JBA consulting

Bolton by Bowland and Gisburn Forest Neighbourhood Plan -Strategic Environmental Assessment

Scoping Report October 2015

Kirkwells Lancashire Digital Technology Centre Bancroft Road Burnley Lancashire BB10 2TP

JBA Project Manager

Laura Thomas JBA Consulting Epsom House Chase Park Redhouse Interchange DONCASTER South Yorkshire DN6 7FE

Revision History

Revision Ref / Date Issued	Amendments	Issued to
Draft Scoping Report / October 2015		Claire Parker, Kirkwells

Contract

This report describes work commissioned by Claire Parker from Kirkwells, on behalf of Bolton by Bowland, Gisburn Forest and Sawley Parish Council, by an email dated 11th September 2015. Matthew Williams and Laura Thomas of JBA Consulting carried out this work.

Prepared by	Matthew Williams BSc MSc Assistant Analyst
Reviewed by	Laura Thomas BA MRes MCIEEM

Purpose

This document has been prepared as a Draft Report for Kirkwells. JBA Consulting accepts no responsibility or liability for any use that is made of this document other than by the Client for the purposes for which it was originally commissioned and prepared.

JBA Consulting has no liability regarding the use of this report except to Kirkwells.

Copyright

© Jeremy Benn Associates Limited 2015

Carbon Footprint

A printed copy of the main text in this document will result in a carbon footprint of 178g if 100% post-consumer recycled paper is used and if primary-source paper is used. These figures assume the report is printed in black and white on A4 paper and in duplex.

JBA is aiming to reduce its per capita carbon emissions.

Contents

1	Introduction	1
1.1 1.2 1.3 1.4	The Neighbourhood Plan Strategic Environmental Statement (SEA) Legislative Regime The Study Area	1 2
2	SEA Process and Methodology	4
2.1 2.2	Meeting the Requirements of the SEA Directive Stages in the SEA process	
3	Other relevant policies, plans and programmes	7
3.1	Introduction	7
4	Environmental Characteristics and Key issues	9
4.1	Introduction	
4.2 4.3	Biodiversity, Flora and Fauna	
4.3 4.4	Landscape and Visual Amenity	
4.5	Soils and geology	
4.6	Historic Environment	
4.7	Population	17
4.8	Material assets	19
4.9	Air quality	19
4.10	Climate	
4.11	Scoping conclusion	20
5	SEA framework	23
5.1	Introduction	23
5.2	SEA objectives and indicators	
5.3	Impact significance	
5.4	SEA assessment approach	24
6	Next steps in the SEA process	26
6.1	Consultation	26
6.2	The Environmental Report	26

JBA consulting

List of Figures

Figure 1-1: Extent of the study area (Bolton by Bowland Civil Parish and Gisburn Forest Civil Parish extents)	3
Figure 4-1: Sites of Special Scientific Interest (SSSI) in Bolton by Bowland and Gisburn Forest	
Figure 4-2: Ancient Woodland Sites in Bolton by Bowland and Gisburn Forest	11
Figure 4-3: Lancashire CFMP Sub Areas (Source: Environment Agency, 2015)	14
Figure 4-4: Listed Buildings in Bolton by Bowland and Gisburn Forest civil parishes	17

JBA consulting

List of Tables

Table 2-1: Stages i	in the SEA process as iden	tified within Annex I of the SEA Direc	tive .4
Table 2-2: Environ	mental topics to be covered	d in the SEA	5
Table 3-1: Policies	, plans and programmes re	eviewed through this SEA process	7
Table 4-1: Populati	ions of IBA trigger species	(Source: Birdlife International, 2015)	12
Table 4-2: Key stati	stics for the Ribble catchm	ent	15
		-14 for Ribble Valley (Source:	18
	ures for 2011 Census: Key ghbourhood.statistics.gov.	Statistics (Source: uk)	18
		Source: Ribble Valley Health Profile	19
Table 5-1: Definition	n of SEA objectives, indicat	tors and targets	23
Table 5-2: SEA obje	ectives and indicators		23
Table 5-3: Impact s	ignificance key		24
Table 6-1: Propose	ed Structure of the Environr	mental Report	

Abbreviations

AONB	. Area of Outstanding Natural Beauty
APE	. Annual Probability Event
AQMA	. Air Quality Management Areas
BTCP	. Bird Targeting Conservation Project
CFMP	. Catchment Flood Management Plan
DEFRA	. Department for Environment, Food and Rural Affairs
HLS	. Higher Level Stewardship
IBA	. Important Bird and Biodiversity Area
IUCN	. International Union for Conservation of Nature
JNCC	Joint Nature Conservation Committee
LAQM TG	Local Air Quality Management Technical Guidance
LNR	. Local Nature Reserve



Natural Environment Research Council
National Nature Reserve
National Planning Policy Framework
. Nitrate Vulnerable Zones
. Office of the Deputy Prime Minister
Preliminary Flood Risk Assessment
Special Areas of Conservation
Strategic Environmental Assessment
. Special Protected Area
Sites of Special Scientific Interest
. Sustainable Drainage System
United Kingdom Biodiversity Action Plan
United Kingdom Climate Projections 2009
. Water Framework Directive

Introduction 1

1.1 **The Neighbourhood Plan**

The Localism Act, which received Royal Assent on 15th November 2011, introduced new rights and powers to allow local communities to shape new development by coming together to prepare neighbourhood plans¹. Neighbourhood planning legislation came into effect in April 2012².

Neighbourhood planning can be taken forward by two types of body - town and parish councils or 'neighbourhood forums'. Neighbourhood forums are community groups that are designated to take forward neighbourhood planning in areas without parishes. It is the role of the local planning authority to agree who should be the neighbourhood forum for the neighbourhood planning area.

Neighbourhood plans, when complete, form part of the statutory development plan for an area. The Bolton by Bowland, Gisburn Forest and Sawley Parish Council applied to be designated a Neighbourhood Planning Area in February 2014. In May 2014, Ribble Valley Borough Council approved the application, which covered Bolton by Bowland Civil Parish and Gisburn Forest Civil Parish. The preparation of the Neighbourhood Plan, by the Parish Councils Steering group, began soon after its designation by Ribble Valley Borough Council. The plan will give local people more say in the future development of the two areas in the parish³.

Neighbourhood planning gives communities the power to:

- make a neighbourhood development plan
- make a neighbourhood development order
- make a Community Right to Build order

The Localism Act 2011 introduced new powers for people to make neighbourhood plans and neighbourhood planning orders, with reduced involvement from central government. These new powers are in addition to existing opportunities for community involvement, which are already part of the planning system.

1.1.1 Weighting

From the day of publication, decision-takers may also give weight to relevant policies in emerging neighbourhood plans according to:

- the stage of preparation of the emerging neighbourhood plan (the more advanced the preparation, the greater the weight that may be given);
- the extent to which there are unresolved objections to relevant policies (the less significant . the unresolved objections, the greater the weight that may be given); and
- the degree of consistency of the relevant policies in the emerging neighbourhood plan to the policies in the National Planning Policy Framework (NPPF) (the closer the policies in the emerging neighbourhood plan to the policies in the NPPF, the greater the weight that may be given)4.

1.2 Strategic Environmental Statement (SEA)

The purpose of a SEA is the systematic identification and evaluation of the potential environmental impacts of strategic plans, programmes or policies to aid the selection of a preferred option(s) that is economically viable, meets environmental objectives, legal requirements and provides the best social outcomes. It aims to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on aspects such as "biodiversity, population, human health, fauna, flora, soil, water, air, climate, material assets including architectural and archaeological heritage, landscape and the interrelationship between the above factors" (Annex 1(f), European Directive 2001/42/EC).

¹ Planning Portal. Neighbourhood Planning, 2015. Available: www.planningportal.gov.uk (Accessed: 8 October 2015) 2 Policy paper. 2010 to 2015 government policy: planning reform (Accessed: 5 October 2015)

³ Bolton by Bowland and Gisburn Forest Neighbourhood Plan Draft Submission Version May 2015. (Accessed : 6 October 2015)

⁴ Paragraph 216 of the NPPF. Available: http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainabledevelopment/annex-1-implementation/#paragraph_216 (Accessed 20 October 2015) SEA for Bolton by Bowland NP - Draft v2

The SEA will be conducted in line with the guidance detailed in 'A Practical Guide to the Strategic Environmental Assessment Directive'⁵, and the Environmental Assessment of Plans and Programmes Regulations 2004. The level of detail within the SEA will be proportionate to that of the Neighbourhood Plan itself, and it will identify environmental objectives for ensuring that the proposals of the plan take into account environmental considerations.

The requirement to undertake an SEA was determined by a screening exercise conducted in December 2014. The Screening Report concluded that as the Neighbourhood Plan had the potential for possible impacts on the environmental quality and heritage of the area, a full SEA would be required⁶.

1.3 Legislative Regime

The European Directive 2001/42/EC requires that an Environmental Report be produced for those plans or programmes requiring SEA, which includes information on the "*relationship* [of the plan or programme] with other relevant plans and programmes" (Annex I(a)), in addition to relevant "*environmental protection objectives, established at international,* [European] community or [national] level" (Annex I (e)).

The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations'). The SEA Regulations form the basis by which all SEAs are carried out to assess the effects and impacts of certain plans and programmes on the environment. In conjunction with the European Directive 2001/42/EC and SEA Regulations, an Office of the Deputy Prime Minister (ODPM) Government publication, 'A *Practical Guide to the Strategic Environmental Assessment Directive*' was issued⁷.

This SEA scoping report will address these legislative requirements through the procedural completion of 'Stage A - A1' (see Section 2 of this report) as referred to within the practical guide. The Directive informs the requirement for information on "*relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan and programme*" and "*the environmental characteristics of areas likely to be significantly affected*" (Annex (b), (c)). This will also be addressed within the report under completion of 'Stages A - A2 and A3' under the relevant guidance⁸.

1.4 The Study Area

Bolton by Bowland, Sawley and Gisburn Forest are three individual parishes who have united for form a single parish⁹. Ribble Valley Borough Council approved the application to be a Neighbourhood Planning Area covering the parishes of Bolton by Bowland and Gisburn Forest, as shown in Figure 1-1.

1.4.1 Bolton by Bowland

Bolton by Bowland is a parish in the Ribble Valley Borough of Lancashire. The parish is entirely within the Forest of Bowland Area of Outstanding Natural Beauty (AONB). The parish covers an area of 2,550 hectares, has a population of 499 and contains 230 dwellings.

1.4.2 Gisburn

Gisburn (formerly Gisburne) is a village, civil parish and ward within the Ribble Valley Borough of Lancashire, England. It lies 8 miles (13 km) north-east of Clitheroe and 11 miles (18 km) west of Skipton. Gisburn Forest Civil Parish has a population of 151 and contains 67 dwellings according to the Office for National Statistics in 2011¹⁰.

⁵ ODPM, 2005. A Practical Guidance to the Strategic Environmental Assessment Directive. Available: www.gov.uk (Accessed: 9 October 2015)

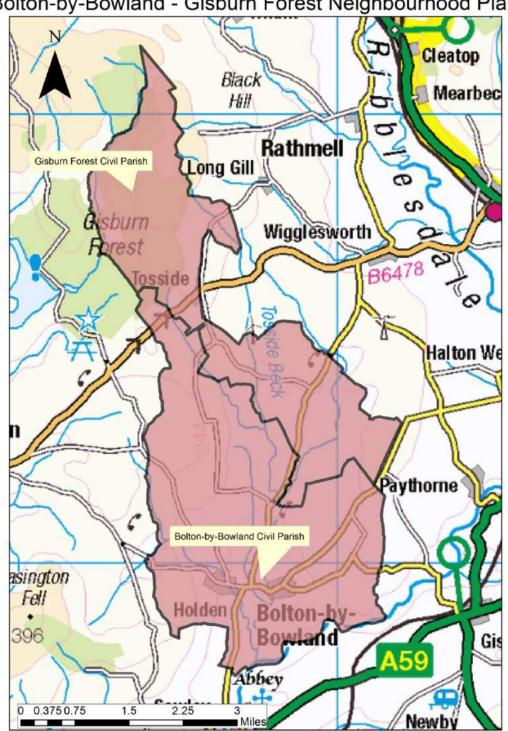
⁶ Kirkwells (2014) Strategic Environmental Assessment (SEA) Screening: Bolton by Bowland and Gisburn Forest Neighbourhood Plan.

⁷ ODPM, 2005. A Practical Guidance to the Strategic Environmental Assessment. Available: www.gov.uk (Accessed: 9 October 2015)

⁸ Ibid

⁹ Bolton by Bowland and Gisburn Forest Neighbourhood Plan Draft Submission Version May 2015. (Accessed : 6 October 2015)

¹⁰ http://www.neighbourhood.statistics.gov.uk/dissemination (Accessed: 6 October 2015) SEA for Bolton by Bowland NP - Draft v2



Bolton-by-Bowland - Gisburn Forest Neighbourhood Plan

Figure 1-1: Extent of the study area (Bolton by Bowland Civil Parish and Gisburn Forest Civil Parish extents)

JBA consulting

2 SEA Process and Methodology

2.1 Meeting the Requirements of the SEA Directive

SEA involves the systematic identification and evaluation of the potential environmental impacts of the Neighbourhood Plan. This information is then used to aid the selection of a preferred option(s) for the strategy, which are those that best meet its economic, environmental and social objectives, and legal requirements.

The full range of environmental receptors has been considered when developing the scope of the SEA. This meets the obligations of the SEA Directive, which requires that an assessment identifies the potentially significant environmental impacts on 'biodiversity, population, human health, fauna, flora, soil, water, air, climatic, material assets including architectural and archaeological heritage, landscape and the interrelationship between the above factors'.

Table 2-1: Stages in the SEA process as identified within Annex I of the SEA Directive

SEA Directive requirements	Where covered in the SEA
(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;	SEA Scoping Report (Section 3)
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	SEA Scoping Report (Section 4)
 (c) the environmental characteristics of areas likely to be significantly affected; 	SEA Scoping Report (Section 4)
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	SEA Scoping Report (Section 4)
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	SEA Scoping Report (Sections 3 and 4)
(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	SEA Environmental Report (to be prepared)
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	SEA Environmental Report (to be prepared)
(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	SEA Environmental Report (to be prepared)
(i) a description of the measures envisaged concerning monitoring in accordance with Article 10;	SEA Environmental Report (to be prepared)
(j) a non-technical summary of the information provided under the above headings.	SEA Environmental Report (to be prepared)

2.2 Stages in the SEA process

2.2.1 Task A1: Identifying other relevant policies, plans and programmes, and environmental protection objectives

The relationship between various policies, plans, programmes and environmental protection objectives may influence the Neighbourhood Plan. Analysis of the relationship;

- identifies any external social, environmental or economic objectives that should be reflected in the SEA process;
- identifies external factors that may have influenced the preparation of the plan; and
- determines whether the policies in other plans and programmes might lead to cumulative or synergistic effects when combined with policies in the plan

The plans and programmes that need to be considered include those at the international, national, regional and local scale. These are identified and evaluated in Section 3.

2.2.2 Task A2: Collecting baseline information

The SEA Directive identifies a range of environmental topics that must be considered for all environmental assessments. These are shown in Table 2-2.

Baseline information has been collected in relation to each of these topics, many of which are inter-linked. A desk study was undertaken to identify baseline environmental information, which was used to determine the key environmental characteristics of the Neighbourhood Plan Area. This information provides the basis for assessing the potential effects of the Neighbourhood Plan options. The information will aid development of appropriate mitigation measures, together with a future monitoring programme. The information search included information from a wide range of sources including the following organisations:

- Ribble Valley Borough Council
- Natural England
- Environment Agency
- Office for National Statistics
- English Heritage
- Joint Nature Conservation Committee (JNCC)
- Department for Environment, Food and Rural Affairs (DEFRA)

Where information is available, key environmental targets and objectives have been identified; established and predicted trends in the status or condition of environmental features have been described; and significant environmental and sustainability issues have been highlighted. Trends evident in the baseline information have been used to predict the future baseline situation, which has assumed a continuation of the existing trends in some cases.

SEA Directive requirements	Where covered in the Definition in relation to this report Scoping Report			
Air Biodiversity (including flora and fauna)	Air quality Biodiversity, flora and fauna	Air quality patterns Rare and notable species and habitats; trends in condition and status		
Climate	Climate	Regional climate patters; trends in greenhouse gas emissions and the sources of these emissions; mitigation measures and adaptation options to manage climate change		
Cultural heritage	Historic environment	Protected and notable heritage features; human induced physical changes to the environment		
Human health	Population	Trends and patterns in human health; key community facilities and recreation opportunities		
Landscape	Landscape and visual amenity	The local landscape character; protected and notable landscapes; key local landscape features		
Material assets	Material assets	Critical infrastructure		
Population	Population	Where people live and work; population trends and demographics; economic prosperity; relative levels of advantage, disadvantage and inequality; key community facilities; accessibility and recreation opportunities		
Soil	Geology and soils	Variety of rocks, minerals and landforms; the quantity and distribution of high quality soil		
Water	Water environment	Chemical and biological water quality; water resources; water body hydromorphology; flood risk		
The interrelationship	Throughout the	The relationship between environmental		

Table 2-2: Environmental topics to be covered in the SEA

SEA requiremen			Definition in relation to this report		
between the factors	e above	Scoping Report	features and issues		

2.2.3 Task A3: Identifying environmental issues and problems

The identification of significant environmental issues is an important step in establishing an appropriate assessment framework. Such issues have been identified directly through the baseline information search or can be identified by evaluating the relationship between the aims of the Neighbourhood Plan and the established environmental baseline.

2.2.4 Task A4: Developing the SEA objectives

SEA objectives are a key tool used to assess the potential positive and negative environmental effects of the Neighbourhood Plan. Together with associated indicators, they form an assessment framework that provides a means to predict, describe and analyse the environmental effects that are likely to arise from the implementation of the strategy. The strategy objectives are appraised individually against each SEA objective, thereby allowing environmental, economic and social effects, in particular those which are significant, to be identified. The use of comparable alternatives can also be incorporated into the assessment once the assessment framework has been established to aid in the identification of the most appropriate option for each of the strategy objectives.



3 Other relevant policies, plans and programmes

3.1 Introduction

An important aspect of the SEA process is the assessment of other policies, plans and programmes and their environmental protection objectives, to identify how these strategic objectives may influence the development of the Neighbourhood Plan. Identifying these relationships enables potential synergies to be determined, strengthening the benefits that can be gained from implementation of the Neighbourhood Plan. This information is also used to inform the development of the environmental baseline and the identification of key issues and problems. In addition, any inconsistencies or constraints can be identified, which could hinder the achievement of the environmental protection objectives or those of the Neighbourhood Plan, and therefore providing a broad appraisal of the strategy's compliance with international, national and local considerations.

The ODPM SEA guidance recognises that no list of plans or programmes can be definitive and as a result, this report describes only the key documents, which may influence the Neighbourhood Plan. These are shown in Table 3-1.

Plan, Policy or Programme
International
EU Sustainable Development Strategy (revised 2006)
European Biodiversity Strategy to 2020
EC Birds Directive – Council Directive 2009/147/EEC on the conservation of wild birds
EU Floods Directive – Directive 2007/60/EC on the assessment and management of flood risks
EU Groundwater Directive – Directive 2006/118/EC on the protection of groundwater against pollution and deterioration
EC Habitats Directive – Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
Urban Wastewater Treatment Directive – Directive 91/271/EEC concerning urban waste water treatment
EU Water Framework Directive – Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy
National
Securing the Future – the UK Government Sustainable Development Strategy (2005)
Flood and Water Management Act (2010)
Water for People and the Environment, Water Resources Strategy for England and Wales (2009)
Future Water, The Government's water strategy for England (2008)
Making Space for Water – taking forward a new Government strategy for flood and coastal erosion risk management in England (2005)
The National Flood and Coastal Erosion Risk Management Strategy for England (2011)
Draft Water Bill (2012)
The National Flood Emergency Framework for England (2011)
The Carbon Plan (2011)
Building a Low Carbon Economy – the UK's Contribution to Tackling Climate Change (2008)
Climate Change Act (2008)
Biodiversity 2020: A Strategy for England's Wildlife and Ecosystems (2011)
England Biodiversity Framework (2008)
UK Biodiversity Action Plan (1994)
National Wetland Vision (2008)
Wildlife and Countryside Act (as amended) (1981)
Natural Environment and Rural Communities (NERC) Act (2006)
Salmon and Freshwater Fisheries Act (1975)

Table 3-1: Policies, plans and programmes reviewed through this SEA process

Bolton by Bowland and Gisburn Forest Neighbourhood Plan Submission version (2015)

Air Quality Updating and Screening Assessment for Ribble Valley Borough Council (2015) 2015 Air Quality Updating and Screening Assessment for Ribble Valley Borough Council

Ribble Valley Borough Council - Core Strategy 2008 - 2028 A Local Plan for Ribble Valley (2014)

Plan, Policy or Programme

Regional

Local

Contaminated Land (England) Regulations (2006)

National Planning Policy Framework (2012)

Heritage Protection for the 21st Century, White Paper (2007)

North West River basin District - River Basin Management Plan (2015) Local Air Quality Management. Technical Guidance LAQM.TG(09)

Lancashire Climate Change Strategy 2009-2020 (2009)

Ribble Valley Community Strategy 2014-2019 (2014)

Ribble Valley District Health Profile (2015)

8



Environmental Characteristics and Key issues 4

4.1 Introduction

A search of baseline environmental information has been undertaken to identify the key environmental characteristics of the Neighbourhood Plan Area. This includes details of the environmental status and condition of notable environmental features; current and future predicted trends in the evolution of the environment; and issues and problems currently affecting the environment.

The information obtained through this desk study exercise is set out in the following topic-specific sections, many of which are inter-linked. The information used to characterise the baseline environment is broadly strategic in nature and reflects the high-level objectives of the Neighbourhood Plan. It has been obtained from a broad range of sources and no new investigations or surveys have been undertaken as part of the scoping process. The baseline may require updating throughout the duration of the SEA process as the Neighbourhood Plan is developed further and new information becomes available.

4.2 **Biodiversity, Flora and Fauna**

4.2.1 **Designated Nature Conservation Sites**

Bolton by Bowland and Gisburn Forest have no Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites, National Nature Reserves (NNRs) or Local Nature Reserves (LNRs), however, there are two Sites of Special Scientific Interest (SSSI) (see Figure 4-1). The two SSSIs are; White Moss (a lowland area consisting of fen, marsh and swamplands) and New Ing Meadow (neutral grassland)¹¹.

White Moss SSSI

White Moss is a watershed/valley side mire situated 5 km south-west of Long Preston at an elevation of about 185 m AOD. Formerly more extensive, White Moss has been reduced in recent years through agricultural reclamation but is important as the best surviving example in Lancashire of this mire type. The site lies in a peat-filled depression on boulder clay overlying limestone¹².

New Ing Meadow SSSI

New Ing Meadow lies at an altitude of around 125 AOD in the valley of a small tributary of the River Ribble, approximately 1.25 km north of the village of Bolton by Bowland. It represents an important example of one of the few remaining herb-rich hay meadows typical of this part of Lancashire. This vulnerable habitat has become increasingly scarce nationally. It has almost been destroyed in Lancashire due to agricultural intensification¹³.

¹¹ Natural England (2015). Magic - Interactive Mapping. Available: http://magic.defra.gov.uk/ (Accessed: 16 October 2015)

White 12 Natural England (2015). Available: Moss https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002735&SiteName=white&countyCode=& responsiblePerson= (Accessed 15 October 2015)

¹³ Ribble Valley (2015). Ribble Valley Sites of Special Scientific Interest - New Ing Meadow SSSI. Available: https://www.ribblevalley.gov.uk/downloads/file/8979/new_ing_meadow_sssi (Accessed: 14 October 2015) SEA for Bolton by Bowland NP - Draft v2 9

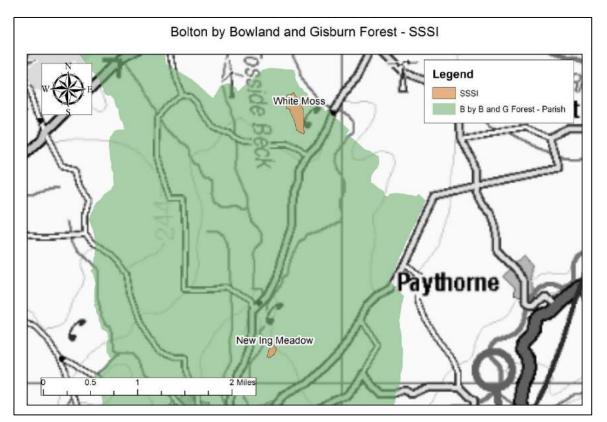


Figure 4-1: Sites of Special Scientific Interest (SSSI) in Bolton by Bowland and Gisburn Forest

4.2.2 Habitats Regulations Assessment

The Conservation of Habitats and Species Regulations 2010 (as amended) implement Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) into national legislation. In brief, the regulations "provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites¹⁴. Whilst there are no SACs, SPAs or Ramsar sites within the study area, the presence of sites within relatively close proximity, for example, the Bowland Fells SPA to the north-west will require assessment under these Regulations.

4.2.3 Priority Habitat Inventory

UK BAP priority habitats were those that were identified as being the most threatened and requiring conservation action under the UK Biodiversity Action Plan (UK BAP). The original list of UK BAP priority habitats was created between 1995 and 1999, and was revised in 2007, following publication of the Species and Habitats Review Report. Following this review, the list of UK BAP priority habitats increased from 49 to 65¹⁵. Habitats identified as being present in the project area:

- Coastal and Floodplain Grazing Marsh
- Lowland Calcareous Grassland
- Lowland Dry Acid Grassland
- Lowland Meadows
- Upland Calcareous Grassland
- Upland Hay Meadows
- Upland Heathland
- Blanket Bog

¹⁴ JNCC (2010). The Conservation of Habitats and Species Regulations 2010. Available: http://jncc.defra.gov.uk/page-1379 (Accessed: 16 October 2015)

¹⁵ Joint Nature Conservation Committee (JNCC), 2015. UK BAP list of priority habitats. Available: www.jncc.defra.gov.uk (Accessed: 8 October 2015)

- Lowland Fens
- Upland Flushes, Fens and Swamps
- **Deciduous Woodland**

4.2.4 **Ancient Woodlands**

Trees and woodland classed as 'ancient' or 'veteran' are irreplaceable. Ancient woodland takes hundreds of years to establish. Ancient woodland is considered important for its wildlife, soils, recreation, cultural value, history and contribution to landscapes¹⁶. Ancient woodland is any wooded area that has been wooded continuously since at least 1600 AD. It includes:

- Ancient semi-natural woodland mainly made up of trees and shrubs native to the site, usually arising from natural regeneration.
- Plantations on ancient woodland sites which are areas of ancient woodland where the • former native tree cover has been felled and replaced by planted trees, usually of species not native to the site.

Ancient semi-natural woodland and plantations on ancient woodland sites have equal protection under the National Planning Policy Framework. Bolton by Bowland and Gisburn Forest, collectively, have ten Ancient Woodland sites, as shown in Figure 4-2. Ancient and semi-natural woodlands present in the study area include Ox Pasture Wood, Fooden High Wood, Clough Wood, Blue Scar Wood, Higher Skye Wood, Park House Wood, Rainsber Wood, Calf House Wood, New Ing Wood, and Springs Wood.

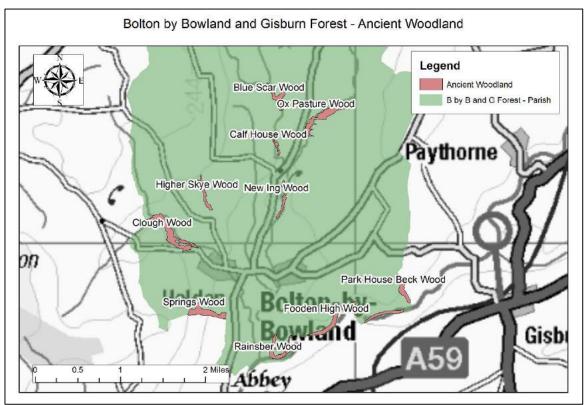


Figure 4-2: Ancient Woodland Sites in Bolton by Bowland and Gisburn Forest

4.2.5 **Important Bird Areas - Bowland Fells**

The Bowland Fells Important Bird and Biodiversity Area (IBA) supports a typical range of breeding upland birds, and is a breeding stronghold of Hen Harrier. The site is also important for breeding waders and gulls¹⁷.

¹⁶ Natural England and Forestry Commission. Ancient woodland and veteran trees: protecting them from development (2015). Accessible: www.gov.uk/guidance (Accessed: 8 October 2015)

Ribble Valley (2012). Ribble Ecology Ecological Appraisal. Available: https://www.ribblevalley.gov.uk/planx_downloads/12_1021_ecology_report.pdf (Accessed 15 October 2015) SEA for Bolton by Bowland NP - Draft v2

JBA

Species	Season	Period	Population estimate	Quality of estimate	IUCN Category
Peregrine Falcon <i>Falco</i> peregrinus	Resident	1994	10 breeding pairs	Good	Not Recognised
Merlin Falco columbarius	Resident	1994	17 breeding pairs	Good	Least Concern
Hen Harrier Circus cyaneus	Resident	1994	14 breeding pairs	Good	Not Recognised
Common Redshank <i>Tringa totanus</i>	Breeding	1993	520 breeding pairs	Good	Least Concern
Lesser Black-backed Gull Larus fuscus	Breeding	2001	18,518 breeding pairs	Good	Least Concern
Mediterranean Gull <i>Larus</i> <i>melanocephalus</i>	Breeding	2002	2 breeding pairs	Good	Least Concern
Short-eared Owl Asio flammeus	Resident	1994	9 breeding pairs	Good	Least Concern
Species group - waterbirds	Breeding	1999- 2002	20,681 breeding pairs	Good	n/a

Table 4-1: Populations of IBA trigger species (Source: Birdlife International, 2015)

4.2.6 Bird Conservation Targeting Project Farmland Birds

The Bird Conservation Targeting Project (BCTP) was developed to target management and resources towards important sites for scarce and declining farmland and woodland birds. Records are brought together from a wide range of sources, including individual birdwatchers, county bird clubs and national surveys¹⁸. BCTP farmland bird species present in the study area include Curlew, Grey Partridge, Lapwing, Redshank, Snipe, Tree Sparrow and Twite.

Key environmental Issues

Bolton by Bowland and Gisburn Forest have no SACs, SPAs, Ramsar sites, NNRs or LNRs, however, there are two SSSIs; White Moss (a lowland area consisting of fen, marsh and swamplands) and New Ing Meadow (neutral grassland). Whilst there are no SACs, SPAs or Ramsar sites within the study area, the presence of sites within relatively close proximity will require assessment under the Conservation of Habitats and Species Regulations 2010. The Bowland Fells Important Bird and Biodiversity Area (IBA) supports a typical range of breeding upland birds and contain eight IBA trigger species. There are 11 UK BAP priority habitats present in the project area, seven BCTP farmland bird species and ten ancient woodland areas.

4.3 Landscape and Visual Amenity

The Forest of Bowland, also known as the Bowland Fells, is an area of barren gritstone fells, deep valleys and peat moorland, mostly in north-east Lancashire with a small part in North Yorkshire (before 1974, some of the area was in the West Riding of Yorkshire).

4.3.1 Area of Outstanding Natural Beauty

The Forest of Bowland forms a western outlier to the Pennines, with gentle slopes and level ground on ridges¹⁹. Fast-flowing streams drain an extensive area of upland moorland and blanket mire, and bracken may dominate on lower ground. It has been designated an Area of Outstanding

¹⁸ RSPB (2015) The Bird Conservation Targeting Project. Available: https://www.rspb.org.uk/forprofessionals/targeting/ (Accessed: 12 October 2015)

¹⁹ Forest of Bowland (2015). What is an AONB? Available: http://forestofbowland.com/What-AONB (Accessed: 15 October 2015)

SEA for Bolton by Bowland NP - Draft v2

Natural Beauty (AONB) since 1964 and the study area falls entirely within it. AONBs are designated in recognition of their national importance, and to ensure that their character and qualities are protected for all to enjoy. It is used for walking and cycling, though it is relatively unfrequented by tourists.

The Forest of Bowland AONB also includes a detached part known as the Forest of Pendle separated from the main part by the Ribble Valley, and anciently a forest with its own separate history.

4.3.2 Landfill

There are only two historic landfills in the project area, both of which are just east of Bolton by Bowland town; Scott Laithe landfill and Foulden landfill. The Scott Laithe landfill received inert, industrial, commercial and household waste between 1947 and 1995. Gas control measures have been taken to either vent the landfill gas away or burn it off. Details for the Foulden landfill are unknown²⁰.

Key environmental Issues

The forest of Bowland is a designated AONB. There are also two historic landfills located just outside of the town of Bolton by Bowland.

4.4 Water environment

4.4.1 Catchment Area and Flood Risk

Bolton by Bowland and Gisburn Forest come under Sub-area 1 'Upper Ribble & Hodders' in Lancashire's Catchment Flood Management Plan (CFMP), as shown in Figure 4-3. This sparsely populated area has a generally low risk of flooding considering its very large size. Any properties that are at risk of flooding are dispersed in nature.

The sub-area is very rural and the rivers tend to be natural channels without flood defences. The Environment Agency estimate there are 230 properties at risk of flooding in a 1% annual probability event (APE) and this could rise to 350 due to the effects of climate change by 2100.

²⁰ Environment Agency. Landfill. Available: http://maps.environment-agency.gov.uk/wiyby (accessed 22 October 2015) SEA for Bolton by Bowland NP - Draft v2 13

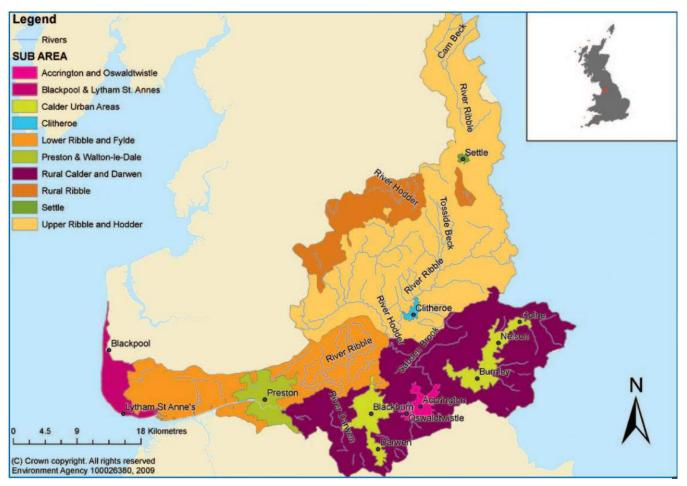


Figure 4-3: Lancashire CFMP Sub Areas (Source: Environment Agency, 2015)

4.4.2 Water Availability

The main river running through the parish council area is the River Ribble, south of Bolton by Bowland. There are many smaller tributaries running southwards through the area towards the River Ribble including, but not exclusive to; Skirden Beck, Monubent Beck and Tosside Beck.

4.4.3 Water abstraction activities

Water can be abstracted from groundwater, surface water, or tidal water. An abstraction licence details on what is permitted such as how much water is allowed to be abstracted and at what times. According the Environment Agency's water abstraction licences data, within the two parishes, there are two small water abstractions from groundwater sources and one small water abstraction from a surface water source²¹.

4.4.4 **Water Framework Directive**

The Water Framework Directive (WFD) is a European Directive which requires the introduction of strategic planning measures to manage, protect and improve the water environment and came into force in December 2000. The WFD was transposed into UK legislation in 2003, which resulted in the Environment Agency being made responsible for the production of River Basin Management Plans (RBMPs).

River Basin Management Plan

The Ribble is one of the longest rivers in the North West, rising in the Yorkshire Dales and flowing into the Irish Sea. Its two main tributaries reflect the contrasts in the catchment. The River Hodder

²¹ Environment Agency (2015). Water Abstraction Licences. Available: http://maps.environment-agency.gov.uk/wiyby (Accessed 22 October 2015) SEA for Bolton by Bowland NP - Draft v2 14

drains much of the Forest of Bowland AONB, whilst the River Calder flows through many of the industrial east Lancashire towns²².

Table 4-2: Key statistics for the Ribble catchment

River and Lake Water bodies	2009	Predicted 2015
% at good ecological status or potential	38	42
% assessed at good or high biological status (63 water bodies assessed)	45	50
% assessed at good chemical status (9 water bodies assessed)	67	67
% at good status overall (chemical and ecological)	38	42
% improving for one or more element in rivers		27

Groundwater Quality

Current quantitative quality is the degree to which a body of groundwater is currently affected by direct and indirect abstractions. The current quantitative quality for Skirden Beck, which runs through Bolton by Bowland, is good.

The current chemical quality is a measure of the present chemical condition of a water body (also called Chemical Status). There are two classes of chemical status of a water body (good or fail). The current chemical quality of Skirden Beck is good, but deteriorating²³. The area has no Nitrate Vulnerable Zones (NVZs).

River Quality

Current ecological quality is a measure of the present ecological condition of a surface water body (also called Ecological Status). There are five classes of ecological status of surface waters (high, good, moderate, poor or bad). The current ecological quality of Skirden Beck has been assessed as moderate. The current chemical quality of Skirden Beck is that it does not need assessment²⁴.

4.4.5 Fisheries

The Ribble and its tributaries provide good habitat for Salmon, and also Otter. Although numbers have increased over recent years, action is required to improve habitats for these species further. The upper Ribblesdale area also supports significant populations of native White-clawed Crayfish²⁵.

Key environmental Issues

There are no NVZs in Bolton by Bowland and there is a low risk of flooding. Only 230 properties are at risk of flooding (1% APE) in Ribble Valley. There are two small water abstractions from groundwater sources and one small water abstraction from a surface water source. Of the rivers and lake water bodies in the Ribble catchment, 38% had a good overall status (ecologically and chemically), which was expected to rise to 42% by 2015. The current quantitative groundwater quality and the groundwater chemical quality for Skirden Beck have both been assed as 'good'. The Ribble and its tributaries provide good habitat for Salmon, Otters and Crayfish

²² Environment Agency. Water for Life and Livelihoods. River Basin Management Plan - North West River Basin District. (Accessed 22 October 2015)

²³ Environment Agency. 2009 River Basin Management Plans - Groundwater. Available: http://maps.environment-agency.gov.uk/wiyby (Accessed: 22 October 2015)

²⁴ Environment Agency. 2009 River Basin Management Plans - Rivers. Available: http://maps.environment-agency.gov.uk/wiyby (Accessed: 22 October 2015)

²⁵ Environment Agency. Water for Life and Livelihoods. River Basin Management Plan - North West River Basin District. (Accessed 22 October 2015)

4.5 Soils and geology

The underlying geology of Lancashire is comparatively simple and is formed from four major rock types from three main geological periods (Carboniferous, Permian and Triassic, and the Quaternary).

The Lower Carboniferous is represented by the shallow marine Carboniferous Limestone, which outcrops at Silverdale and the Ribble Valley, running through Clitheroe into Yorkshire. The deltaic, Upper Carboniferous Millstone Grit, forms the core of the upland area of the Forest of Bowland and the higher moors to the east of Chorley, while the succeeding Coal Measures underlie Blackburn, Accrington and Burnley in the south of the County. The coastal lowlands of the west of the County are generally formed of Permian and Triassic sandstones and mudstones²⁶.

Lancashire was completely covered by ice during the last glacial advance of the Quaternary, or Ice Ages, and consequently the solid geology is largely covered by layers of glacially derived sediments. These form a skin of superficial deposits, which in places are so thick as to eradicate all visual clues as to the nature of the underlying solid geology. This drift has been eroded and shaped by fluvial, marine, aeolian and frost processes, which combine to create distinctive features and landscapes²⁷.

Key environmental Issues

The underlying geology of Lancashire is formed from four major rock types from three main geological periods (Carboniferous, Permian and Triassic, and the Quaternary).

4.6 **Historic Environment**

Bolton by Bowland and Gisburn Forest parishes have a rich and diverse history. Bolton by Bowland is a village and civil parish in the Ribble Valley Borough of Lancashire, England. Before 1974, the village was part of Bowland Rural District in the West Riding of Yorkshire²⁸. In medieval times, it was known as Bolton in Bowland, reflecting the shifting boundaries of the ancient Forest of Bowland on whose south-east flank the village sits.

Bolton by Bowland has two village greens. The smaller green contains the remains of a 13th Century stone cross and old stocks. The church has many ornamental carvings and a font dating from 1500, which bears the arms of the Pudsay, Percy, Tempest, Hammerton and other families. Overlooking the River Ribble is Rainsber Scar, known locally as Pudsay's leap²⁹.

There are no World Heritage Sites or registered Battlefields in the area.

Scheduled monuments, listed buildings, and other undesignated buildings, structures and areas of local importance are located in the area. Historic sites in the area include:

- Two scheduled monuments; these are historic sites of national importance and include • the moated site 50m north-east of Holden Farm and, Sawley Cistercian abbey and associated earthworks.
- 52 listed buildings: these are statutorily designated and include one Grade I listed building • and 51 Grade II, as shown in Figure 4-4.

Natural England (2015). Lancashire's Geodiversity. Available: 26 www.naturalengland.org.uk/ourwork/conservation/geodiversity/englands/counties (Accessed: 6 October 2015) 27 Ibid

²⁸ Forest of Bowland (2015). The Lordship of Bowland. Available: http://forestofbowland.com/node/1864 (Accessed: 12 October 2015)

²⁹ The Village of Bolton by Bowland, 2015. Available: http://www.bolton-by-bowland.org/ (accessed 9 October 2015) SEA for Bolton by Bowland NP - Draft v2

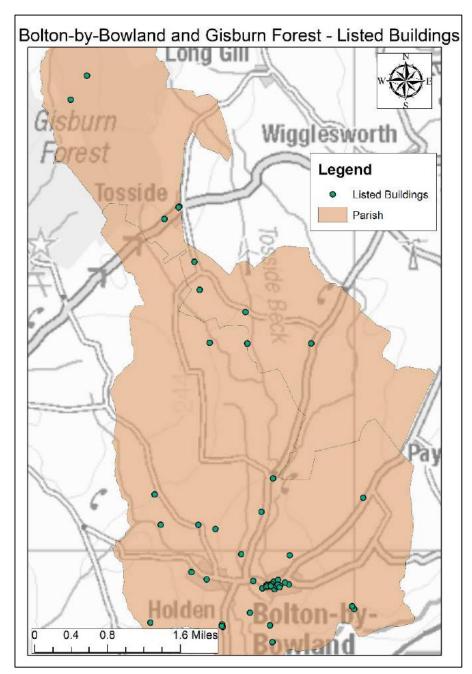


Figure 4-4: Listed Buildings in Bolton by Bowland and Gisburn Forest civil parishes

Key environmental Issues

Bolton by Bowland has two village greens. There are 2 scheduled monuments and 52 listed buildings, including one Grade I listed building. There are no world heritage sites, or registered battlefields in the area

4.7 **Population**

The Ribble Valley has an estimated population, at the mid-year resident population estimate (2013-14), of 58,091, as shown in Table 4-3 below. This is an increase of 233 residents from the previous year. Gisburn Forest Civil parish had an estimated population of 151 residents in the 2011 census, and Bolton by Bowland had 499 residents (see Table 4-4).

Table 4-3: Mid-year resident population 2013-14 for Ribble Valley (Source: www.lancashire.gov.uk)

Mid-year resident population 2013-14						
Area	2013	2014	Percentage C	centage Change and Components of Change 2013-14		
			Percentage Change	Natural Births	Net Internal Migration	Net External Migration
Ribble Valley	57,858	58,091	0.40%	-153	365	18

Table 4-4: Key Figures for 2011 Census: Key Statistics (Source: www.neighbourhood.statistics.gov.uk)

Key Figures for 2011 Census					
Area	All Usual Residents	Males	Females	Households	
Gisburn Forest Civil Parish	151	67	84	59	
Bolton by Bowland Civil Parish	499	254	245	214	

4.7.1 Health Statistics

Local authority health profiles are designed to show the health of people in each local authority area, and include comparisons with other similar populations³⁰.

They are produced by Public Health Observatories and are updated annually. The information provided below is sourced from the 'Ribble Valley District Health Profile 2015'.

Heath Indicators

The health of people in Ribble Valley is generally better than the England average. Deprivation is lower than average, however about 6.0% (600) children live in poverty. Life expectancy for men is higher than the England average. Life expectancy is 6.7 years lower for men in the most deprived areas of Ribble Valley than in the least deprived areas. Rates of statutory homelessness, violent crime, long-term unemployment, drug misuse and excess winter deaths are better than average. Table 4-5 shows how the health of people in this area compares with the rest of England. Local value and England value represents the rate per 100,000 population.

Table 4-5: Health Summary for Ribble Valley. Source: Ribble Valley Health Profile 2015

Health Summary for Ribble Valley					
Indicator	Local Value	England Value			
Obese Adults	18.6	23.0			
Percentage of physically active adults	62.6	56.0			
Hospital stays for alcohol related harm	486	645			
Hospital stays for self-harm	192.7	203.2			
Incidence of TB	2.9	14.8			
New STI	433	832			
Hip fractures in people aged 65 and over	438	580			
Smoking related deaths	283.7	288.7			
Killed and seriously injured on roads	66.0	39.7			

Community Indicators

In Year 6, 15.2% (98) of children are classified as obese, better than the average for England. The rate of alcohol specific hospital stays among those under 18 was 49.9 (per 100,000). This represents seven stays per year. Levels of GCSE attainment are better than the England average.

Levels of smoking at time of delivery are worse than the England average, whereas, levels of breastfeeding are better than in England³¹.

Key environmental Issues

The population of Ribble Valley was 58,091 for 2013-14. There has been a small increase in the population for Ribble Valley. The combined estimated population for Gisburn Forest and Bolton by Bowland parishes was 650 in 2011.

The health of people in Ribble Valley is generally better than the England average. The level of deprivation, life expectancy for men, statutory homelessness, violent crime, long-term unemployment, drug misuse, childhood obesity, GCSE attainment, and excess winter deaths are better than average. Levels of smoking at time of delivery are worse than the England average.

4.8 Material assets

The three largest villages in the two civil parishes are Holden, Tosside and Bolton by Bowland.

Fewer residents have no car or van than elsewhere; 3.7% of residents in Bolton by Bowland, and 1.7% of residents in Gisburn Forest have no car or van compared to 13% in Ribble Valley and 25.8% across England. The largest road in the study area is the B6478, which connects the villages of Newton-in Bowland and Wigglesworth.

4.9 Air quality

There are no Air Quality Management Areas (AQMAs) in either the Bolton by Bowland or Gisburn Forest parishes.

Ribble Valley Borough Council has monitored nitrogen dioxide concentrations at eight sites over the last year (2014-15). The results from this monitoring indicate that the air quality objectives are not being exceeded at any location³². No monitoring of any other pollutants has been undertaken but a review of the background maps available on the Defra website has indicated that no exceedances are expected. Ribble Valley Borough Council has considered the following sources of pollutants:

- Road Transport Sources
- Other Transport Sources

SEA for Bolton by Bowland NP - Draft v2

³¹ Public Health England. Ribble Valley District Health Profile 2015. Available: https://www.gov.uk/government/organisations/public-health-england (Accessed 9 October 2015)

^{32 2015} Air Quality Updating and Screening Assessment for Ribble Valley Borough Council. Available: www.ribblevalley.gov.uk (Accessed: 6 October 2015)

- Commercial and Domestic Sources
- Fugitive and Uncontrolled Sources.

It has been determined that in each case there are no new or significantly altered sites of concern that meet the criteria within the guidance document Local Air Quality Management Technical Guidance(09) (LAQM TG)³³.

Key environmental Issues

Air quality objectives are not being exceeded at any location. A review of the background maps available on the Defra website has indicated that no exceedances are expected. There are no AQMAs in the area and there are no new or significantly altered sites of concern.

4.10 Climate

The UK Climate Projection (UKCP09) provides probability-based projections of key climate variables, such as temperature and rainfall at a higher geographic resolution than has previously been available. Projections are based on the Intergovernmental Panel on Climate Change's 'business as usual' emissions scenario.

At present Lancashire experiences a temperate climate with average winter temperatures of between 2 to 6 °C and average summer temperatures of between 12 and 16 °C. On average, winter rainfall in the region is between 100-800mm and summer rainfall between 100-300mm³⁴.

4.10.1 Climate Change

During the 20th century, the annual mean central England temperature warmed by about 1°C. The 1990s were exceptionally warm in central England by historical standards, about 0.6°C warmer than the 1961-1990 average.

The Lancashire Climate Change Strategy provides evidence of how the weather is already changing in the North West. It includes:

- 0.40°C rise in annual mean temperature at Manchester Airport between 1988 and 1997 (compared to the 1961-1990, 30 year average);
- 20% decrease in summer rainfall over the last century
- Increased high intensity rainfall since the 1960s
- Seasonal rainfall varying by as much as 15% from the average in the last 30 years
- Sea level rise at Liverpool of around 6cm in the last 50 years
- Increased flooding of some of the region's major rivers in the last few decades³⁵

Key environmental Issues

Lancashire has a temperate climate, with mean annual temperatures for 2014 between 8 and 10°C. As a result of climate change the climate in Lancashire is projected to become wetter and warmer during the summer and winter months.

4.11 Scoping conclusion

Following a review of this environmental baseline data it was possible to scope out air quality as an SEA issue, as it is unlikely that there will be significant environmental effects on these receptors arising from implementation of the Neighbourhood Plan. A summary of the scoping conclusions are given in Table 4-6 below.

³³ Part IV of the Environment Act 1995, Environment (Northern Ireland) Order 2002 Part III, Local Air Quality Management, Technical Guidance LAQM. TG(09), February 2009, DEFRA

 ³⁴ Met
 Office.
 (2015).
 UK
 actual
 and
 anomaly
 maps.
 Available:

 http://www.metoffice.gov.uk/climate/uk/summaries/anomacts
 (Accessed: 6 October 2015)
 Available:
 Available:

³⁵ The Lancashire Climate Change Strategy 2009-2020. Available: http://www.lancashire.gov.uk/media/190306/Lancashire_Climate_Change_Strategy_2009_2020.pdf (Accessed 6 October 2015)



able 4-6: Summary	Scoped In	
Receptor	/ Out	Conclusion
Landscape and visual amenity	Scoped in	The landscape qualities and integrity of the Borough could be affected by changes to land use/management, including new development. Housing growth could affect locally important urban and rural landscapes and other locally important landscape areas. Neighbourhood Plan measures could enhance the landscape as it proposes strict planning constraints to ensure any development
		preserves the traditional character of the environment including the landscape.
Biodiversity, flora and fauna	Scoped in	National and locally important biodiversity sites and species within the Borough, including two SSSI's and BAP habitats and species may be affected by the new housing, additional amenities and changes to the local transport (new bus services, road works etc.). The Neighbourhood Plan policies may present opportunities for biodiversity gain. Neighbourhood Plan measures could improve the biodiversity of the area through the protection of the AONB, greenspaces and the natural landscape. Habitat creation or enhancement could also be incorporated into Neighbourhood Plan measures, for example through the implementation of more natural flood risk management measures.
Water environment	Scoped in	New development could potentially affect the water environment both positively and negatively. The Neighbourhood Plan could give rise to changes in flood risk and water quality, and could affect provision of water resources, impact on WFD objectives and potentially result in indirect impacts on designated sites/species. The Neighbourhood Plan may present opportunities for improved water
		management through the implementation of Sustainable Drainage Systems (SuDS), water attenuation facilities, and rainwater harvesting.
Soils and geology	Scoped in	Changes to land use/water management and new development could affect soil quality and underlying geology. Subsequent erosion of these lands could give rise to pollution pathways, increasing the risk of an adverse effect on other environmental receptors. Bolton by Bowland contains a significant percentage of agricultural land, which could be impacted upon adversely (e.g. through erosion and waterlogging) as a result of changed land use or water management. Impacts on soil quality could then affect other aspects of the environment such as biodiversity and water quality.
Historic environment	Scoped in	Changes to the transport infrastructure and local amenities, and new housing, could have positive or negative impacts on historic sites, including scheduled monuments and listed buildings including impacts on their historic value or setting and changes to the landscape visually. There are a number of historic assets in the Borough that could be affected by changes to the landscape and water management measures. Opportunities may exist to protect important sites or negative impacts could occur due to increased flood risk to vulnerable sites.
Population	Scoped in	A range of socio-economic characteristics of the Borough including social deprivation levels, health and wellbeing, access and recreation, and employment opportunities could be impacted upon by the Neighbourhood Plan. Critical social infrastructure, including schools, and residential and nursing homes could benefit from enhanced community facilities. The Neighbourhood Plan has the potential to provide significant positive
		benefits to the population of the Borough through reduced levels of flood risk to population generally (through new water management techniques). Vulnerable groups could benefit from additional amenities, and greater involvement in existing organisations.
Material assets	Scoped in	Critical infrastructure including the transport network, waste sites and utilities services could benefit from a number of policies within the Neighbourhood Plan.

Table 4-6: Summary of the Scoping Conclusions

Receptor	Scoped In / Out	Conclusion
		Material assets, in particular amenity resources, could also benefit from improved existing transport facilities, infrastructure and services.
Air quality	Scoped out	With an improved and more sustainable transport infrastructure, the Neighbourhood Plan may have an effect on air quality in the Borough. The neighbourhood plan supports improvements to roads to reduce the negative impacts of increased traffic volume, size and speeds. This could improve the air quality of the area due to a decrease in emissions. However, new housing could result in increased carbon emissions associated with an increase in the population. Arguably, due to the localised nature, these effects will likely be very small and therefore air quality can be scoped out of this assessment.
Climate	Scoped in	Changes to the transport infrastructure and new developments could have knock-on effects on a range of environmental aspects including biodiversity, water resources and the local landscape. New housing could result in increased carbon emissions associated with an increase in the population. However, more sustainable travel could decrease carbon emissions. The Neighbourhood Plan may include mitigation, resilience and adaption responses and measures that could contribute to addressing the future impacts of climate change effects.

5 SEA framework

5.1 Introduction

The SEA framework is used to identify and evaluate the potential environmental issues associated with the implementation of the Neighbourhood Plan. The framework comprises a set of SEA objectives that have been developed to reflect the key environmental issues identified through the baseline information review in Chapter 4. These objectives are supported by a series of indicators, which are used as a means to measure the potential significance of the environmental issues and can be used to monitor implementation of the Neighbourhood Plan objectives. These Neighbourhood Plan objectives are tested against the SEA framework to identify whether each option will support or inhibit achievement of each objective.

Table 5-1 below summarises the purpose and requirements of the SEA objectives and indicators.

Table 5-1: Definition of SEA objectives, indicators and targets

	Purpose
Objective	Provide a benchmark 'intention' against which environmental effects of the plan can be tested. They need to be fit-for-purpose.
Indicator	Provide a means of measuring the progress towards achieving the environmental objectives over time. They need to be measurable and relevant and ideally rely on existing monitoring networks.

5.2 SEA objectives and indicators

SEA objectives and indicators have been compiled for each of the environmental receptors (Table 5-2) (or groups of environmental receptors) scoped into the study during this phase of the project (see Table 4-6). These objectives are currently in draft form and can be refined or revised in response to comments received during the consultation phase on this SEA Scoping Report and in light of any additional information obtained during the life of the project.

Receptor	Obje	ective	Indicator
Landscape	1	Protect the integrity of the Borough's urban and, in particular, rural landscapes.	Changes in the condition and extent of existing characteristic elements of the landscape. The condition and quality of new characteristics introduced to the environment. Percentage of open countryside.
Biodiversity,	2	Protect and enhance designated sites and BAP habitats and species in the Borough.	Area of designated sites adversely affected by proposals from the Neighbourhood Plan. Monitoring of reported status of designated nature conservation sites.
flora and fauna	3	Maintain and enhance habitat connectivity and wildlife corridors within the Borough.	Percentage of land designated as nature conservation sites as a result of Neighbourhood Plan measures. Area of habitat created as a result of implementation of the Neighbourhood Plan.
Water environment	4	Improve the quality and quantity of the water in the Borough's rivers.	Water quality of the Borough's watercourses. Number of SuDS schemes installed as part of the Neighbourhood Plan. Numbers of sites with high pollution potential (e.g. landfill sites, wastewater treatment works) at risk from flooding as a result of measures from the Neighbourhood Plan.
	5	Do not inhibit achievement of the WFD objectives and contribute to their achievement where possible.	Achievement of WFD objectives. Percentage of water bodies achieving 'Good' ecological status/potential. No deterioration in WFD status.
Soils and geology	6	Reduce the risk of soil erosion and pollution.	Area of agricultural, rural and greenfield land affected by Neighbourhood Plan measures.

Receptor	Obje	ective	Indicator
			Numbers of sites with high pollution potential (e.g. landfill sites, wastewater treatment works) at risk from flooding as a result of measures from the Neighbourhood Plan.
Historic environment	7	Preserve and where possible enhance important historic and cultural sites in the Borough.	Number of historic assets adversely affected by proposals from the Neighbourhood Plan. Number of vulnerable historic assets protected/ enhanced by implementation of the Neighbourhood Plan.
Population	8	Protect and enhance social and community facilities within the Borough	Number of green spaces protected/enhanced/ created as part of implementation of the Neighbourhood Plan. Number of key services (e.g. hospitals, health centres, residential/care homes, schools etc.) protected/enhanced/created as part of implementation of the Neighbourhood Plan.
Material assets	10	Protect and enhance the existing transport infrastructure of the Borough.	Length of road infrastructure enhanced (e.g. traffic calming measures) from implementation of the Neighbourhood Plan. Number of public transport initiatives enhanced/ established. Length of footpath created/ enhanced.
Climate	11	Reduce vulnerability to climate change impacts and promote measures to enable adaptation to climate change impacts.	Number of sustainable transport initiatives established as a result of implementation of the Neighbourhood Plan. Number of renewable energy projects established within the Borough. Number of residential properties and key services at risk of flooding.

5.3 Impact significance

The unmitigated impacts of the Neighbourhood Plan objectives on achieving the SEA objectives will be identified through the analysis of the baseline environmental conditions and use of professional judgement. The significance of effects will be scored using the five-point scale summarised in Table 5-3. If there is high uncertainty regarding the likelihood and potential significance of an impact (either positive or negative), it will be scored as uncertain.

Table 5-3: Impact significance key

Impact significance	Impact symbol
Significant positive impact	++
Minor positive impact	+
Neutral impact	0
Minor negative impact	-
Significant negative impact	
Uncertain impact	?

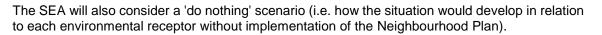
5.4 SEA assessment approach

5.4.1 Developing Alternatives

The SEA Directive requires an assessment of the plan and its 'reasonable alternatives'. In order to assess reasonable alternatives, different strategy options for delivering the Neighbourhood Plan will be developed and assessed at a strategic level against the above SEA objectives and environmental baseline as detailed in Section 4. The results of this assessment will be used to inform the decision-making process in choosing a preferred way of delivering the Neighbourhood Plan.

The Neighbourhood Plan objectives and measures (in SEA terms called 'alternative options') are not yet sufficiently developed to detail in this scoping report. However, they will be assessed at a later stage, with details of each provided in the Environmental Report.

SEA for Bolton by Bowland NP - Draft v2



5.4.2 Assessment Approach

The Neighbourhood Plan measures will be evaluated in light of its potential cumulative, synergistic and indirect environmental effects on the different SEA receptors selected for further assessment (see Table 4-6). The assessment of these environmental effects will be informed by the baseline data collected at this scoping stage, professional judgement and experience with other flood risk related SEAs, as well as an assessment of national, regional and local trends. In some cases, the assessment will draw upon mapping data and GIS to identify areas of potential pressure, for example due to flood risk or presence of environmental designations.

Throughout the assessment, the following will apply:

- Positive, neutral and negative impacts will be assessed, with uncertain impacts highlighted.
- The duration of the impact will be considered over the short, medium and long term.
- The reversibility and permanence of the impact will be assessed (e.g. temporary construction impacts, impacts that can be mitigated against/restored over time or irreversible changes to the environment).
- In-combination effects will also be considered.

The significance of effects upon each of the SEA objectives will then be evaluated and used to inform option selection.

6 Next steps in the SEA process

6.1 Consultation

A key aspect of the SEA process is consultation, which is also a requirement under Article 10 (1) and (2) of the Floods Directive. The SEA process provides a mechanism to ensure that stakeholder engagement requirements are achieved by providing interested parties/organisations and the public an opportunity to inform the process and comment on decisions taken. Stakeholder engagement also ensures that environmental and social issues, constraints and opportunities are identified and assessed at an early stage of the project. Public consultation is encouraged as a means by which to help set the environmental context and determine the scope of assessment. The Scoping Report will be subject to a five-week consultation period, after which the comments received will be taken into account in the Environmental Report. The Environmental Report will be the next output in the SEA process and it will document the assessment of the Neighbourhood Plan against the SEA objectives.

6.2 The Environmental Report

Following the consultation period on the SEA Scoping Report, the Neighbourhood Plan will be developed, concurrently with the SEA, following the framework outlined above. The results of this will be summarised in an Environmental Report. A proposed structure for the Environmental Report is outlined below.

Section	Information to be included
Non-technical summary	Non-technical summary of the SEA process
Methodology	Who carried out the SEA, how, who was consulted, and when Difficulties in collecting data or assessment
Background	Purpose of the SEA and integration with Neighbourhood Plan objectives
Environmental baseline	Baseline environmental data, including the future baseline without the plan. This will be updated from the Scoping Stage with information brought to light during the consultation period. Links to other plans, programmes and relevant environmental protection objectives, and how they have been incorporated Existing and foreseeable future environmental problems Limitations of the data, assumptions etc.
SEA objectives, baseline and context	SEA objectives and indicators
Plan issues and alternatives	Description of significant environmental effects of the strategies Assessment matrix for each strategy/alternative How environmental problems were considered in developing the strategies and choosing the preferred alternatives Other alternatives considered, and why these were rejected Proposed mitigation and enhancement measures to deliver objectives
Implementation	Links to project environmental impact assessment, design guidance etc. Proposals for monitoring and reporting

Table 6-1: Proposed Structure of the Environmental Report



Offices at

Coleshill

Doncaster

Dublin

Edinburgh

Exeter

Haywards Heath

Limerick

Newcastle upon Tyne

Newport

Saltaire

Skipton

Tadcaster

Thirsk

Wallingford

Warrington

Registered Office South Barn Broughton Hall SKIPTON North Yorkshire BD23 3AE

t:+44(0)1756 799919 e:info@jbaconsulting.com

Jeremy Benn Associates Ltd Registered in England 3246693

EG OLD TALE TO BOT





Visit our website www.jbaconsulting.com