

- Absence of nutrient management plans on livestock farms which has likely contributed to the eutrophication of nearby watercourses
- The lowest level of tree cover in the UK or EU member state
- Legacy of land affected by contamination, often arising from its past industrial use

Ireland

- Increasing pressure on soil, particularly from land use changes, intensification of agriculture, erosion and overgrazing, afforestation, industry and urbanisation
- Has a number of contaminated land sites

Water

Strengths and Opportunities

Northern Ireland

- Increase in salmonid river lengths meeting the standards set by the Freshwater Fish Directive
- Majority of surface waters meet the relevant standard for nitrate pollution
- Concentration of groundwater nitrates are generally low
- Compliance of Waste Water Treatment Works against the numeric conditions of their Water Order consent has continued to improve
- Drinking water quality remains at the highest level of compliance
- Many monitored bathing waters meet the 'excellent' or 'good' standard
- Ten areas have been designated as shellfish water protected areas for the protection of shellfish growth and production

Ireland

- A relatively abundant supply of fresh water, which constitutes a key resource in economic, amenity and aesthetic terms
- The levels of seriously polluted river water has fallen
- Most of surveyed bathing water sites had good water quality or sufficient water quality
- Most of groundwater bodies and coastal waters are of satisfactory quality

Weaknesses and Threats

Northern Ireland

- Decrease in river water quality
- More than half of lakes are classified as 'moderate' or worse in terms of water quality
- The compliance rate for private sewage and trade effluent has decreased
- Increase in flooding and coastal erosion is predicted with climate change

Ireland

- Increase in number of slightly, moderately and seriously polluted rivers
- Only half of lakes and less than half of estuaries are found to be of satisfactory water quality
- Impact on water quality from agriculture and waste water discharges and impacts to the physical habitat conditions from excess fine sediment (hydromorphology), and from forestry activities

- Risk of increase in flooding predicted due to climate change

Air Quality

Strengths and Opportunities

Northern Ireland

- Air quality has improved considerably over the last few decades
- Monitoring data from 2018 determined that EU limit values, target values and corresponding Air Quality Standard objectives have been met by a number of pollutants
- Annual mean nitrogen dioxide and particulates concentrations have fallen

Ireland

- Air quality is generally good in comparison with other European states
- Monitoring of key pollutants in 2018 shows that Ireland continues to meet the EU air quality standards for most pollutants
- There has been an overall reduction in emissions between 1990 and 2018

Weaknesses and Threats

Northern Ireland

- Continued exceedance of nitrogen dioxide, ozone and benzo[a]pyrene concentrations at some monitoring sites
- Increasing ammonia emissions from agriculture

Ireland

- Localised air quality issues associated with nitrogen dioxide and particulates
- Wood and peat burning contribution to particulate emissions
- Increasing ammonia emissions from agriculture and non-compliance with the National Emission Ceilings Directive emission target
- Nitrogen oxide and non-methane volatile organic compound emissions non-compliance with the National Emission Ceilings Directive emission targets
- Challenge in meeting more stringent World Health Organisation and European Economic Area air quality reference guidelines

Climate Change

Strengths and Opportunities

Northern Ireland

- Total greenhouse gas emissions have reduced since 1990
- Electricity generation is changing with the closure of coal fired power stations in line with UK government policy to end coal-fired generation in the UK by 2025
- Electricity consumption from indigenous renewable energy sources has increased

Ireland

- Total greenhouse gas emissions have been decreasing due to increased energy efficiency and increased share of renewables

Weaknesses and Threats

Northern Ireland

- Higher than average share of UK emissions considering its share of UK population
- Greenhouse gas emissions due to the agricultural sector are disproportionately high compared to other UK and EU nations and over reliance on cars
- A number of changes taking place as a result of climate change such as changes in growing, breeding and migration seasons and weather patterns

Ireland

- Higher greenhouse gas emissions compared to EU28 average
- Due to miss greenhouse gas targets set for period 2013-2020 and is projected to miss 2021-2030 target as well mainly due to industry, agriculture and transport
- Increase in flooding and coastal erosion is predicted with climate change

Material Assets

Strengths and Opportunities

Northern Ireland

- Significant natural resources such as water, carbon rich soils and high quality grassland, whilst natural resources are also available for renewable energy generation e.g. wind, hydro, marine, biomass and solar.
- Extensive deposits of economically valuable minerals
- Municipal waste has decreased over the years
- Recycling rates continue to improve

Ireland

- Significant natural resources such as water, carbon rich soils and high quality grassland, whilst natural resources are also available for renewable energy generation.
- Significant mineral deposits
- Landfill disposal has fallen sharply
- Recycling rates increased since the early 2000s
- On track to meet its EU 2020 targets for municipal and construction waste

Weaknesses and Threats

Northern Ireland

- Municipal waste generation has increased over the last few years

Ireland

- Recycling rate for municipal waste has slightly declined
- Challenge in meeting the revised Packaging Directive's more ambitious plastic packaging recycling targets
- Heavily reliant on export markets, particularly for recycling

Historic Environment

Strengths and Opportunities

Northern Ireland

- Rich heritage of archaeological sites, monuments, buildings and ship wreck sites, with many scheduled or listed
- Large number of historic parks, gardens and demesnes (manorial estates) which have been an important feature of the countryside for three centuries
- Ten areas of particularly distinctive historic landscape character have been designated
- Significant number of Conservation Areas and Areas of Townscape/Village Character

Ireland

- Two UNESCO World Heritage Sites
- Rich heritage with a number of monuments recorded and under state care and protected structures registered
- New national heritage plan is currently being developed

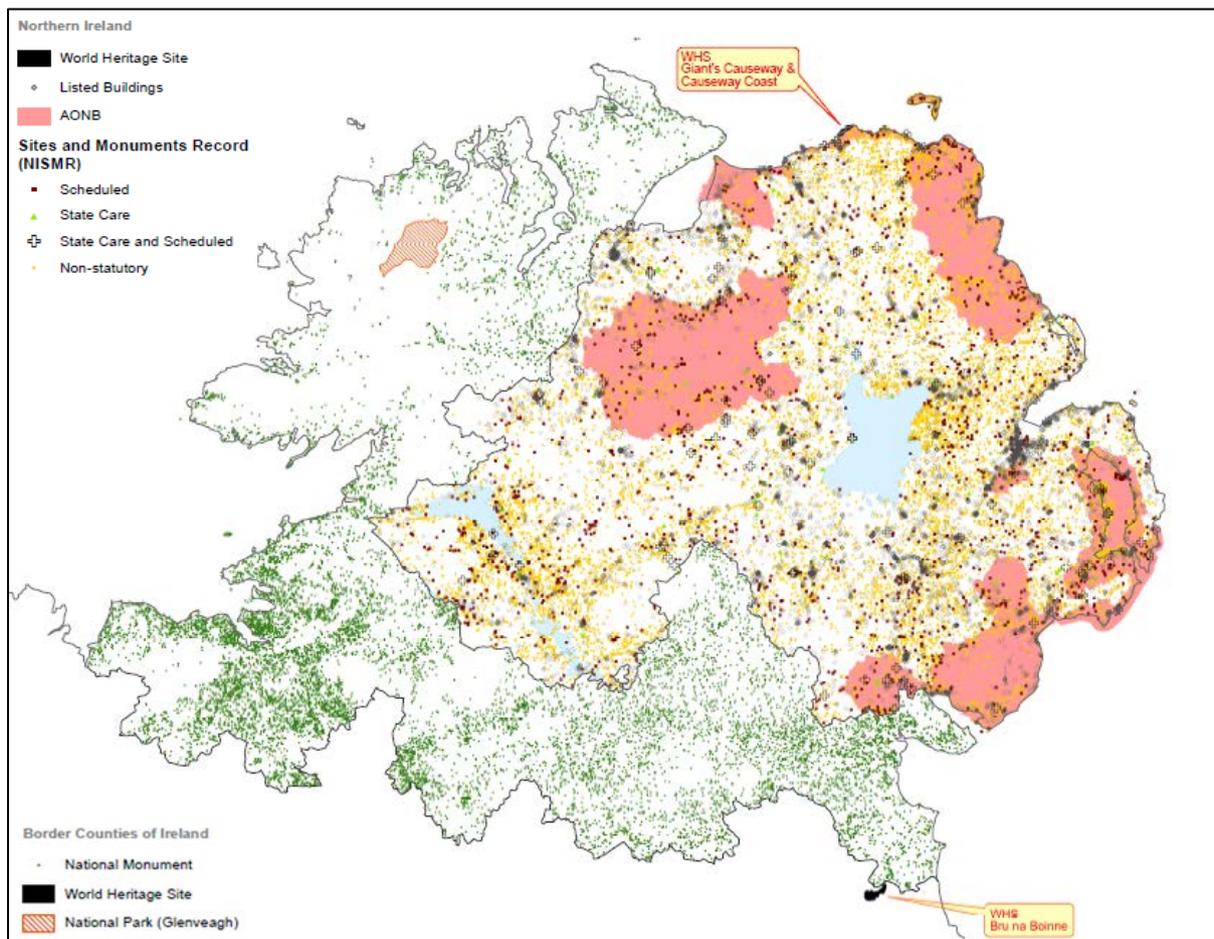


Figure 3.4: Statutory Designations - Landscape & Cultural Heritage Sites

Weaknesses and Threats

Northern Ireland

- Number of listed buildings and structures at risk has increased
- The historic environment is facing pressure from economic regeneration and climate change

Ireland

- Vulnerability of built and archaeological heritage to impacts of climate change

Landscape

Strengths and Opportunities

Northern Ireland

- Numerous protected area designations and major rural tourism attractions
- Eight areas designated as Areas of Outstanding Natural Beauty making up 20% of its total land
- 130 landscape character areas and 24 seascape character areas have been identified
- Has very specific historic landscape characteristics, such as ancient administrative townland boundaries and historic parish boundaries

Ireland

- There are six National Parks designated and recognised as nationally important landscapes (one within the border counties)
- Increase in forestry land cover since 1990
- The National Landscape Strategy was published in 2015 ongoing to 2025 which will be used to ensure compliance with the European Landscape Convention
- Draft Regional Seascape Character Assessment identified distinct seascape character types and regional seascape character areas

Weaknesses and Threats

Northern Ireland

- Landscapes have been strongly affected by rural development, particularly single dwellings and their associated infrastructure, and windfarms / single turbines, as well as by agricultural intensification
- There are no National Parks

Ireland

- Grassland land use has decreased since 1990
- Landscapes have been affected by housing and infrastructure development, agricultural intensification, forestry and decline/ loss of natural and cultural features

Natural Capital

Strengths and Opportunities

Northern Ireland

- Majority of coastline is protected and has great biodiversity value as well as critical natural defences against storms, floods and erosion
- Grassland and peatland are excellent carbon stores if managed appropriately
- Open space and outdoor recreation are increasing being recognised for their benefits to health and quality of life
- High quality natural and cultural landscapes and authentic surroundings demonstrates the potential to increase the contribution tourism makes
- Social use of both state and non-state woodland is increasing

Ireland

- Preliminary map of Green Infrastructure assets revealed strong green infrastructure in western counties, uplands and coastal areas, with the water network providing widespread opportunities for connecting features
- A number of studies are being carried out to identify the value of natural assets, those carried out to date have identified the value or importance of freshwater systems, marine systems and animal pollination etc.
- The marine environment is hugely important to the bio-economy, transport, tourism and recreational sectors
- Natural assets, including landscape and cultural heritage, are a significant draw for tourists
- Three UNESCO Global Geoparks, while other tourism initiatives such as the Wild Atlantic Way, Irelands Ancient East, and Irelands Hidden Heartlands have focused on nature, heritage and scenic related tourism (pre-Covid-19).

Weaknesses and Threats

Northern Ireland

- Lack of access to publicly available woodlands

4 HOW HAS THE PEACE PLUS PROGRAMME BEEN ASSESSED?

The PEACE PLUS Programme has been assessed against a number of SEA objectives designed to cover the broad range of environmental issues facing the programme area:

- **Ecology and Nature Conservation** – Protect, enhance and manage biodiversity assets and ecosystems
- **Health and Quality of Life** – Improve health and quality of life
- **Population and Socio-economic Factors** – Enhance life opportunities and promote strong community cohesion
- **Soil and Land Use** – Protect and enhance soil quality
- **Water** – Protect, enhance and manage water resources and flood risk
- **Air Quality** – Reduce air pollution and ensure continued improvements to air quality
- **Climate Change** – Minimise contribution to climate change and adapt to its predicted effects
- **Material Assets** – Conserve and enhance resources and reduce waste production
- **Historic Environment** – Protect, enhance and manage archaeological and cultural heritage
- **Landscape** - Protect, enhance and manage the character and quality of the landscape
- Natural Capital

These objectives are used within high level and detailed assessment matrices to ascertain the magnitude of likely effects, the sensitivity or value of the receiving environment (including people and wildlife) and the resultant significance of effects of the Investment Areas identified under each theme of the Programme.

Assessments of alternatives to the Programme have been undertaken, along with an assessment of likely cumulative effects of the Investment Areas within the PEACE PLUS Programme itself and accounting for likely in-combination effects with other plans and programmes. Opportunities for improvement and measures to address possible impacts have also been identified.

5 WHAT ARE THE ALTERNATIVES?

With European funded programmes such as the PEACE PLUS Programme, constraints on what practical alternatives exist are often restricted by the need to comply with pre-determined criteria set at a European level. This can have the effect of limiting the alternatives that are available to the programme makers.

Six strategic alternatives have been assessed against the SEA objectives:

- **Alternative 1** – Do Nothing or ‘Zero’ Option
- **Alternative 2** – Continue with the PEACE IV and INTERREG VA Programmes 2014-2020
- **Alternative 3** – Draft Proposals as at June 2020
- **Alternative 4** – Other Relevant Specific Objectives not put Forward in the June 2020 Proposals
- **Alternative 5** – Proposal as Presented in December 2020 - February 2021
- **Alternative 6** – Other Relevant Specific Objectives not put Forward in the December 2020 - February 2021 Proposal

Alternative 1 generally performs the worst in terms of assessment against the SEA objectives because the absence of a programme would be to the likely detriment of the population (incorporating both socio-economic and health), ecology, water and natural capital objectives.

Alternative 2 scores positively against the population related objectives of socio-economics and health and quality of life but it would lose some of the more innovation, environmental improvement and green enterprise related objectives. The existing INTERREG programme also includes a greater element of support for capital works, which dependent on exact locations and targeting presents an increased risk of adverse effect on ecology, water and landscape in particular.

Alternative 3, 4, 5 and 6 all perform similarly, representing only relatively subtle shifts in the respective programme objectives. The main feature between these scenarios is Alternative 4's more overt support for sustainable energy and transport related infrastructure. This presents greater scope for climate and air related benefits, but increases the potential for indirect impacts on other objectives including ecology, water and landscape.

Alternative 6 presents a balance between other alternatives, the most distinguishing feature being the greater focus on renewable energy and smart energy systems. Whilst this may lead to enhanced performance under the climate SEA objective in particular, some of the other benefits identified under Alternative 3–5 may be lost as a result. Overall, the performance of this alternative is not assessed as significantly different to other alternatives but the balance of the scoring by objectives varies to reflect the areas of focus.

Alternatives 3 and 5 by comparison are less overtly climate-focused (although Alternative 5 in particular does include some climate related objectives), but have a greater emphasis on the opportunities presented by environmental engagement as a means of delivering the over-arching themes.

Alternative 5 represents the selected chosen strategic alternative. This is on the basis of SEUPB's analysis and community engagement activities which suggests it provides the optimum blend of priorities to maximise performance in terms of supporting and maintaining the peace process whilst also seeking opportunities to support and improve local environments within the programme area.



Therefore, the Policy Objectives and Specific Objectives included in the Alternative 5 for the PEACE PLUS programme is presented for public consultation.

6 WHAT ARE THE LIKELY ENVIRONMENTAL IMPACTS OF THE PEACE PLUS PROGRAMME?

As a predominantly community focused programme, all PEACE PLUS themes are found to have a generally beneficial effects on the community focused SEA objectives of health & quality of life and socio-economic.

In addition, Theme 5 *Supporting a Sustainable and Better Connected Future* is assessed to have beneficial effects on the non-population related objectives. This is due to its support for nature and nature based community activities, marine, coastal and water management and reducing greenhouse gases through sustainable transport and geothermal energy development.

Theme 4's Investment Area 2: *Rural Regeneration and Social Inclusion* is considered to have the potential for negligible adverse effects on ecology because the creation of green infrastructure, including cycle and walkways, and the resultant increase in public access could result in disturbance to species and damage to habitats, depending on where it is located. However, local planning controls and associated regulations relating to Natura 2000 sites and protected species provide a means of assessing impacts on ecology at a local level and hence it is unlikely that there would be significant negative effects at the programme level.

Theme 5's Investment Area 6: *Enhanced Sustainable Travel Connectivity* supports existing initiatives around improving cross-border rail services including for track upgrades and rail improvements. required to facilitate the improving rail services. Depending on the extent of work required and their location, the works could have local impacts on ecology, landscape, soil and water and by extension natural capital. Such works are likely to be subject to controls through the project design and planning process and relevant regulations to act to ensure that any effects are not significant. Negligible adverse effects are predicted on soils, water and landscape and minor / negligible adverse effects on ecology and by extension natural capital.

Overall the PEACE PLUS Programme is considered to have significant beneficial effects on the health and quality of life and socio-economic objectives and beneficial effects on the other non-population objectives. No significant adverse effects are predicted.

Cumulative Effects with Other Plans and Programmes

Whilst significant adverse effects primarily associated with those other programmes cannot be discounted, the PEACE PLUS programme is considered to support the identified SEA objectives and therefore it is not anticipated to lead to significant adverse effects either singularly or in combination with other plans and programmes.

Transboundary Effects

The PEACE PLUS Programme covers Northern Ireland and the border counties of Ireland and therefore by its nature, the effects of the programme are transboundary. There is also potential for effects to extend further than these two geographic areas because the programme is not strictly limited to the administrative borders of the programme area.



However no significant adverse transboundary effects are predicted because the few potentially adverse effects predicted were due to localised small scale impacts which are no more than minor or negligible adverse significance.

7 WHAT ARE THE KEY RECOMMENDATIONS FOR MITIGATION OR ENHANCEMENTS?

7.1 Minimising Adverse Effects

No significant adverse effects are identified and therefore there is no requirement for mitigation. Nevertheless the following measures are identified in order to reduce the potential for adverse, non-significant, effects:

- Theme 4 Investment Area 2: *Rural Regeneration and Social Inclusion*:
 - New green infrastructure created or enhanced under this investment area should be sensitively located and public access to sensitive sites avoided
 - Any potentially adverse effects will be minimised through compliance with legislation, an d s tandard survey and m itigation pr ocedures a s pa rt o f t he planning application process
- Theme 5 Investment Area 6: *Enhanced Sustainable Travel Connectivity*:
 - Any potentially adverse effects associated with track upgrades and renewals will be minimised through incorporation of environmental constraints assessment into t he s cheme t argeting pr ocess, ac companied by s tandard s urvey an d mitigation procedures as part of the planning application process.

Accounting for the mitigation measures discussed above, the PEACE PLUS Programme is not anticipated to have any significant adverse residual effects on the identified SEA objectives.

7.2 Environmental Enhancements

The following potential enhancement measures are recommended. These are intended to improve the overall performance of the programme with a focus on the environment based objectives. The adoption of these recommendations is not a mandatory part of the SEA process and hence it is for SEUPB as the plan-making body to decide on the extent to which they should form part of the final programme.

- Promotion of environment related volunteering activities in cross-community and cross-border engagement programmes
- Support for environment, sustainability and climate themed education programmes
- Improving t he c ondition of designated s ites – tighter targeting of t he p rogramme objectives to direct activities funded under the programme to support the wider policy objective of improving the condition of protected habitats.
- Greening of shared spaces – direct funding towards environmental improvements

8 WHAT WILL HAPPEN NEXT?

The Environmental Report has been submitted to the statutory authorities and made available to other interested parties to facilitate determination of the likely effect of the PEACE PLUS Programme, as currently drafted, on the environment. The public consultation period runs for 8 weeks, starting on 10th March 2021.

The Environmental Report can be viewed on the SEUPB website: www.seupb.eu/PEACEPLUS

Hard copies of the Environmental Report (a fee will apply to cover the cost of reproduction and postage) and Non-Technical Summary (free of charge) can be obtained from:

RSK Environment Ltd.
Fourways House
57 Hilton Street
Manchester
M1 2EJ