the Greenway project could contribute positively to advancing the attainment of conservation objectives along and adjacent to the route, thereby benefitting the management of designated sites. Based on existing Waterways Ireland and Office of Public Works visitor management strategy practices, the Department will ensure that a visitor management strategy informs the implementation of the Greenway project.</li> </ul> <p><b>Protection of Biodiversity including Natura 2000 Network</b></p> <p>Contribute, as appropriate, towards the protection of designated ecological sites including candidate Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs); UNESCO World Heritage and UNESCO Biosphere sites; Ramsar Sites; Salmonid Waters; Shellfish Waters; Freshwater Pearl Mussel catchments; Flora Protection Order sites; Wildlife Sites (including Nature Reserves); Certain entries to the Water Framework Directive Register of Protected Areas; Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs); Wildfowl Sanctuaries (see S.I. 192 of 1979); and Tree Preservation</p>

Orders (TPOs).

The protection of natural heritage and biodiversity, including European sites that form part of the Natura 2000 network, will be implemented in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents):

- EU Directives, including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the Environmental Liability Directive (2004/35/EC), the Environmental Impact Assessment Directive (85/337/EEC, as amended), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC).
- National legislation, including the Wildlife Act 1976, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989) (as amended), the Wildlife (Amendment) Act 2000, the European Union (Water Policy) Regulations 2003 (as amended), the Planning and Development Act 2000 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011), the European Communities (Environmental Liability) Regulations 2008 and the Flora Protection Order 1999.
- National policy guidelines, including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010.
- Catchment and water resource management Plans, including River Basin District Management Plans 2009-2015.
- Biodiversity Plans and guidelines, including Actions for Biodiversity 2011-2016: and Ireland's National Biodiversity Plan.
- Ireland's Environment 2015 (EPA, 2016), and to make provision where appropriate to address the report's goals and challenges.

#### **Appropriate Assessment**

All projects and plans arising from this plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and a Stage 2 Appropriate Assessment where necessary, that:

1. The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
2. The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
3. The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.

#### **Protection of Natura 2000 Sites**

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans or projects<sup>3</sup>).

#### **Areas of geological interest**

Contribute towards, as appropriate, the protection and maintenance of the character, integrity and conservation value of features or areas of geological interest.

#### **NPWS & Integrated Management Plans**

The Department shall endeavour to engage with the National Parks & Wildlife Service to ensure Integrated Management Plans are prepared for all Natura sites and ensure that plans are fully integrated with the Greenway Plan and other plans, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations and with special regard to local communities.

#### **Coastal Zone**

Works undertaken in coastal areas will be in accordance with best practice and the Department will, as appropriate, support measures to protect the coast, the coastal edge and coastal habitats. The Department will seek, as appropriate, to contribute towards an Integrated Coastal Zone Management approach to ensure the conservation, management and protection of man-made and natural resources of the coastal zone.

#### **National Peatlands Strategy**

To implement any relevant recommendations contained in the Department of Arts, Heritage and the

<sup>3</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 plan to proceed; and
- c) Adequate compensatory measures in place.

	<p>Gaeltacht's National Peatlands Strategy, when finalised.</p> <p><b>Biodiversity and Ecological Networks</b> Support, as appropriate, the protection and enhancement of biodiversity and ecological connectivity, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, geological and geo-morphological systems, other landscape features, natural lighting conditions and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive.</p> <p><b>Waters</b> Contribute towards, as appropriate, the protection of the water resources, including rivers, streams, wetlands, groundwater, coastal waters and associated habitats and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the relevant River Basin Management Plans and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same). Support the application and implementation of a catchment planning and management approach to development and conservation, including the implementation of Sustainable Drainage System techniques for new development.</p> <p><b>Protection of Riparian Zone and Waterbodies and Watercourses</b> Protect waterbodies and watercourses from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate, especially between designated sites and cycle lanes and associated infrastructure.</p> <p><b>Non-Designated Sites</b> Recognise that nature conservation is not just confined to designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve the biological diversity.</p> <p><b>Non-native invasive species</b> Support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control the spread of non-native invasive species on land and water.</p>
<b>Water</b>	<p><b>Directives and Regulations</b> Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, in accordance with the EU Water Framework Directive, the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) or any updated legislation.</p> <p><b>River Basin Management Plan</b> Support the implementation of the relevant recommendations and measures as outlined in the various relevant River Basin Management Plans, and associated Programmes of Measures, or any such plans that may supersede same during the lifetime of the Greenway Plan, as well as relevant recommendations contained in the Water Quality in Ireland 2010-2012 (EPA, 2015, and any updated/superseding document). The Department will seek to demonstrate that proposals for development would not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands and coastal waters. Also the Department will have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 which provides guidance on exemptions to the environmental objectives of the Water Framework Directive.</p> <p><b>Bathing Water</b> Contribute towards the achievement of the requirements of the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008) and EU Mandatory Values, as a minimum, and EU Guide Values, where possible.</p> <p><b>Flood Risk Management Guidelines</b> Support, as appropriate, in co-operation with the OPW and planning authorities, the implementation of the EU Flood Risk Directive (2007/60/EC), the Flood Risk Regulations (SI No. 122 of 2010), the DEHLG/OPW publication <i>The Planning System and Flood Risk Management Guidelines</i> (2009) (and any updated/superseding legislation or policy guidance) and relevant outputs of the Catchment and Flood Risk Assessment and Management Studies (CFRAMS).</p> <p><b>Improvement and/or Restoration of Natural Flood Risk Management Functions</b> Support, subject to compliance with the Habitats and Birds Directives, the improvement and/or restoration of the natural flood risk management functions of flood plains.</p> <p><b>Surface Water Drainage and Sustainable Drainage Systems (SuDs)</b> Ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate. Also see measures related to water quality and waste water treatment.</p>
<b>Soil</b>	<p><b>Soil Protection and Contamination</b> The Department shall ensure that adequate soil protection measures are undertaken where appropriate. Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.</p>
<b>Cultural Heritage</b>	<p><b>Archaeological Heritage</b> Contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended).</p> <p><b>Protection of Archaeological Sites</b> Contribute, as appropriate, towards the protection of archaeological sites and monuments and their settings, archaeological objects and underwater archaeological sites that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are subject of Preservation</p>

	<p>Orders or have been registered in the Register of Historic Monuments. Contribute, as appropriate, towards the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places.</p> <p><b>Consultation</b> Consult with the National Monuments Service of the Department of Arts Heritage and the Gaeltacht in relation to proposed developments adjoining archaeological sites.</p> <p><b>Underwater Archaeological Sites</b> Contribute, as appropriate, towards the protection and preservation of underwater archaeological sites in riverine, intertidal and sub-tidal locations.</p> <p><b>Architectural Heritage</b> Ensure the appropriate protection of architectural heritage by complying, as appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document).</p>
<b>Landscape</b>	<p><b>Landscape Designations</b> Contribute, as appropriate, towards the protection of county and local level landscape designations and Special Amenity Area Order designations from incompatible developments. Proposals for development that have the potential to significantly adversely impact upon these designations shall be accompanied by an assessment of the potential landscape and visual impacts of the proposed development - demonstrating that landscape impacts have been anticipated and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.</p> <p><b>Coastal Areas and Seascapes</b> Protect the character and visual potential of the coast and conserve the character and quality of seascapes.</p> <p><b>National Landscape Strategy</b> Support, as appropriate, any relevant recommendations contained in the Department of Arts, Heritage and the Gaeltacht's National Landscape Strategy for Ireland.</p>