

Human beings and material assets environmental sciences essay



**ASSIGN
BUSTER**

15. 1 INTRODUCTION

Human beings and their associated material assets (physical resources in the environment, which maybe either of human or natural origin) are an important element of the environment. Any potential impact on the status of human beings by the proposed Greenway Project must therefore be comprehensively assessed. The principal concern is that human beings within the study area experience no significant unacceptable diminution in aspects of quality of life as a consequence of the Connemara Greenway Project - Clifden to Oughterard. Relevant components of this chapter of the EIS include land use, demography, employment, amenity/community aspects and services/utilities. This chapter describes the potential impacts on material assets as a result of the proposed Greenway Project. For the purposes of this assessment, material assets include: \ Economic Assets of Natural and Human Origin, and \ Cultural Assets of a Physical and Social Type.

15. 2 METHODOLOGY

The EPA Advice Notes on Current Practice in the preparation of Environmental Impact Statements (2003) sets out a useful framework methodology, which has been consulted in the process of preparing this assessment. The Advice Notes suggest that the human environment be assessed under the following headings: \ Economic Activity - will the proposed Greenway Project stimulate additional development and/or reduce economic activity, and if either, what type, how much and where? \ Social Consideration - will the proposed Greenway Project change patterns and types of activity and land use? \ Land Use - will there be severance, loss of

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

rights of way or amenities, conflicts, or other changes likely to ultimately alter the character and use of the surroundings? Health and Safety – will there be risks of death, disease, discomfort or nuisance? Likewise the Advice Notes suggest that Material Assets should be assessed under the following headings: Economic Assets of Natural and Human Origin, and

† Cultural Assets of a Physical and Social Type.

These issues are addressed in this assessment and a baseline study of the existing human and material assets environment was undertaken in order to complete this. Desktop research comprised the method of obtaining this information. The following sources of information were consulted in the process of this assessment: Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 305 F01 † 2006 Census of Ireland, Central Statistics Office, 2006, † 2011 Census of Ireland, Central Statistics Office, 2011, and † Galway County Development Plan 2009-2015. Some of the issues discussed in this chapter including traffic, noise, air quality, visual amenity and water quality are addressed in greater detail in the relevant chapters of this EIS. This chapter should be read in conjunction with the layout plans for the project description section of this EIS (Chapter 6). Where relevant, impacts on material assets such as the road network and designated conservation sites are more appropriately described in other chapters of this EIS. Table 15. 1 below highlights other chapters that are relevant to human beings and material assets.

Table 15. 1 EIS Chapters Relevant to Human Beings and Material Assets

Chapter No. Title Human Aspect or Assets

7	Hydrology	Water	8	Soils, Geology & Hydrogeology	Natural Resources
10	Terrestrial & Aquatic Ecology	Designated Conservation Sites	11	Air Quality & Climate	Air Quality
12	Noise	Noise Environment	13	Archaeology, Architectural and Cultural Heritage	Cultural Assets
14	Landscape and Visual Views	16	Traffic Road Infrastructure		

15. 3 EXISTING ENVIRONMENT

The Connemara Greenway Project – Clifden to Oughterard is a community driven project by local community groups in Clifden, Recess and Oughterard with support from Failte Ireland, Galway County Council and Forum Connemara Ltd. The proposed Greenway begins on the outskirts of Oughterard village and follows the N59 through the village of Recess. The Greenway diverges from the route of the N59 in the townland of Athry and runs to the south of Ballynahinch Lake, Lough Fada and Croghat Lough. The Greenway rejoins the N59 at Gowland West before diverging to the south of Lough Phreaghau and terminating at Clifden town. The two main settlements within this region are Oughterard and Clifden. Beyond these urban settlements the land is mountainous and is composed predominantly of blanket peat and bedrock outcrops. There are many mineral sites present in the study area. There are also two extractive industry related activities within a 1km boundary of the Greenway, including Lackagh Quarries and Lissoughter Green Marbles Quarry, both located in Recess. Oughterard and Clifden have some relatively dense, modern, semi urban development. There

are very few industrial or commercial facilities outside of these two urban areas. The area between Oughterard and Clifden is characterised by low density ribbon settlement along the N59 and local roads with clusters at Oughterard, Recess and Clifden. The vast majority of the settlement is within 1km either side of the N59. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 306 F01

15. 3. 1 Human Environment

15. 3. 1. 1 Economic Activity

Demography & Employment - In this section, the key demographic and employment characteristics of the resident population within the Study Area is examined. Between 2006 and 2011 Clifden experienced a 23% increase in population, while Oughterard experienced a 2% increase in population (see Table 15. 2). The pattern of increased growth in the major towns, Clifden and Oughterard, has been balanced by population decreases in the rural areas.

Table 15. 2 Population Profile of the Study Area (Source: CSO Census of Population 2002, 2006, 2011)

Population Persons

2002

Persons

2006

Persons

2011

Percentage

Change 2002-

2006

Percentage

Change 2006-

2011

Clifden 1929 2118 2609 10% 23%Oughterard 2380 2563 2605 8% 2%Co.

Galway 209, 077 231, 035 250, 541 11% 8%Connacht 464, 296 504, 121

542, 039 8% 8%State 3, 917, 203 4, 234, 925 4, 581, 269 8% 8%Age

ProfileThe age profile of the study area is older than the state average. The largest weighting and the largest disparity from the national average, lies in the 45-64 age group (see Table 15. 3).

Table 15. 3 Age Profile (Source: CSO Census of Population 2006, Census 2011 figures not available for this data yet)

Percentage of the population in each age group, 2006

0-14 15-24 25-44 45-64 65+

Study Area 19% 13% 26% 27% 15%Co. Galway 20% 16% 31% 21%

11%Connacht 20% 15% 29% 23% 13%State 20% 15% 32% 22%

11%EmploymentIn 2006 the study area had a substantially higher unemployment rate than the state average; 7% in the study area compared with 4% nationally (see Table 15. 4). Connemara Greenway Project - Clifden to Oughterard - EISHuman Beings & Material AssetsMGE0269RP0003 307 F01

Table 15. 4 Employment Profile (Source: CSO Census of Population 2006, Census 2011 figures

not available for this data yet)

Persons aged 15 years and over by principal economic status,

2006

At work Looking for first

regular job

Unemployed (having

lost or given up

previous job)

Study Area 49% 1% 7%

Galway 56% 1% 4%

Connacht 55% 1% 4%

State 57% 1% 4%

Sectoral Composition of Employment The employment make-up of an area is an important element of its socio-economic profile. The CSO Census of Population 2006 shows that employment in the study area is weighted towards 'farming, fishing, forestry and other agricultural', 'manufacturing' and 'building and construction'. This reflects the predominantly rural make-up of the area. The study area has 1% less of its working age population in public administration i. e. clerical, office, administrative and government jobs than the State average. It also has 13% less working in commerce and trade

roles than the state average. Again, this reflects the rural nature of the area (see Table

15. 5).

Table 15. 5 Sectoral Composition of Employment (Source: CSO Census of Population 2006,

Census 2011 figures not available for this data yet)

Agriculture, forestry

and fishing

Building and

construction

Manufacturing

industries

Commerce and trade

Transport and

communications

Public administration

Professional services

Other

Study Area 3% 10% 10% 15% 5% 5% 23% 29% Connacht 2% 12% 17% 22%

4% 6% 22% 15% Galway 1% 11% 18% 23% 4% 5% 22% 17% State 1% 10%

15% 28% 5% 6% 19% 16% The tourism industry remains an important

element of employment for the region and is directly associated with the

visiting community and amenity value of the region. West County Galway

was visited by approximately 700,000 overseas tourists in 2009. In 2011, the west region of Ireland was visited by 1,148,000 tourists. The Connemara area has a strong tourism product that links a rich language and culture with scenic landscapes and an unpolluted, unspoiled marine environment.

The N59 acts as one of only two accesses to the Connemara region from Galway City and the east, the other being the R336, which follows the coast from Galway to Rossaveal. The Galway County Development Plan 2009-2015 sets out economic development aims for the entire County and stresses the need for a balance between economic growth and sustainable development.

The strategic aims of the development plan reflect this through the following strategic aims: Connemara Greenway Project - Clifden to Oughterard -

EIS Human Beings & Material Assets MGE0269RP0003 308 F01

- ✎ Implement an overall development strategy for the County aimed at achieving the balanced and sustainable development of County Galway in a strategic and plan led manner.
- ✎ Improve the quality of life for the people of Galway and maintain the County as a uniquely attractive place in which to live, work and visit.
- ✎ Create a receptive development environment in response to national and regional policy, such as the National Spatial Strategy, the National Development Plan 2007-2013 and the West Regional Planning Guidelines 2004-2016 (i. e. Counties Galway, Mayo, Roscommon and Galway City) (RPGs) and secure the development of the identified major infrastructural projects which will underpin sustainable development throughout the County and Region during the Plan period.
- ✎ To drive forward the balanced economic and social development of Galway by facilitating new strategic developments at appropriate locations and enhancing the quality of life for the citizens of Galway within an environment of outstanding

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

quality. To move towards a more sustainable and integrated concept of development with regard to land use, transportation, water services, energy supply and waste management over the lifetime of the Plan.

15.3.1.2 Social Consideration

Community Facilities The communities in the vicinity of the proposed Greenway route have developed a range of facilities that contribute to the quality of life of the area's residents. These facilities could benefit from the improved connectivity provided by the Greenway. It is unlikely that the Greenway will impact communities through severance of supporting communities. The following sections list the key community and social infrastructure along the route of the proposed Greenway. In addition, the towns of Clifden and Oughterard provide a wide range of facilities used by the residents of the study area.

Community Facilities

- Ballinahinch Church
- Recess National School
- Recess Garda Station
- Recess Church
- Health Centre, Recess
- Leam National School
- Tourist Accommodation
- 10 B&Bs adjacent to nearby N59 route
- River View B&B, Galway Road, Clifden
- 'All the 2's' B&B, Galway Road, Clifden
- Byrne Mal Dua House Guest House, Galway Road, Clifden
- Joyce's Waterloo House B&B, Galway Road, Clifden

Connemara Greenway Project - Clifden to Oughterard - EIS

Human Beings & Material Assets

MGE0269RP0003 309 F010

- Cregg B&B, Killymongaun, Clifden
- Lakeside B&B, Derrylea, Clifden
- Dan O'Hara Farmhouse B&B, Lettersheao
- Wilderness B&B, Emlaghmoreo
- Cushlough B&B, Recesso
- Tullaboy House, Maam Cross
- Clifden Glen Holiday Village, Galway Road, Clifden
- Ballinahinch Castle Hotel
- An Óige Hostel, Lettery
- Lough Inagh Lodge, Hotel and Fishery, Recess
- Peacock

Hotel, Maam Cross Tourism Facilities on-line ✂ Dan O'Hara Heritage Centre, Lettershea ✂ Glengowla Mine Experience, Glengowla Recreational Facilities ✂ Connemara Ponies, Canal, Recess ✂ Glenmaroon Pitch and Putt, Garroman ✂ Owenglin Fishery, Clifden ✂ Ballinahinch Fishery, Clifden ✂ Derryclare Lough and Lough Inagh, Fishing, Recess ✂ Screebe Fishery, Camus, Galway ✂ Derroura Mountain Bike Trail, Oughterard, ✂ The Golden Mile, Leam, including the ' Quiet Man' Bridge, Connemara Commercial and other Business Premises in proximity to the Greenway ✂ Grapefruit Moon, Recess ✂ Joyce's Craft Shop, Recess ✂ Joyce's of Recess: Grocery, Petrol, café, post office ✂ Paddy Feistí Bar, Recess ✂ Joyce's Connemara Marble, Recess ✂ Joyce's Hardware and Animal Feeds, Recess ✂ Wool Merchants, Farm Supplies, Agri Oil, Tyres, Maam Cross ✂ Michael Nee Bus Hire, Canal, Recess Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 310 F01 Walking and Cycle Routes There are a number of long-distance walking, cycling and driving routes within the vicinity of the proposed Greenway as shown in Figure 15. 1. These are: ✂ Western Way The Western Way is a long-distance walkway that runs from Oughterard through Westport and Ballina to the border of Mayo / Sligo. Within County Galway it travels through Maam, Maumeen, Inagh and Leenane. The route is connected to Recess village by another walking route, the Slí Conamara, described below. The route is 6 km from Maam Cross, but connection here is via the existing R336 regional road. ✂ Slí Chonamara This is a way-marked long-distance walking route that journeys through Connemara, primarily along the coastline. The western part of the Slí connects the Connemara Coast at Rosmuc, northwards through forests to the Western Way north of Recess. Slí Conamara interacts with the

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

proposed Greenway in the vicinity of Recess village. \ Bord Fáilte National Cycle NetworkThe Galway to Clifden route as set out in the A Strategy for the Development of Irish CycleTourism' (2007) plan identifies a route on the proposed N59 road development west ofOughterard that turns south at Maam Cross (Chainage 256100) and arriving at Clifden via thecoastal orientation on the regional road (R341), rejoining the proposed N59 road development. \ The Connemara Loop (Fáinne Conamara)This is an 85 km long sign-posted driving route through Connemara. It goes from Maam Crossto Leenane and onwards to Renvyle, Letterfrack and Recess before returning to Maam Crossalong the existing N59. \ Clifden Looped CyclesClifden serves as a hub for a number of looped cycle routes from the town. These range inlength from 14 km to 40 km and run to Cleggan, the Sky Road, Errislannan and Roundstone. Connemara Greenway Project - Clifden to Oughterard - EISHuman Beings & Material AssetsMGE0269RP0003 311 F01

Figure 15. 1 Walking and Cycling Routes

Source: Fáilte IrelandPublic TransportThe N59 route is served by the 419 / 421 Bus Éireann service. This travels between Clifden andOughterard 3 times a day in winter and 5 times a day in summer. School bus services are also provided in the study area. Amenity & Communities - There are three principal elements to the community of the study area, namely: \ the residential community; \ the working community, and \ the visiting community. For the purpose of this assessment the residential community consists of those living within the StudyArea. The Study Area is largely rural, apart from the urban settlements of Oughterard and Clifden. The villages of

Oughterard and Clifden host a number of local shops and a basic range of services are provided for those residing within these villages and in their immediate hinterland e. g. hotels, shops, pubs, Corporate Park, GAA club, community centre, leisure centre and offices. Oughterard remains a desirable residential location for those prepared to commute to work in the larger urban centres of Galway City. Oughterard displays the characteristics of a dormitory settlement: a high residential content, no significant local employment base and a high level of commuting. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material

Assets MGE0269RP0003 312 F01 The majority of the townlands located within the Study Area are mountainous with many lakes. There is some intensive agricultural land in the regions but it is largely extensively farmed agricultural land and bog. Table 15. 6 shown overleaf, sets out the population structure, employment trends and employment levels for the nine main electoral divisions that cover the study area of the Connemara Greenway Project - Clifden to Oughterard. From this table it is clear that the female working community consists mainly of professional workers or workers in the service industry. The male community consists predominantly of building and construction workers or "other workers". There is also some reliance on the fishing, forestry and farming industry. The study area is close to Galway City for commuting for professional workers. Oughterard and Clifden are also popular tourist destinations which have resulted in the creation of a large service industry in the region. As this information is taken from the 2006 census, it is likely that the breakdown of these working sectors has changed to reflect recent economic changes. It is likely that unemployment levels have increased and that the level of those

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

employed in the building and construction sector will have decreased.

Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 313 F01

Table 15. 6 Population Structure, Employment Trends and Employment Levels for the Nine Main Electoral Divisions (Census 2011 figures not available for this data yet)

Electoral

Division

Binn an

Choire Clifden Derrycunlagh/

Derrylea An Uillinn Maíros An

Crompán Letterfore Oughterard Wormhole

Population(15yrs +) 218 1723 202 82 316 1854 233 2027

1458 Unemployment Levels (%) 3. 2 5. 5 4 8. 5 7. 6 9. 1 1. 7 4. 1 3.

2 Main Employment Sector *F

Service Workers Service Workers Service Workers Professional / Service

Workers Service Workers Professional Workers Sales Workers Professional Worker

s Professional Workers M Other Workers Other Workers Other Workers Farming,

Fishing & Forestry Building & Construction Building & Construction Building

& Construction Building & Construction Building & Construction

***F – Female M – Male (Source: CSO, 2006)**

Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings &

Material Assets MGE0269RP0003 314 F01 In terms of the visiting community

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

the predominant attraction is angling and tourism. Connemara is a popular region for driving, cycling and walking. A document published by Fáilte Ireland "Tourism Facts 2010" shows that approximately 693,000 tourists engaged in hiking and cross country walking while visiting Ireland in 2010. This figure accounts for 58% of all activities surveyed and displays the importance of hiking and cross country walking to the Irish tourism industry. Fáilte Ireland promotes a number of activities in Connemara on their website www.discoverireland.ie, including the Derroura Mountain Bike Trail at Derroura Mountain in Connemara; the Connemara Garden Trail which includes sites such as Ballynahinch Castle Hotel, Brigit's Garden's Roscahill and Cashel House Hotel Cashel; as well as the Connemara History and Heritage Trail which includes sites along the N59 such as Kilcummin Parish Church, Glengowla Mines and Aughnacore Castle in Oughterard, Ballynahinch Castle, Cashel House Hotel and Clifden Castle.

15.3.1.3 Land Use

The route for the proposed Greenway is located on the disused Galway and Clifden Railway line in a relatively sparsely populated area between Clifden and Oughterard. There are no topographical constraints in the area, as the Greenway will be located for the most part on the existing rail line. The majority of the route is located in an area designated as a 'Poor Aquifer'. Under the landscape sensitivity rating in the County Development Plan, the Plan area is classified from Class 3 (high sensitivity) to Class 5 (Unique sensitivity). The Study Area is located between the coastal town of Clifden to the west and travels through a lake-rich transitional zone which lies between the southern foothills of the mountainous Connemara National Park to the

north and extensive bog lands to the south. There are four designated or protected sites within the Study Area and surrounding environs: \ Lough Corrib NHA/SPA/cSAC; \ Connemara Bog Complex cSAC/NHA (Site Code: 002034); \ Maumturk Mountains cSAC/NHA (Site Code: 002008); \ Twelve Bens cSAC/NHA (Site Code: 002031). Designated sites are discussed further in Chapter 10. Land ownership along the route for the proposed Greenway is mostly private. The disused railway line is not a public right of way and there are a number of dwellings and one commercial operation occupied immediately adjacent to the track. The rail track is currently unfenced in many parts and therefore it is considered part of each landholding it runs through.

15. 3. 1. 4 Health and Safety

Currently there are no risks of death, disease, discomfort or nuisance associated with the existing rail line. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 315 F01

15. 3. 2 Material Assets

Material assets can be defined as physical resources in the environment, which may be either of human or natural origin. These are further broken down in the EPA publication 'Advice Notes on Current Practice in the preparation of Environmental Impact Statements' (2003) into the following: Economic Assets of Natural and Human Origin: The most significant natural resource occurring within the study is the scenic landscape. The mountainous peat landscape and bedrock outcrop have an economic value in terms of tourism and amenity value. The proposed Greenway is likely to attract further

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

tourism to the area. Other significant natural and economic assets occurring within the study area are the blanket peat and associated soils areas, the mineral resources (quarries and mines) as well as the many rivers and lakes scattered throughout the study area. The main man-made material assets include the transportation network, utilities (electricity and telephone), water and wastewater.

Blanket Peat and Associated Soils: These areas are considered to be a non-renewable natural resource of importance for the region.

Mineral Resources: There are known mineral or aggregate deposits existing within the study area. There are also two extractive industry related activities within a 1km boundary of the Greenway - Lackagh Quarries and Lissoughter Green Marbles Quarry, both located in Recess. These aspects will not be impacted negatively by the proposed Greenway.

Rivers, Lakes and Streams: These freshwater habitats are important fisheries habitats which have an economic value in terms of angling, tourism and amenity value. The water quality and morphology of the river channels, lakes and streams have the potential to be influenced by the proposed Connemara Greenway Project - Clifden to Oughterard, particularly during construction stage of the works.

Transportation Network: The remnants of the railway line from Oughterard to Clifden consist of a well defined corridor for much of its length with a number of intact bridges. The corridor merges with the N59 at Lough Aggrafard, Buncanniff townland to Cloonoppeen Bridge and at Recess. The Greenway also merges with the regional road R341 from Ballinafad to Cloonbeg Bridge. The Greenway crosses the N59 at Shannakinlough, Glendollagh Loch and Athry Lough. There are no existing modern rail corridors in the area. Work at the river crossings, i. e. bridges, may constrain the local transport network and have the potential for disruption to electricity and telephone lines. This

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

will need to be considered further at locations where these features are coincident. Utilities Infrastructure: A medium voltage, 3-phase, 10kV ESB overhead powerline runs from Oughterard to Recess to Clifden, following, in different sections, the corridor of the dismantled railwayline and the N59. The 10kV powerline follows the route of the proposed Greenway for approximately 5km from Oughterard village to Lough Aggrafard and for approximately 8km from Bunsconniff townland through Maam Cross to Bunnakill townland. West of Recess the 10kV overhead powerline diverges from the dismantled railway line. The proposed Greenway will cross under an additional 10kV overhead powerline close to Ballinahinch and again when entering the environs of Clifden town. The ESB also has a 38kV overhead powerline between Oughterard and Clifden. The 38kV powerline does not follow the route of the proposed Greenway/N59 exactly. Instead the 38kV powerline runs in a north of the N59 from Oughterard to Recess crossing the N59 and the proposed Greenway at Boocaunmore. The 38kV line then follows a route between the N59 and the proposed Greenway from Recess to Clifden and crosses the Greenway at Lough Muingacurry. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material

Assets MGE0269RP0003 316 F01 Through correspondence with Bord Gais it was found that there are no gas networks in the vicinity of the study area. Telecommunications infrastructure in the study area includes overhead telephone lines. Construction of the Greenway underneath overhead telephone lines is likely and some diversion of telephone poles may be required. Water Supply: There are 2 public water schemes in the study area at Oughterard and Clifden. Wastewater Treatment: There is no local authority wastewater treatment plants located within the study area. All <https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

wastewater is currently treated via private wastewater treatment systems.

Cultural Assets of a Physical and Social Type: There are 32 Records of Monuments and Places (RMP's)¹² located within 300m of the proposed Greenway. All of the 32 individual recorded archaeological sites are listed within the RMP (Recorded Monuments and Places), with the exception of AH 32, which is a potential ringfort site. A total of 4 of the 52 sites are also designated Protected Structures in the Development Plan. None of these are listed as National Monuments, or subject to preservation orders. The closest recorded site consists of a possible late 18th century burial. This is located c. 30m south of the proposed route within the townland of Killymongaun. The remaining sites vary in type and date, ranging from early medieval through to post medieval garden features. Several of the recorded sites have been deemed to be 'non-antiquities'. A survey as part of the archaeology assessment for this EIS found 123 built heritage sites. Due to the past use of the proposed route as a railway, many of the structures (85 out of 123) relate directly to its former use. A review of the County Galway Development Plan (2009–2015), the Clifden Local Area Plan (2009–2015) and the Oughterard Local Area Plan (2006-2012) revealed that there are a total of eight protected structures located within c. 300m of the proposed route. The closest structure to the scheme is Ardbear Old Bridge, which is located at the beginning of the route. A total of 20 individual or groups of buildings were identified within the survey in proximity of the proposed Greenway. Of these, eight are already listed within the register of protected structures. Several of the structures are located along the scheme. These include Ardbear Old Bridge, a railway bridge at Ballynahinch, a road bridge at Cloonbeg, a railway

bridge at Letterfore and the ' Quiet Man'bridge. Refer to Chapter 13 for details pertaining to all archaeological issues.

15. 4 POTENTIAL IMPACTS

The human environment and their associated material assets in the region of the proposed GreenwayProject have been set out in the previous section.

This section further assesses the potential impactson this element of the environment resulting from the proposed Greenway Project. 12 A statutory list of all known archaeological monuments provided for in the National Monuments ActsConnemara Greenway Project - Clifden to Oughterard - EISHuman Beings & Material AssetsMGE0269RP0003 317 F01

15. 4. 1 Greenway Project Construction

15. 4. 1. 1 Impacts on Human Beings

Economic Activity - Construction of the proposed Greenway will be carried out by Galway CountyCouncil staff and/or contractors and will not result in any additional employment in the area. There willbe a total of approximately 14 people employed during the construction phase. Social Consideration - The construction phase of the proposed Greenway will not impact any typesof activity and land use. Land Use - The construction phase of the proposed Greenway may impact on use by walkers orfarmers in the area where construction is underway. Health and Safety - During construction of the proposed Greenway workers on site will be at riskfrom activities associated with this work. In addition, members of the public who come into contact withconstruction activities will be at risk from these activities.

Members of the public who live in proximity tothe works may also be at risk

of increased noise levels and decreased air quality levels from the construction work.

15. 4. 1. 2 Impacts on Material Assets

Economic Assets of Natural and Human Origin

Blanket Peat and Associated Soils: The majority of the proposed Greenway will be located on the existing disused railway line. During the construction phase there will be some loss of cutover peat. No part of the Greenway is proposed for blanket peat areas. **Mineral Resources:** Lackagh Quarries and Lissoughter Green Marbles Quarry, both located in Recess will not be impacted negatively by the construction of the proposed Greenway. Stone for the Greenway base and surface, approximately 50, 000 tonnes, will be sourced from local quarries. **Rivers, Lakes and Streams:** The water quality and morphology of the river channels, lakes and streams have the potential to be influenced by the proposed Greenway during the construction stage of the works. This is particularly so when bridge replacement and land drain works are being carried out. **Transportation Network:** The proposed Greenway route merges with the N59 at Lough Aggrafard, Bunscanniff townland to Cloonoppeen Bridge and at Recess and with the regional road R341 from Ballinafad to Cloonbeg Bridge. The Greenway crosses the N59 at Shannakinlough, Glendollagh Loch and Athry Lough. The Greenway has the potential to impact on the road network at these locations and in particular at river crossings on the network. Work at the river crossings, i. e. bridges, may constrain the local transport network and have the potential for disruption to electricity and telephone lines. This will need to be considered further at locations where these features are coincident. **Utilities Infrastructure:**

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

Construction of the Greenway underneath overhead telephone lines is likely and some diversion of telephone poles may be required. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 318 F01 Water Supply: It is not likely that construction of the proposed Greenway will impact on water supply in the area. Wastewater Treatment: All wastewater is currently treated via private wastewater treatment systems in the vicinity of the Greenway. It is not likely that construction of the proposed Greenway will impact on wastewater treatment in the area. Construction of the proposed Greenway route will for the most part not pose constraints on the mainland uses, population or employment in the region. Any in-stream or adjacent to river works required including bridge and drainage works could have an effect on the fisheries potential of local waterbodies, fish passage and flows with resulting impacts on the angling resources of the region. There may be temporary impacts for local people who currently use the route as a walking trail and noise sensitive receptors due to the construction of the route. However implementation of suitable mitigation measures should ensure that these impacts are minor in magnitude.

15. 4. 2 Greenway Project Operation

15. 4. 2. 1 Impacts on Human Beings

Economic Activity - It is estimated that operation of the proposed Greenway will stimulate additional tourism for the local area and for the country. A similar scheme, the Great Western Greenway (Westport-Newport-Mulranny-Achill), has resulted in an increased opportunity for employment and economic stimulation in that local area and has provided the region with

an additional local and tourism amenity. It has been estimated that the Great Western Greenway contributed an additional €3.8 million spend in the local economy in 2011 and helped to create an estimated 38 new full-time equivalent jobs.

Social Consideration – It is estimated that the operational phase of the proposed Greenway will impact on the types of activity in the area. The Great Western Greenway has seen use by 'local' Co. Mayo residents at 38%. Activities on the trail were broken down into 56% of local users walking on the trail, while 90% of domestic visitors and 80% of overseas visitors participating in cycling as either a sole activity or in combination with walking. It is expected that similar activities and participation levels by user groups will result during operation of the Connemara Greenway Project – Clifden to Oughterard.

Land Use – It is intended that the disused railway route will remain in private ownership with all boundaries respected. There will be no payment for access or maintenance with the route to be maintained by Galway County Council. However, it may be necessary to put alternative arrangements in place in the future. On all waymarked way trails, the owners and occupiers of private property crossed by the way will be indemnified against any negligence claims by a recreational user for accident, damage or injury sustained while walking on private property. Indemnity will be provided by Galway County Council through a policy administered by Irish Public Bodies Mutual Insurance Ltd.; hence the landowner is indemnified from any claims. The limit of indemnity provided for any one accident is €9,500,000 inclusive of all damages, costs and expenses. As such, the policy extends to all landowners whose lands either cross or adjoin the designated walking route. The indemnity is valid whether the recreational user is actually on the

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

way or has strayed off it. Where a walking / cycling trail development crosses either public or private land, the landowner's permission to do so must always be obtained. The majority of recreational trail developments in Ireland are established on a permissive basis. A permissive trail is a trail which people are allowed to use with the agreement of the landowner. Where the proposed Greenway crosses private lands it will be considered a permissive trail and not a public right of way. In order to maintain the permissive nature of this access the route will be closed for one day every year. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 319 F01 It is possible that a reduction in connectivity of the area of workable lands for agricultural purposes may occur. Health and Safety - The proposed Greenway route will be limited to use by walkers and cyclists. Where the proposed route is adjacent to or crosses a public road there is a risk of injury or death to users and possible nuisance to road traffic.

15. 4. 2. 2 Impacts on Material Assets

Economic Assets of Natural and Human Origin:

Blanket Peat and Associated Soils: No impacts to ' Blanket Peat and

Associated Soils' during operation of the proposed Greenway are foreseen.

Mineral Resources: No impacts to ' Mineral Resources' during operation of the proposed Greenway are foreseen. Rivers, Lakes and Streams: During the

operational phase of the Greenway water quality of the river channels, lakes and streams have the potential to be influenced by the proposed Greenway

as a result of weed spraying activities on the route. Transportation Network:

Where the Greenway crosses roadways there is the potential for

negative impacts road traffic. Utilities Infrastructure: No impacts to ' Utilities

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

Infrastructure' during operation of the proposed Greenway are foreseen.

Water Supply: No impacts to ' Water Supply' during operation of the proposed Greenway are foreseen. Wastewater Treatment: No impacts to ' Wastewater Treatment' during operation of the proposed Greenway are foreseen.

15. 5 MITIGATION MEASURES

15. 5. 1 Greenway Project Construction

Any potential negative impact identified will be mitigated for through a range of measures which are assessed in detail in this EIS. Table 15. 9 summarises the potential impacts identified for human beings and material assets as a result of the proposed Greenway Project. Mitigation measures are included where required.

15. 5. 2 Greenway Project Operation

Where alteration of existing land use will occur it will be necessary to obtain landowner permission/consent and to replace lands adjacent to the Greenway fit for purpose post Greenway Project works. Potential pollution of water as a natural resource through weed spraying will be mitigated through selective weed spraying as per measures in Chapters 10. Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material

Assets MGE0269RP0003 320 F01

15. 6 RESIDUAL IMPACTS

There may be minor temporary impacts for local road users and noise sensitive receptors during construction of the Greenway Project. However implementation of suitable mitigation measure should ensure that these are

<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

minor in magnitude. The proposed Greenway Project will provide positive impacts for the local community with an added local and tourist amenity providing both economic and social benefits.

15. 7 CONCLUSIONS

It is anticipated that the proposed Greenway Project - Clifden to Oughterard will have significant positive impacts for the local human environment in both economic and recreational terms. It is hoped that this development would benefit local communities in as much as it would provide a secure and safe environment for walkers and cyclists leading to an increased opportunity for physical exercise. It would also provide a unique and novel experience for visitors to the area. It is anticipated that there may be some minor temporary disturbances to the local farming community and walkers along the disused rail line and to noise sensitive receptors during construction of the Greenway. However if proposed mitigation measures are put in place as recommended these impacts should remain minor or insignificant in nature.

Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 321 F01

Table 15. 9 Summary of Impact Assessment on Human Beings & Material Assets

Potential

Impact on

Human and

Material

Assets

Environment

Positive/

Negative

Major/Moderate

/Minor

Area

Affected Duration* Mitigation Measures

Residual Impact

Greenway Route Construction

Transport machinery to site causing traffic inconvenience Negative Minor Local

Temporary \ Notify local road users of time that machinery will be transported

to site \ Transport machinery during non-peak traffic hours None Increased

noise levels Negative Minor Adjacent to site Temporary \ Ensure that

activities are restricted to working hours where working near sensitive

receptors None Decreased air quality Negative Minor Adjacent to site

Temporary \ Measures to be put in place as per Section 12.5. None Pollution

of water as a natural resource Negative Major Local Temporary \ A range of
<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

measures to be put in place as per Chapters 8 and 10. None
 Health and Safety Risks Negative Minor Galway Co. Co. workers Temporary \ Follow Galway County Council Health and Safety Policies and Statements at all times during works. None

Greenway Route Operation

Alteration of existing land use Negative Minor Local Permanent \ Obtain landowner permission/consent \ Replace lands adjacent to the Greenway fit for purpose post Greenway Project works. The land will be economically beneficial to the local community
 Pollution of water as a natural resource through weeds spraying Negative Major Adjacent or downstream of site Temporary \ Selective spraying as per measures in Chapters 8 and 10. None
 Visual Impact for local residents Negative Minor Local -Adjacent Permanent \ Retention of the existing vegetation as far as possible. \ Site preparation areas and compound areas will be kept tidy at all times. Potential minor impact for local residents
 Connemara Greenway Project - Clifden to Oughterard - EIS Human Beings & Material Assets MGE0269RP0003 322 F01

Potential**Impact on****Human and****Material****Assets****Environment****Positive/****Negative****Major/Moderate****/Minor****Area****Affected Duration* Mitigation Measures****Residual Impact**

Public use of private lands for route Negative Minor Local Permanent \ Obtain
landowner permission/consent \ Maintain upkeep of Greenway by Galway
Co. Co. \ Maintain indemnity insurance by Galway Co. Co. \ Maintain
permissive nature of route by closing route for one day each year Potential
minor impact for local landowners Severance
of agricultural land holdings Negative Minor Local Permanent Provide cattle
stops and fencing between landholding severed by the Greenway
None Increased local and national tourism spend Positive Moderate
Local/Regional Permanent N/A Economic benefits for County and
Region Health and Safety Risks during operation of the
proposed Greenway Negative Minor Public users of Greenway Permanent Follow
<https://assignbuster.com/human-beings-and-material-assets-environmental-sciences-essay/>

Galway County Council Health and Safety Policies and Statements at all times during works. NoneConnemara Greenway Project - Clifden to Oughterard - EIS