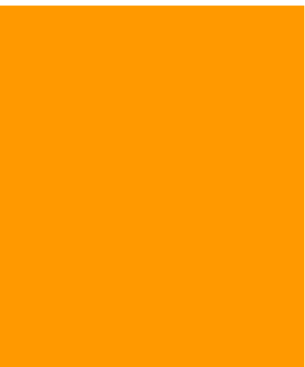
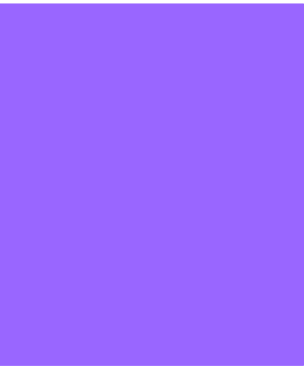


# Local Flood Risk Management Strategy

## Strategic Environmental Assessment



We are producing Bury's first Local Flood Risk Management Strategy (LFRMS), which will guide the approach to flood risk management within the Borough. There is a requirement to undertake a statutory Strategic Environmental Assessment (SEA) of the strategy to ensure that any options considered for managing flood risk take into account the environmental and wider social and economic risks, as well as opportunities at the same time.

Carrying out the SEA at the same time as we are developing the Strategy has helped to influence options at an early stage to reduce their negative impacts.

This report should be read in conjunction with the [Local Flood Risk Management Strategy Strategic Environmental Assessment Scoping Report](#), which sets out the context of the SEA, baseline data about the Borough, the environmental objectives of other relevant documents, key environmental issues and the assessment framework to be used to assess the LFRMS.

This report sets out the findings of the SEA and presents a proposed strategy for monitoring the effects of the LFRMS.

We are seeking your opinions on this report and would welcome any comments or information you may have that is relevant to this SEA and the LFRMS. Please submit this information by Friday 21st February 2014 to:

Department of Communities and Neighbourhoods  
Planning Policy and Projects  
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# 1 Introduction

## The Local Flood Risk Management Strategy

- 1.1 Under the Flood and Water Management Act 2010 Bury Council is required to produce a Local Flood Risk Management Strategy (LFRMS). The aim of this strategy is to set out how the Council plans to manage local flood risk and fulfil its duties under the Act, balancing the needs of communities, the economy and the environment through partnership working, effective risk management and prioritisation and the sharing of data and information.
- 1.2 The LFRMS has been identified as a plan that is subject to the requirements of European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”, known as the Strategic Environmental Assessment (SEA) Directive.

## Aim and Objectives of the LFRMS

- 1.3 The aim of the LFRMS is to produce a strategy which demonstrates how Bury Council will work with individuals, the community, and businesses to manage the risk of flooding and its impacts within the Borough. The objectives are:
  - To gain a strategic understanding of flood risk from all sources in Bury;
  - To manage the likelihood of flooding within the Borough;
  - To help Bury residents to manage their own risk;
  - To ensure that new development in Bury reduces rather than increases flood risk;
  - To take a sustainable approach to flood risk management within the Borough, which balances economic, environmental and social benefits with flood risk policies and programmes;
  - To improve flood preparation, warning and post flood recovery;
  - To endeavour to direct flood risk funding to areas most at need or where solutions will be most effective.

## The Strategic Environmental Assessment Directive

- 1.4 European Directive 2001/42/EC ‘on the assessment of certain plans and programmes on the environment’ (commonly referred to as the SEA Directive) introduced a mandatory requirement to undertake SEA on certain plans and programmes upon which work commenced after 21 July 2004. The LFRMS is one such document.
- 1.5 The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the LFRMS on issues such as ‘biodiversity, population, human health, fauna, flora, soil, water, air, climatic, material assets including architectural and archaeological heritages, landscape and the interrelationship between the above factors.’ The Directive was transposed into English legislation by the Environmental

Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations').

### Habitats Regulation Assessment

- 1.6 The Council is required under Regulation 48 (1) of the Conservation (Natural Habitats, &C) (Amendment) (England and Wales) Regulations 2006, to carry out an Appropriate Assessment in respect of any plan or project which would either alone or in combination with other plans or projects be likely to have a significant effect on a European Site and is not directly connected with the management of the site for nature conservation. There are no sites with European designations<sup>1</sup> in the Borough. However, the Council has a responsibility to consider the impacts of its strategies, plans and projects on European sites in adjacent Boroughs.
- 1.7 The closest protected site is the Rochdale Canal (located 4km to the south east)<sup>2</sup> which runs from Rochdale through Oldham and Tameside into Manchester. Other more distant sites are the South Pennines SAC<sup>3</sup> (13km), the Peak Borough SPA<sup>4</sup> (17km) and Manchester Mosses SAC<sup>5</sup> (10-16km).

### Water Framework Directive

- 1.8 The Water Framework Directive (WFD) 2000/60/EC, and the WFD Regulations 2003 require the Council to ensure that the strategy:
- will not lead to actions which result in a deterioration in the status of any water body (including the channel, the flow, and the flora and fauna);
  - will not prevent future restoration/improvement, and includes opportunities for improvement in the status of water bodies to help meet WFD objectives.

These requirements will be incorporated into the assessment framework.

### Strategic Environmental Assessment

- 1.9 This report should be read in conjunction with the [Local Flood Risk Management Strategy Strategic Environmental Assessment Scoping Report](#) which sets out the scope of the SEA, baseline data about the Borough, the environmental objectives and targets of relevant other documents, key environmental issues and the assessment framework to be used to assess the Local Flood Risk Management Strategy.

<sup>1</sup> European sites are Special Protection Areas (SPAs) and Special Areas of Conservation (SACs)

<sup>2</sup> Designated because the canal supports a protected species (floating water-plantain – *Luronium natans*)

<sup>3</sup> Designated because the area supports habitats of value such as European dry heaths, blanket bogs, old sessile oak woods.

<sup>4</sup> Designated because the area supports protected species (short eared owls (*Asio flammeus*), Merlin (*Falco columbarius*) and Golden Plover (*Pluvialis apricaria*).

<sup>5</sup> Designated because the area contains raised bogs still capable of natural regeneration.

## 2 Methodology

### SEA Stages

2.1 The assessment of the LFRMS has five stages. These stages and the tasks for each stage are listed in Table 1.

**Table 1 - Stages in the SEA Process**

SEA Stages	SEA Tasks
<b>Stage A:</b> Setting the context and objectives, establishing the baseline and deciding on the scope.	A1: Identifying other relevant policies, plans and programmes, and environmental protection objectives.
	A2: Collecting baseline information
	A3: Identifying environmental issues and problems
	A4: Developing the SEA objectives and framework
	A5: Consulting on the scope of the SEA
<b>Stage B:</b> Developing and refining options and assessing effects	B1: Testing the plan objectives against the SEA objectives
	B2: Developing strategic alternatives
	B3: Predicting the effects of the plan, including alternatives
	B4: Evaluating the effects of the plan, including alternatives
	B5: Mitigating adverse effects
	B6: Proposing measures to monitor the environmental effects of implementing the plan
<b>Stage C:</b> Preparing the Environmental Report	C1: Preparing the Environmental Report
<b>Stage D:</b> Consulting on the LFRMS and the SEA Report	D1: Consulting on the LFRMS and Environmental Report with the public and consultation bodies
	D2: Assessing significant changes
	D3: Making decisions and providing information
SEA Adoption Statement	
<b>Stage E:</b> Monitoring the significant effects of implementing the LFRMS.	E1: Developing aims and methods for monitoring
	E2: Responding to adverse effects

### Stage A

2.2 The [Local Flood Risk Management Strategy Strategic Environmental Assessment Scoping Report](#) represents Stage A shown in Table 1 above and presents the findings of Tasks A1 to A4 of the SEA process in a logical progression to reflect the way in which the work was undertaken.

2.3 The Scoping Report was consulted upon for a 6 week period from Monday 2<sup>nd</sup> September to Monday 14<sup>th</sup> October.

- 2.4 One comment was received on the Scoping Report from Natural England which stated that the following documents should be added to Table 2 'Key Documents':
- The Conservation of Habitats and Species (as amended) Regulations 2012,
  - The Wildlife and Countryside Act 1981 (as amended),
  - The Countryside and Rights of Way Act 2000 and
  - Biodiversity 2020: A strategy for England's wildlife and ecosystem services.
- 2.5 Natural England also identified that Bury is located within the Manchester Pennine Fringe National Character Area and asked for this area to be considered within the SEA Scoping Report.
- 2.6 Finally Natural England stated that the Scoping Report refers to the Borough having a Site of Special Scientific Interest (SSSI). Natural England suggested that the Scoping Report should provide the details of this SSSI and the SEA Environmental Report should identify measures for how potential impacts could be overcome.
- 2.7 The SEA Scoping Report and Environmental Baseline Report have been updated to reflect these comments.

### **Stage B**

- 2.8 The SEA framework provides a set of agreed objectives and sub-objectives against which to assess the LFRMS. The SEA framework is reproduced in Table 2 below.
- 2.9 The assessment has examined whether and how well the SEA questions in the SEA Framework are being addressed by the LFRMS Strategy.

**Table 2 - Local Flood Risk Management Strategy SEA Objectives**

LFRMS SEA Objective	Assessment Criteria Would the LFRMS, in combination with other plans....	Potential Monitoring Indicator
<b>Population and Human Health</b>		
To minimise the risk of flooding and to promote awareness of flooding, but to manage expectations	Reduce flood risk and the risk of direct physical impacts of flooding on people?	<ul style="list-style-type: none"> <li>• Number of properties/business at risk of flooding;</li> <li>• Number of new developments permitted in areas of flood risk;</li> <li>• Number of developments permitted contrary to EA advice;</li> <li>• Number of flood defences developed;</li> <li>• Number of Sustainable Drainage Systems implemented since publication of the LFRMS.</li> </ul>
	Help provide safe development?	
	Reduce the fear of flooding?	
<b>Biodiversity, Flora and Fauna</b>		
To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features	<ul style="list-style-type: none"> <li>• Reduce damage to, fragmentation or loss of existing designated wildlife sites, wildlife corridors and priority habitats?</li> <li>• Support opportunities to enhance biodiversity?</li> <li>• Maintain or improve existing water levels and water quality?</li> </ul>	<ul style="list-style-type: none"> <li>• Change in areas of biodiversity importance;</li> <li>• Changes in condition to designated sites;</li> <li>• Achievement of Biodiversity Action Plan targets</li> </ul>



LFRMS SEA Objective	Assessment Criteria Would the LFRMS, in combination with other plans....	Potential Monitoring Indicator
Soil		
To conserve soil resources and reduce land contamination	Require or encourage LFRM schemes on previously undeveloped land?	<ul style="list-style-type: none"> <li>• Number of proposed and actual flood mitigation developments to be located within the Greenbelt;</li> <li>• Area/Number of incidences where Grade 1,2 or 3 soil is lost due to need for flood defence</li> </ul>
	Reduce risk of soil contamination (e.g. through remediation of contaminated land, or reducing flood risk in known areas of contaminated land?)	
	Reduce soil erosion caused by flooding?	
Water		
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources	Result in improved drainage and attenuation (e.g. installation of SuDS), so that surface run-off is controlled to reduce pollution of soils and watercourses as well as run-off rates?	<ul style="list-style-type: none"> <li>• Ecological status of rivers</li> <li>• Chemical status of rivers</li> <li>• Condition of water bodies (Water Framework Directive)</li> </ul>
	Reduce flood risk?	
	Improve the ecological conditions of water bodies, with respect to the Water Framework Directive?	
	Prevent or assist future improvement of the physical, chemical or biological status waterbodies?	

LFRMS SEA Objective	Assessment Criteria Would the LFRMS, in combination with other plans....	Potential Monitoring Indicator
Climatic Factors		
To reduce contributions to and promote adaptation to the impacts of climate change	Help reduce flood risk to receptors across the SEA topic areas?	<ul style="list-style-type: none"> <li>Indicative floodplains under current conditions and under climate change scenarios and the developments occurring within them.</li> </ul>
	Help reduce the impact of flood risk across the range of SEA topic areas?	
Material Assets		
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties	Improve protection of existing or proposed key transport routes or infrastructure?	<ul style="list-style-type: none"> <li>Number and severity of incidents leading to disruption or damage to transport infrastructure;</li> <li>Number and severity of incidents leading to disruption or damage to service provision.</li> </ul>
	Ensure the protection of services, including water, power and telecommunications?	
	Reduce flood risk to properties?	
	Have a positive impact on the local economy? e.g. through improved flood protection or enhanced recreation opportunities?	
	Reduce flood risk to areas of high quality agricultural land?	
	Reduce flood risk to areas important for their mineral resource?	
	Reduce flood risk to the access routes used to access any of the above assets?	

LFRMS SEA Objective	Assessment Criteria Would the LFRMS, in combination with other plans....	Potential Monitoring Indicator
Cultural, Architectural and Archaeological Heritage and Landscape		
To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment	Cause visual intrusion to historic landscapes, landscape character or the loss of damage to the significance of other heritage assets and their setting?	<ul style="list-style-type: none"> <li>• Number of listed buildings at risk of flooding events</li> <li>• Number of flood defences implemented to protect listed buildings since the LFRMS was published</li> </ul>
	Promote schemes that enhance the condition and character and promote understanding of the significance of conservation areas and other heritage assets and their settings?	
	Cause any direct or indirect physical impacts on the borough's features of landscape character, historic, archaeological and architectural or artistic interest, or their setting?	
	Enhance the range and quality of the public realm, including viewpoints and open spaces?	

**Stage C**

- 2.10 This document presents Stage C of the SEA. It outlines the significant effects of the LFRMS and sets out a proposed strategy for monitoring these significant effects. This report should be read in conjunction with the [Local Flood Risk Management Strategy Strategic Environmental Assessment Scoping Report](#).

**Stage D**

- 2.11 This report will be consulted upon for a six week period from Friday 10<sup>th</sup> January 2014 to Friday 21<sup>st</sup> February 2014, with the statutory SEA consultees, other key stakeholders and the public.
- 2.12 Following consultation, changes to this report may be necessary depending on the nature of the comments and the changes made to the LFRMS in response to these. Any changes which are deemed to be significant will require further assessment to identify whether they would result in significant effects.

**Stage E**

- 2.13 This report outlines a proposed strategy for monitoring the significant effects of the LFRMS.

**Difficulties Encountered in Undertaking the SEA**

- 2.14 The identification of alternatives has been difficult because the purpose and content of the LFRMS are relatively prescriptive. This is discussed further in Section 3.
- 2.15 Identifying the potential effects of some of the actions within the Action Plan has been difficult because a number of the actions either relate to studies which are being or will be undertaken or relate to maintenance works to infrastructure, such as new or replacement culverts, or the action to be taken has not yet been identified. In the case of on-going or planned studies, the studies themselves are unlikely to have environmental effects, however, actions identified through or following the studies may require site specific environmental assessment to identify potential significant environmental effects.

**Likely Evolution without the Local Flood Risk Management Strategy**

- 2.16 Annex 1 of the SEA Directive requires that information is provided on “the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan”.
- 2.17 A review of the relevant plans, policies and programmes and consideration of the baseline character in the SEA Scoping Report and Environmental Baseline highlighted a number of environmental and sustainability issues facing the Borough.

2.18 In order to meet the requirement of the SEA Directive, Table 3 sets out how these key issues may develop over time without implementation of the LFRMS.

**Table 3 – Key Environmental Issues and Likely Evolution without the LFRMS**

Key Environmental Issues identified in the SEA Scoping Report Environmental Baseline	Likely Evolution without the LFRMS
<p>Development pressures linked to population growth may result in residential, business and community developments being built in areas at risk of flooding.</p> <p>The potential increased demand for water resources and pressure on the Borough's sewerage systems due to local population growth, an ageing population and increased single occupancy homes.</p>	<p>This issue is likely to continue as at present as the LFRMS is not intended to address population growth and demand. Rather the Strategy should help to ensure that the Borough seeks to accommodate the new development without increasing flood risk.</p> <p>Without the LFRMS, the implications of development pressure in terms of flood risk may be increased.</p>
<p>Biodiversity in the Borough is increasingly under pressure. Changing agricultural, flood and river-management practices, urban expansion, road development, mineral extraction, pollution, water abstraction, impoundment and climate change have all had and/or are having an adverse effect on the biodiversity environment. There has been a steady decline in the areas that can be defined as semi-natural habitats of wildlife importance. Those areas that have survived are often small and have a fragmented distribution.</p>	<p>Without the LFRMS, policies such as the Catchment Flood Management Plans and policies to manage flood risk in the emerging Core Strategy would still apply and have some benefits in terms of protecting the natural environment from the impacts of flooding.</p> <p>However, these are likely to have less direct and significant effects than implementation of the LFRMS would.</p>
<p>Water resources within the Borough are likely to be under increasing pressure from a growing population and increased demand for waste water treatment and drinking water. Increased flood risk could affect water supply or treatment facilities, resulting in the loss of service or contamination of water supplies.</p>	<p>Without the LFRMS, policies such as the Catchment Flood Management Plans and policies to manage flood risk in the emerging Core Strategy would still apply and have some benefits in terms of protecting water quality from the impacts of flooding.</p> <p>However, these are likely to have less direct and significant effects than implementation of the LFRMS would.</p>
<p>Climate change increases the risk of fluvial and pluvial flooding within</p>	<p>This issue is likely to continue as at present, the LFRMS does not intend</p>

<p>the Borough, in terms of the magnitude, extent and duration of flood risk. Measures to adapt to the flood risk impact of climate change is likely to put pressure on other environmental features e.g. increased demand for flood defences and canalisation can impact adversely on important species and their habitat.</p>	<p>to address the causes of climate change. Rather the LFRMS should help to ensure that the Borough is well-equipped to adapt to the increasing flood risk.</p> <p>Therefore without implementation of the LFRMS, the implications of climate change in terms of flood risk may be negative.</p>
<p>A significant number of residential properties, employment premises, material assets and critical infrastructure (roads, railway lines, minerals, waste energy and water infrastructure) are located within floodplains or are at risk from surface water flooding.</p>	<p>In the absence of the LFRMS, policies in the emerging Core Strategy would still apply, which aim to ensure that new development is steered away from areas of flood risk.</p> <p>Other policies such as the Catchment Flood Management Plans would still apply and should have some benefit in terms of reducing the flood risk facing existing buildings, material assets and critical infrastructure from the potential adverse impacts of flooding.</p> <p>However, these are likely to have less direct and significant effects than implementation of the LFRMS would.</p>
<p>Landscapes and heritage assets which are located within or in close proximity to a flood plain are likely to be at greater risk of flooding.</p>	<p>In the absence of the LFRMS, other policies such as the Catchment Flood Management Plan and policies to manage flood risk in the emerging Core Strategy would still apply and have some benefit in terms of protecting landscape and heritage assets from the potential adverse impacts of flooding.</p> <p>However, these are likely to have less direct and significant effects than implementation of the LFRMS would.</p>

2.19 Understanding local flood risk can assist in minimising the impacts of flooding and the consequences of climate change by enabling more informed decision making. By not implementing the LFRMS the Council would be less likely to make accurate flood risk judgements and decisions.

2.20 Public engagement is key to reducing the impacts of flooding on a localised level. The LFRMS identifies steps that can be taken by any

individual to aid the safeguarding of their property from flooding. As such, there is a clear benefit to be realised in proactively engaging individuals and local communities through the LFRMS.

- 2.21 The advantages of partnership working are clear in that it allows the Council to pool knowledge and data between stakeholders, leading to a more efficient co-ordination of time and resources. A well developed communicative framework also allows stakeholders to be aware of the intended direction of other stakeholders. Without the LFRMS, this information would be more difficult to access and distribute among risk management authorities.

### Structure of the SEA Report

- 2.22 **Chapter 1** of the report described the background to the production of the Bury LFRMS and the requirement to undertake SEA. This chapter (**Chapter 2**) has described the approach that is being taken to the SEA of the LFRMS and outlines the tasks involved. The remainder of this report is structured into the following sections:
- **Chapter 3** presents the alternative options for the LFRMS;
  - **Chapter 4** presents the SEA Framework that is being used for the SEA of the LFRMS;
  - **Chapter 5** summaries the findings of the SEA of the final LFRMS;
  - **Chapter 6** details the approach that will be taken to monitoring the effects of the LFRMS as it is implemented;
  - **Chapter 7** presents the conclusions of the SEA and describes the next steps to be undertaken; and
  - **Appendix 1** presents the detailed SEA matrices.

### 3 The Assessment of Alternatives

- 3.1 Bury Council, under its role as Lead Local Flood Authority (LLFA), must 'develop, maintain, apply and monitor' a Local Flood Risk Management Strategy (LFRMS). The LFRMS focuses on local flood risk resulting from surface water, groundwater and ordinary watercourse flooding. The interaction with main river flooding has also been assessed.
- 3.2 The Flood and Water Management Act (2010) states that the LFRMS must cover:
- The risk management authorities in the authority's area;
  - The flood risk management function that may be exercised by those authorities in relation to the area;
  - The objectives for managing local flood risk;
  - The measures proposed to achieve those objectives;
  - How and when the measures are expected to be implemented;
  - The costs and benefits of those measures and how they are to be paid for;
  - The assessment of local flood risk for the purpose of the Strategy; and
  - How and when the Strategy is to be reviewed, and how the Strategy contributes to the achievement of wider environmental objectives.
- 3.3 As the purpose and content of the LFRMS is clearly defined, there is limited scope for the consideration of radical alternatives. However, at points through the development of the LFRMS certain decisions have been made which had alternatives to them. Checks have been made to ensure that the preferred alternative selected does not have significant negative effects on the SEA objectives, and where necessary mitigation has been included within the preferred alternative.
- 3.4 Consideration has also been given as to whether there are any reasonable alternatives for the actions/projects included within the Action Plan in Appendix 1 of the LFRMS.



**Table 4 – Assessment of LFRMS Alternatives**

Alternatives Tested	SEA Objectives							Summary of Performance	Reason for Selection or Rejection
	Pop & Health	Biodiversity	Soils	Water	Climatic Factors	Material Assets	Cultural Heritage & Landscape		
<p><b>Strategy Objectives</b></p> <ul style="list-style-type: none"> <li>National objectives</li> <li>Locally adapted objectives</li> </ul>	✓	✓	✓	✓	✓	✓	✓	<p>The locally adapted objectives cover the same themes as the national objectives.</p> <p>The national objectives are therefore weaker than the locally adapted objectives which have a stronger focus on local environmental issues and economic sustainability.</p> <p>Using the locally adapted objectives may not address all catchment issues which could lead to negative effects with regards to material assets downstream and potentially positive effects</p>	<p><b>Chosen approach – Local adapted objectives.</b></p> <p>The locally adapted objectives which have a broader coverage with regards to local environmental issues and economic sustainability and are more specifically tailored to local issues.</p> <p><b>Mitigation – ensure the LFRMS considers wider catchment issues.</b></p>

Alternatives Tested	SEA Objectives							Summary of Performance	Reason for Selection or Rejection
								with regards to the landscape.	
<p><b>Funding</b></p> <ul style="list-style-type: none"> <li>• Partnership Funding - different prioritisation methodology and works programme</li> <li>• Non partnership funding approach</li> </ul>	✓	✓	✓	✓	✓	✓	✓	<p>It is difficult to determine the potential effects of the two options as it would depend on the type of scheme and bidding processes. All future schemes and associated bids will need to address HRA and WFD requirements.</p> <p>Using the partnership funding approach, Bury Council bid to the RFCC and then top up with partnership funding. This co-ordinated approach means that a range of different schemes (rather than just a small number of large schemes) go ahead and they are focussed on the beneficiaries contributing financially to schemes.</p> <p>In the non-partnership approach option, scheme development would be limited.</p>	<p><b>Chosen approach – Partnership Funding</b></p> <p>Partnership funding approach should result in multiple benefits/higher outcome measures.</p> <p>In the non-partnership approach option, scheme development would be limited as few schemes would score highly enough to be fully funded in Bury due to the limited number of properties that would be protected, the level of deprivation and the cost of schemes. Also in-house capital funding would be limited.</p>
<p><b>Consenting</b> Options for the delivery</p>	✓	✓	✓	✓	✓	✓	✓	Consenting relates to activities on ordinary	<b>Chosen approach – Internal Departments.</b>

Alternatives Tested	SEA Objectives						Summary of Performance	Reason for Selection or Rejection
<p>of the consenting role have been explored through:</p> <ul style="list-style-type: none"> <li>• Internal Department</li> <li>• External Consultants</li> </ul>							<p>watercourses which could alter water flow – looked at holistically including nature conservation, WFD, flood risk.</p> <p>The key issue is whether the necessary skills and resources are held by the organisation to be chosen to deal with consenting. There is limited experience and lack of guidance in determining WFD compliance and habitat impacts in house.</p> <p>The in-house engineering consultancy has most experience of dealing with consents and resources.</p>	<p>Chosen approach is to keep in house as lead. All consents will be dealt with, this can allow opportunities to be identified for improvements.</p> <p>There is limited experience and lack of guidance in determining WFD compliance and habitat impacts.</p> <p><b>Mitigation: There is a need for national guidance relating to consenting and the implications of WFD to be produced by DEFRA/EA</b></p>
<p><b>SuDS Approval Body</b> This role is clearly defined within the legislation, although this has not been implemented. Delivery options explored the provision of the service by:</p>	✓	✓		✓		✓	<p>Secondary legislation has not been enacted yet. Little is known about what the national standards will include.</p> <p>Bury Council – Development Control – limited skills/resources</p>	<p><b>Chosen approach – Bury Council Engineering Consultancy</b></p> <p>The Engineering Consultancy have the skills and limited resources so this would be the favoured option. SuDs are currently assessed by in-house</p>

Alternatives Tested	SEA Objectives						Summary of Performance	Reason for Selection or Rejection
<ul style="list-style-type: none"> <li>Bury Council Development Control</li> <li>Bury Council Engineering Consultancy</li> <li>External Consultants</li> <li>AGMA</li> </ul>							<p>Bury Council – Engineering Consultancy – limited resources</p> <p>External Consultants – cost implications, lack of geographical knowledge and understanding.</p> <p>AGMA – would require additional funding; lack of local geographical knowledge.</p>	<p>engineers.</p>
<p><b>Definition of a ‘significant’ flooding event.</b> This is for the LLFA to determine locally. No national guidance has been established or thresholds set by DEFRA in relation to the definition of significant.</p> <ul style="list-style-type: none"> <li>Local Definition</li> <li>AGMA Definition</li> </ul>			✓		✓		<p>Local Definition – this option has been developed based on local circumstances.</p> <p>AGMA Definition - a definition has been drafted for local implementation to improve the understanding of flood risk and flood risk management uniformly across Greater Manchester.</p>	<p><b>Chosen approach – AGMA Definition</b></p> <p>Both options rely on good flooding records. However the AGMA definition avoids inconsistency across the sub-region.</p> <p><b>Mitigation: need to ensure that flooding records are kept up to date and the public are aware of the importance of reporting their flood incidents.</b></p>

Alternatives Tested	SEA Objectives						Summary of Performance	Reason for Selection or Rejection	
<p><b>Thresholds for flood investigations.</b> This is for the LLFA to determine locally. No national guidance has been established or thresholds set.</p> <ul style="list-style-type: none"> <li>• Local Definition</li> <li>• AGMA Definition</li> </ul>				✓		✓		<p>Local Definition – this option has been developed based on local circumstances.</p> <p>AGMA Definition - a definition has been drafted for local implementation to improve the understanding of flood risk and flood risk management uniformly across Greater Manchester.</p>	<p><b>Chosen approach – AGMA Definition.</b></p> <p>Both options allow events to be categorised. Bury Council record and collect information on flood events reported to them in order to determine whether an investigation is required. However the AGMA definition avoids inconsistency across the sub-region.</p> <p>Investigating flooding provides a history of flooding which is useful knowledge to assess the level of risk and options for its management and to raise the awareness of flooding.</p>

## 4 SEA Framework Assessment

### Introduction

- 4.1 The SEA framework was prepared and consulted upon as part of the SEA Scoping process, drawing on the review of relevant plans and programmes, baseline information and key environmental and sustainability issues.
- 4.2 There are seven SEA objectives in total, as set out in Table 5.

**Table 5 – SEA Objective**

SEA Objectives
1. To minimise the risk of flooding and to promote awareness of flooding, but to manage expectations
2. To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features
3. To conserve soil resources and reduce land contamination
4. To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources
5. To reduce contributions to and promote adaptation to the impacts of climate change
6. To minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.
7. To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.

- 4.3 Schedule 2 of the SEA Regulations provides a list of specific environmental topics to be addressed. In drawing up the LFRMS SEA objectives, care was taken to ensure that the SEA Directive's environmental objectives were also covered.
- 4.4 Table 6 sets out the SEA Directives Environmental topics and the relevant objectives from the Bury LFRMS SEA Framework which address them. This helps to demonstrate that each SEA environmental issue has been addressed in the assessment of the LFRMS. Note that one of the SEA topics, 'air' was scoped out of the assessment due to the fact that the type of measures to be included in the LFRMS are not considered likely to have an impact on air quality, as they relate to flood risk management and will not result in emissions to air that could affect air quality.

**Table 6 – SEA Environmental Topics and SEA Objectives**

SEA Environmental Topic	Relevant SEA Objective(s)
Biodiversity, Flora and Fauna	2
Population and Human Health	1
Soil	3
Water	4
Air	Scoped out of assessment
Climatic Factors	5
Material Assets	6
Cultural Heritage	7
Landscape	7

### Use of the SEA Framework Assessment

- 4.5 Within the assessment, symbols have been used against each SEA objective to show whether an effect is likely to be significant (positive or negative), less significant, no implications or uncertain. The key is set out in Table 7 below.

**Table 7 – Key Used in the Assessment of the Strategy**

Colour Code	Meaning
+/-	<b>Significant Implications</b> - based on the information available, positive or negative environmental effects are likely to occur which will require further investigation and potential mitigation by those responsible for progressing the action.
+/-	<b>Less Significant Implications</b> - potential positive or negative effects could occur but information is not yet available on what is proposed to enable the identification of potential effects. Opportunities may also exist to achieve wider environmental benefits.
0	<b>Little or no implications</b> - No environmental effects anticipated.
?	<b>Uncertainties</b> - For actions in the Action Plan for which there is considerable uncertainty, a checklist should be used by those progressing the actions to ensure that there is sufficient information to determine whether the proposed action is likely to be compliant with the Habitats Regulations, the Water Framework Directive and the SEA objectives.

- 4.6 The likely effects of the LFRMS need to be determined and their significance assessed, and this inevitably requires a series of judgements to be made. This assessment has attempted to differentiate between the most significant effects and other more minor effects through the use of symbols.
- 4.7 In terms of timescales for when effects are likely to occur, the LFRMS states that it is a 'living document' designed to establish a sound evidence and knowledge base, which will help to develop a longer term investment programme for flood risk management measures across the Borough. It is anticipated that the LFRMS will become more focussed on the delivery of an affordable and funded programme of flood risk management works in the longer term (5-10 years). Therefore in most instances, it is assumed that the environmental side effects identified will occur in the longer term, and are likely to be permanent (as far as can be reasonably predicted). However, there are some effects that while not taking place until the longer term, may only be temporary, as they would only occur during the initial works to achieve the flood risk management measure (e.g. noise, dust, sediment release etc)

## 5 SEA Findings

- 5.1 In general, the LFRMS objectives have been found to have positive effects on the environment, due to the LFRMS being a proactive strategy to reduce and manage flooding within Bury.
- 5.2 Some of the LFRMS objectives and associated measures were categorised as having 'less significant implications', however an element of uncertainty was attached to this conclusion as it is impossible to identify at this stage what their full effect/s might be and their magnitude, location and timing.
- 5.3 It was determined that for these actions, plus any new actions which are to be included as part of each annual review of the action plan, there needs to be a checklist to ensure there is sufficient information to determine whether the action is likely to be compliant with the Habitats Regulations, the Water Framework Directive and the action is addressing the SEA objective.
- 5.4 Therefore, when taken as a whole, the cumulative effects of the LFRMS are considered to be overall positive for the environment, due to the likely outcomes of implementing the LFRMS being a reduction in flooding and associated risk to the natural and built environment within Bury.
- 5.5 An SEA matrix has been prepared, which presents a detailed assessment of each of the objectives (and associated measures) in the LFRMS against each of the seven SEA objectives. The SEA matrix can be found in Appendix 1. A summary is presented in Table 8 below.



**Table 8 – SEA Assessment Summary**

	SEA Objective 1 – Population and Human Health	SEA Objective 2 – Biodiversity, Flora and Fauna	SEA Objective 3 – Soil	SEA Objective 4 – Water	SEA Objective 5 – Climatic Factors	SEA Objective 6 – Material Assets	SEA Objective 7 – Cultural, Architectural and Landscape
To gain a strategic understanding of flood risk from all sources in Bury	+	+	+	+	+	+	+/-?
To manage the likelihood of flooding within the Borough	+	+/-?	+/-?	+/-?	+	+	+/-?
To help Bury residents to manage their own risk.	+	+/-?	+/-?	+/-?	+	+/-?	+/-?
To ensure that new development in Bury reduces rather than increases flood risk	++	+	+	+	++	++	+
To take a sustainable approach to flood risk management within the Borough, which balances economic, environmental and social benefits with flood risk policies and programmes	++	++	++	++	++	++	++
To improve flood preparation, warning and post flood recovery	+	+/-?	+/-?	+/-?	+	+	+/-?
To endeavour to direct flood risk funding to areas most at need or where solutions will be most effective.	+	+/-?	+/-?	+/?	++	+	+

### SEA Objective 1: To minimise the risk of flooding and to promote awareness of flooding but to manage expectations

- 5.6 All of the LFRMS objectives and associated measures will have either positive or significant positive effects on SEA Objective 1, as the measures have all been designed with the aim of reducing overall flood risk. There is an element of uncertainty as it cannot yet be known whether private land owners will be receptive to the advice and guidance to be provided by the Council and therefore whether the potential benefits in relation to minimising the risk of flooding will be achieved.
- 5.7 Significant positive effects are predicted for LFRMS Objective 4 (ensure that new development in Bury reduces rather than increases flood risk). This is because measures associated with this objective are considered likely to have a particularly strong and direct impact on reducing the extent of overall flood risk to the built environment and ensure that new development will be built to high standards, incorporating flood risk management measures and are located appropriately.
- 5.8 No negative effects from the LFRMS objectives, minor or significant, have been identified in relation to this SEA objective.

### SEA Objective 2: To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features

- 5.9 While all of the LFRMS objectives are likely to have minor positive effects on protecting and enhancing biodiversity within the Borough (whether designated or not for nature conservation importance), the potential positive effects associated with LFRMS Objective 2 (manage the likelihood of flooding), 3 (help Bury residents to manage their own risk), 6 (improve flood preparation, warning and post flood recovery) and 7 (endeavour to direct flood risk funding to areas most at need or where solutions will be most effective) are uncertain. This is because the measures attached to those LFRMS objectives may result in land management, clearance of watercourses and the removal of culverts. While the broad effects of those actions on biodiversity are likely to be positive (mainly as a result of reduced overall flood risk which could otherwise have adverse effects on some habitats and species), it is not possible to rule out the potential for localised negative effects on habitats and species as a result of the flood management activities, particularly when the activities are considered in combination.
- 5.10 However the Habitats Regulation Assessment Screening Report which has also been carried out in relation to the LFRMS concluded that the implementation of the LFRMS will not have any significant impacts.

### SEA Objective 3: To conserve soil resources and reduce land contamination

- 5.11 All of the LFRMS objectives are considered likely to have minor positive effects on the conservation of soil resources and reduction

in land contamination. This is due to the fact that the measures associated with each LFRMS objective will combine to reduce overall flood risk. This will reduce the likelihood of flood events damaging soils, for example as a result of rapid run-off causing soil erosion.

- 5.12 However there are a small number of uncertainties attached to some of the minor positive effects, where specific works will result from the measures and where it is not possible to tell whether those works may have an effect on land use or soil quality. This is the case for Objective 2 (manage the likelihood of flooding), Objective 3 (help Bury residents to manage their own risk), Objective 6 (flood preparation, warning and post flood recovery) and Objective 7 (direct flood risk funding to areas most at need).

#### SEA Objective 4: To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources

- 5.13 All of the LFRMS objectives are considered likely to have minor positive effects on improving the quality of controlled waters and sustainably managing water resources due to the fact that the measures associated with each LFRMS objective will combine to reduce overall flood risk. This will reduce the likelihood of flood events leading to water pollution, for example as a result of rapid surface run-off causing soil erosion and washing sediments and/or chemical fertilisers into watercourses.
- 5.14 However, there are a small number of uncertainties attached to some of the minor positive effects, where specific works will result from the measures but where it is not possible to tell whether those works may have an effect on water pollution due to a lack of specific information about the nature and location of the works. This is the case for the LFRMS Objective 2 (manage the likelihood of flooding), Objective 3 (help Bury residents to manage their own risk), Objective 6 (flood preparation, warning and post flood recovery) and Objective 7 (direct flood risk funding to areas most of need).

#### SEA Objective 5: To reduce contributions to and promote adaptation to the impacts of climate change

- 5.15 All of the LFRMS objectives and associated measures are likely to have either a positive or significant positive effects on SEA objective 5 as there is a specific section on the impact of climate change on future flood risk which considers the implications of climate change with respect to flooding. Significant positive effects are predicted for LFRMS Objective 4 (ensure new development reduces rather than increases flood risk) and Objective 7 (direct flood risk funding to areas most at need). This is because measures associated with this objective are considered likely to have a particularly strong and direct impact on reducing the extent of overall flood risk to the built environment and ensure that new development will be built to high standards, incorporating flood risk management measures and located appropriately.

**SEA Objective 6: To minimise adverse impacts of local flood risk on key infrastructure, land assets and properties**

- 5.16 All of the LFRMS objectives and associated measures are likely to have either positive or significant positive effects on SEA Objective 6, as the measures have all been designed with the aim of reducing overall flood risk, including the risk to key infrastructure, land assets and properties. However, there are uncertainties with LFRMS Objective 3 (help Bury residents to manage their own risk) as it cannot yet be known whether private land owners will be receptive to the advice and guidance to be provided by the Council and therefore whether the potential benefits in relation to minimising the risk of flooding will be achieved.
- 5.17 Significant positive effects are predicted for LFRMS Objective 4 (ensure that new development in Bury reduces rather than increases flood risk). This is because measures associated with this objective are considered likely to have a particularly strong and direct impact on reducing the extent of overall flood risk to the built environment and ensure that new development will be built to high standards, incorporating flood risk management measures and located appropriately.

**SEA Objective 7 – To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment**

- 5.18 All of the LFRMS objectives are to have a positive effect on the character of Bury's landscape, townscape, the countryside and the historic environment because the measures associated with each objective will combine to reduce the overall extent of flood risk, thereby reducing the likelihood of assets being adversely affected by flood events.
- 5.19 The effects of Objectives 1 (gain a strategic understanding of flood risk), 2 (manage the likelihood of flooding), 3 (help Bury residents to manage their own risk) and 6 (improve flood preparation, warning and post flood recovery) are unlikely to be direct as they will not result in physical works or actions that could affect the appearance of the area. There could potentially be uncertainties with these objectives as it is unknown at this moment, how landowners will deal with the advice they are given.
- 5.20 Positive effects have been identified in relation to LFRMS Objective 5 (sustainable approach to flood risk management) and Objective 7 (endeavour to direct flood risk funding to areas most at need or where solutions will be most effective) because actions such as the removal of culverts may result in watercourses being reintroduced into the landscape.

## 6 Proposed Monitoring Strategy

- 6.1 The SEA Directive requires that the responsible authority “monitor the significant environmental effects of the implementation of plans”. A monitoring framework is set out below which links the predicted impacts, effects and monitoring indicators. Once implemented, this should enable the responsible authority to determine at the earliest opportunity if any adverse effects are occurring as a result of the implementation of the LFRMS.
- 6.2 As discussed in Chapter 5, a number of the measures in the LFRMS could have potential significant positive effects on the SEA objectives. Furthermore no negative effects have been identified for SEA Objective 1 (minimise the risk of flooding and promote awareness of flooding). Therefore it is recommended that monitoring of environmental effects due to the implementation of the LFRMS is undertaken in relation only to those objectives where uncertain effects were identified.
- 6.3 To achieve efficiencies and ensure the environmental effects of implementing any of the LFRMS measures are monitored, SEA monitoring of the LFRMS should be conducted as part of the overall approach to monitoring achievement of the LFRMS measures. The LFRMS explains in Section 8 that it is a ‘living document’ which will develop as new information, expertise and resources influence the delivery of the measures outlined in the Strategy. The LFRMS will be monitored through an annual report.
- 6.4 Table 9 sets out a number of suggested indicators for monitoring the potential effects of implementing the LFRMS, drawing on indicators that will also be used for the Core Strategy sustainability monitoring where relevant. Note that the indicators proposed are included as suggestions at this stage, as it is recognised that some datasets may not be available for monitoring some of the environmental effects of the LFRMS, and that the indicators included may change as Bury Council finalises the monitoring framework for the Core Strategy.
- 6.5 In addition, the data used for monitoring in many cases will be provided by outside bodies.

**Table 9 – Proposed Indicators for monitoring the Bury LFRMS**

SEA Topic	Potential Negative Effect	Monitoring Indicator
Biodiversity, Flora and Fauna	Decrease in biodiversity from engineering works relating to the objectives and actions within the Action Plan	<ul style="list-style-type: none"> <li>• Change in areas of biodiversity importance;</li> <li>• Changes in condition to designated sites;</li> <li>• Achievement of Biodiversity Action Plan targets</li> </ul>
Soil	Uncertainties regarding whether specific works may have an effect on land use or soil quality.	<ul style="list-style-type: none"> <li>• Number of proposed and actual flood mitigation developments to be located within the Greenbelt;</li> <li>• Area/Number of incidences where Grade 1,2 or 3 soil is lost due to need for flood defence</li> </ul>
Water	Uncertainties regarding whether specific works may have an effect on water pollution.	<ul style="list-style-type: none"> <li>• Ecological status of rivers</li> <li>• Chemical status of rivers</li> <li>• Condition of water bodies (Water Framework Directive)</li> </ul>
Material Assets	Uncertainties regarding whether land owners will be receptive to the advice and guidance provided by the Council and therefore whether the potential benefits in relation to minimising the risk of flooding will be achieved.	<ul style="list-style-type: none"> <li>• Number and severity of incidents leading to disruption or damage to transport infrastructure;</li> <li>• Number and severity of incidents leading to disruption or damage to service provision.</li> </ul>

## 7 Conclusions and Next Steps

- 7.1 None of the objectives or measures in the final LFRMS are likely to have significant negative effects on any of the SEA objectives. This is because of the nature of the LFRMS, which has an underlying aim of environmental protection through flood risk management, meaning that the effects of the strategy are largely positive. Where uncertain effects have been identified with some potential for negative effects, mitigation should be provided by LFRMS measures which specifically aim to protect the environment.
- 7.2 In order to ensure positive effects of the LFRMS on the environment, it will be necessary to ensure that project level environmental assessment or appraisal feeds into the choice of location and scheme design for any new LFRMS measures and that detailed EIAs include measures to mitigate any adverse effects. An EIA screening opinion, which determines whether an EIA will be required, will need to be obtained from Natural England for any LFRMS measures that could potentially have a significant effect on the environment.

## Appendix 1 – SEA Matrices of the LFRMS

### LFRMS Objective 1: To gain a strategic understanding of flood risk from all sources in Bury

Actions associated with this LFRMS objective:

- Recording/Mapping flood incidents
- Carry out flood investigations
- Assessment of flood risk locations in SFRA/SWMP
- Record drainage and flood assets
- Maintain a flood risk asset register
- Obtain information from stakeholders
- Improve skills and knowledge of flood risk officers

SA Objectives	SEA Score	Justification
To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.	+	The measures associated with this LFRMS objective will not involve direct physical works to manage the risk of flooding to the Borough's communities, however they are expected to have an indirect positive effect on overall flood risk as they will combine to improve the evidence base and skills available to the Council for managing flood risk in the most appropriate and effective ways. In particular measure 1.3 involves an assessment of high flood risk locations identified in the SFRA and SWMP (which were informed in part by the presence of flood receptors including building premises and social infrastructure) – this will help to ensure that appropriate mitigation can be implemented in these areas.
To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features.	+	By combining to contribute to an overall reduction in flood risk in Bury (by improving the level of evidence and skills available to the Council for dealing with flood risk), the measures associated with this LFRMS objective should help to protect biodiversity from the potential adverse impacts of flood events (including both direct impacts and indirect impacts e.g. those resulting from water pollution caused by flooding). None of the measures associated



SA Objectives	SEA Score	Justification
		with this LFRMS objective will result directly in physical works or actions that could have an significant adverse impact on designated or undesignated biodiversity in the Borough, and as such the Habitats Regulations Assessment Screening Report that has been carried out in relation to the LFRMS concluded that the measures associated with this objective would not have any significant effect on the integrity of European sites around Bury.
To conserve soil resources and reduce land contamination.	+	By combining to contribute to an overall reduction in flood risk in Bury (by improving the level of evidence and skills available to the Council for dealing with flood risk), the measures associated with this LFRMS objective should help to protect land and soils and reduce the likelihood of adverse effects from flooding events (e.g. soil erosion caused by high levels of surface water run-off. None of the measures will result directly in physical works or actions that could affect land use.
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.	+	By combining to contribute to an overall reduction in flood risk (by improving the level of evidence and skills available to the Council for dealing with flood risk), the measures associated with this LFRMS objective should help to protect and improve water quality and sustainably manage water resources by reducing the likelihood of adverse impacts arising from flood events (e.g. as a result of soil erosion or run-off washing chemical fertilisers into watercourses). None of the measures associated with this LFRMS objective will result directly in physical works or actions that could have an adverse impact on water quality or water resources in the Borough.
To reduce contributions to and promote adaptation to	+	Capturing up to date hydrology data allows the causes of flood risk

SA Objectives	SEA Score	Justification
the impacts of climate change.		to be better understood in advance, therefore providing an opportunity to apply suitable mitigation that can avoid or maintain existing flooding incidents. This could help to mitigate the implications of climate change.
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.	+	Although measures associated with this LFRMS objective will not result directly in physical works to manage the risk of flooding to infrastructure, assets and properties, the measures should combine to have an indirect positive effect on overall flood risk by improving the level of evidence and skills available to the Council for dealing with flood risk. In particular, measure 1.3 involves the assessment of high flood risk locations identified in the SFRA and SWMP (which were informed in part by the presence of flood receptors including residential properties and key infrastructure) – this will help to ensure that appropriate mitigation can be implemented in these areas.
To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.	+/-?	The measures associated with this LFRMS objective are not considered likely to have a direct effect on the character of Bury as they will not result in any physical works or development; rather they relate to improving the evidence and skills available to the Council for managing flood risk.

### **LFRMS Objective 2: To manage the likelihood of flooding within the Borough**

Actions associated with this LFRMS objective:

- Develop an affordable cyclical maintenance regime based on risk
- Develop a responsive, reactive maintenance regime based on risk
- Work with partners to identify schemes which will alleviate flood risk in the future

SA Objectives	SEA Score	Justification
To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.	+	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the overall risk of flooding in Bury. Maintaining the capacity of drainage systems through both regular and ad-hoc maintenance works will ensure that surface water drainage is maximised. While the overall effect of the measures will be positive, the effect is not expected to be significant as it is acknowledged in the measures that there will be resource constraints which may affect the frequency and extent of the cyclical maintenance regime to be carried out which may limit the extent of the potential positive effects.
To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features.	+/-?	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the overall risk of flooding and therefore the potential for adverse impacts on biodiversity (both direct impacts and indirect impacts e.g. those resulting from water pollution caused by flooding), as maintaining the capacity of drainage systems will ensure that surface water drainage is maximised. However, there is the potential that clearance works could have a direct effect on biodiversity (designated or undesignated) in the affected channels. It is not expected that these effects will be significant, particularly as there is likely to be resource constraints associated with the measures which may affect the frequency and extent of the cyclical maintenance regimes.
To conserve soil resources and reduce land contamination.	+/-?	Maintaining the capacity of drainage systems through both regular and ad-hoc maintenance works will ensure that surface water drainage is maximised, reducing runoff rates which could otherwise have a negative effect

SA Objectives	SEA Score	Justification
		<p>on soil quality by causing soil erosion. As such, a positive effect on this SEA objective is likely. Again, the effect is not likely to be significant due to the restrictions that the Council faces in terms of available resources to carry out a cyclical maintenance regime, meaning that the work can only be targeted in the highest flood risk areas. There are also potential negative uncertainties regarding whether specific works may have an effect on land use or soil quality.</p>
<p>To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.</p>	<p>+/-?</p>	<p>Maintaining the capacity of drainage systems as a result of both regular and ad-hoc maintenance works will ensure that surface water drainage is maximised, reducing runoff rates which could otherwise have a negative effect on water quality and water resources (e.g. as a result of soil erosion or run-off washing sediments and/or chemical fertilisers into watercourses). As such, a positive effect on water quality and water resources is likely. Again, the effect is not likely to be significant due to the restrictions that the Council faces in terms of resources to carry out maintenance, meaning that the cyclical regime can only be targeted in the highest flood risk areas which could potentially limit the extent of the positive effects. Furthermore there are a small number of uncertainties where it is not possible to tell whether specific works may have an effect on water pollution due to a lack of specific information about the nature and location of works.</p>
<p>To reduce contributions to and promote adaptation to the impacts of climate change.</p>	<p>+</p>	<p>The measures associated with this LFRMS objective will combine to have a positive impact on reducing the overall risk of flooding and therefore could help to address the implications of climate change.</p>

SA Objectives	SEA Score	Justification
<p>Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.</p>	<p>+</p>	<p>The measures associated with this LFRMS objective will combine to have a positive impact on reducing the overall risk of flooding (including the risk to key infrastructure, assets and properties) in Bury, as maintaining the capacity of drainage systems through both regular and ad-hoc maintenance works will ensure that surface water drainage is maximised. While the overall effect of the measures will be positive, the effect is not expected to be significant as it is acknowledged in the measures that there will be resource constraints which may affect the frequency and extent of the cyclical maintenance regime to be carried out, which may limit the extent of the potential positive effects.</p>
<p>To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.</p>	<p>+/-?</p>	<p>Work to maximise the capacity of drainage systems through regular and ad-hoc maintenance is not considered likely to have a direct effect on local character. However the measures associated with this LFRMS objective will combine to reduce the overall risk of flooding as a result of both regular and ad-hoc maintenance works which will ensure that surface water drainage is maximised. Positive effects are therefore likely in relation to the protection of the historic environment as the likelihood of both designated and undesignated historic assets such as listed buildings being adversely affected by flooding would be reduced. Again, the effects are not expected to be significant as it is acknowledged in the measures that there will be resource constraints which may affect the frequency and extent of the cyclical maintenance regime to be carried out, which may limit the extent of the potential positive effects.</p>

### LFRMS Objective 3: To help Bury residents to manage their own risk

Actions associated with this LFRMS objective:

- Publish and distribute information explaining responsibilities, local flood risk, property protection/resilience
- Involve local communities in local initiatives and schemes
- Improve and maintain the Council’s flood risk management web pages

SA Objectives	SEA Score	Justification
To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.	+	While the measures associated with this LFRMS objective will not involve the Council undertaking direct physical works to manage the risk of flooding to the Borough’s communities, measure 3.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage overall flood risk (including that potentially affecting community assets). The three measures in combination should have further indirect positive effects on reducing overall flood risk as they will combine to improve local people’s awareness and understanding of their responsibilities in relation to managing flood risk. In particular, encouraging local people to implement appropriate resilience measures to protect their property (measure 3.1) should have positive effects by helping to ensure that community and economic assets are as well protected as possible, thereby reducing the extent of damage in the event of flooding.
To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features.	+/-?	By contributing to an overall reduction in flood risk (by improving local people’s understanding of their responsibilities in relation to managing flood risk), the measures associated with this LFRMS objective should have an indirect positive effect on the protection of habitats and species from the potential adverse impacts of flood

SA Objectives	SEA Score	Justification
		<p>events (both direct impacts and indirect impacts e.g. those resulting from water pollution caused by flooding). None of the measures will result directly in physical works being carried out by the Council that could have an adverse impact on designated or undesignated biodiversity; however measure 3.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk.</p> <p>Depending on the nature of those measures and the locations at which they are implemented, there could potentially be impacts on biodiversity. In light of this, the potential for measure 3.1 to have such effects remains uncertain. As such, the potential positive effect associated with this SEA objective is currently uncertain.</p>
To conserve soil resources and reduce land contamination.	+/-?	<p>By contributing to a reduction in overall flood risk in Bury (by improving local people's understanding of their responsibilities in relation to managing flood risk), the measures associated with this LFRMS objective should have an indirect positive effect on the protection of land and soils by reducing the likelihood of their being adversely affected by flooding events (e.g. soil erosion caused by rapid surface water run-off). None of the measures will result directly in physical works being undertaken by the Council that could affect land use in the Borough; however, measure 3.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures, there could potentially be impacts on the prudent use of land and soil</p>

SA Objectives	SEA Score	Justification
		quality; therefore the likely positive effect associated with this objective is currently uncertain.
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.	+/-?	By contributing to an overall reduction in flood risk (by improving local people's understanding of their responsibilities in relation to managing flood risk), the measures associated with this LFRMS objective should have an indirect positive effect on the protection of water quality and water resources by reducing the likelihood of adverse impacts occurring from flooding events (e.g. as a result of soil erosion or run-off washing chemical fertilisers into watercourses). None of the measures will result directly in physical works being carried out by the Council that could have an adverse impact on water quality or water resources; however measure 3.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures and the locations at which they are implemented, there could potentially be impacts on water quality or water resources. As such, the potential positive effect associated with this SEA objective is currently uncertain.
To reduce contributions to and promote adaptation to the impacts of climate change.	+	The measures associated with this objective seek to improve the level of understanding of flood risk. This could heighten people's awareness of localised problems and therefore increase the likelihood of providing suitable mitigation. This could help to provide a local response to climate change implications.
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.	+/-?	While the measures associated with this LFRMS objective will not involve the Council undertaking direct physical works to manage the risk of flooding to key



SA Objectives	SEA Score	Justification
		<p>infrastructure, assets and properties in Bury, measure 3.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage overall flood risk (including that potentially affecting properties). The three measures in combination should have further indirect positive effects on reducing overall flood risk as they will combine to improve local people's awareness and understanding of their responsibilities in relation to managing flood risk. In particular, encouraging local people to implement appropriate resilience measures to protect their property (measure 3.1) should have positive effects by helping to ensure that residential properties are as well protected as possible, thereby reducing the extent of damage in the event of flooding.</p> <p>However there are also uncertainties as it cannot yet be known whether private land owners will be receptive to the advice and guidance to be provided by the Council and therefore whether the potential benefits in relation to minimising the risk of flooding will be achieved.</p>
<p>To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.</p>	<p>+/-?</p>	<p>The measures associated with this LFRMS objective will not result directly in physical works being undertaken by the Council that could affect land use in the Borough. However measure 3.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures, there could potentially be impacts on local character; however the potential effects are uncertain without more information about the nature of any such actions and the location.</p>

#### LFRMS Objective 4: To ensure that new development in Bury reduces rather than increases flood risk

Actions associated with this LFRMS objective:

- Develop and apply a robust local policy on flood risk management and drainage solutions on new development sites
- Develop a process with the Planning Department to create clear advice and direction to developers on flood risk management and drainage
- Establish the SuDS Approval Body (SAB)

SA Objectives	SEA Score	Justification
To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.	++	The measures associated with this LFRMS objective will combine to ensure that new development incorporates robust flood risk management measures. For example, under measure 4.1, ambitious targets will be set for permitted discharges from new and redeveloped sites and measure 4.2 aims to better integrate flood risk management considerations into planning. As well as reducing levels of flood risk at new development sites, the measures will contribute to reducing the overall flood risk throughout the Borough.
To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features.	+	The measures associated with this LFRMS objective will combine to contribute to a reduction in the overall extent of flood risk throughout Bury by ensuring that new development incorporates flood risk management measures such as green and blue infrastructure. This is likely to have an indirect positive effect on biodiversity by reducing the likelihood of flood events having negative effects (both directly and indirectly e.g. as a result of water pollution caused by flooding). The measures relate to criteria for new development, but will not themselves lead directly to new developments which could affect designated or undesignated biodiversity.
To conserve soil resources and reduce land	+	The measures associated with this LFRMS objective will combine to

SA Objectives	SEA Score	Justification
contamination.		contribute to a reduction in overall flood risk throughout Bury by ensuring that new development incorporates flood risk management measures. This is likely to have an indirect positive effect on soil quality by reducing the likelihood of flooding events having negative effects on soils (e.g. as a result of soil erosion caused by rapid surface water run-off). The measures relate to criteria for new development, but will not themselves lead directly to new developments which could affect the use of land or soil quality.
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.	+	The measures associated with this LFRMS objective will combine to contribute to a reduction in the overall extent of flood risk throughout Bury by ensuring that new development incorporates flood risk management measures. This is likely to have an indirect positive effect on water quality and water resources by reducing the chances of flooding events having negative effects (e.g. as a result of soil erosion or run-off washing chemical fertilisers into watercourses). The measures relate to criteria for new development, but will not themselves lead directly to new developments which could affect water quality or water resources.
To reduce contributions to and promote adaptation to the impacts of climate change.	++	Encouraging the use of SuDS and applying stricter restrictions with regards to discharge rates, volumes, storage for watercourses could help to address the effects of climate change. Therefore it is likely that this LFRMS Objective will have a positive influence on this SA objective.
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.	++	The measures associated with this LFRMS objective will combine to ensure that new development (including that of key infrastructure, assets and properties) incorporates robust

SA Objectives	SEA Score	Justification
		flood risk management measures. For example, under measure 4.1, ambitious targets will be set for permitted discharges from new and redeveloped sites and measure 4.2 aims to better integrate flood risk management considerations into planning. As well as reducing levels of flood risk at new development sites, the measures will contribute to reducing the overall flood risk throughout the Borough (including risk of flooding to key infrastructure, assets and residential properties).
To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.	+	The measures associated with this LFRMS objective are not considered likely to have a direct effect on local character as they will not themselves lead directly to new developments which could affect local character. The measures however will combine to contribute to a reduction in the overall extent of flood risk by ensuring that new development incorporates flood risk management measures. This is likely to have an indirect positive effect on the historic environment by reducing the likelihood of flood events having negative effects on both designated and undesignated heritage assets such as listed buildings. The measures relate to criteria for new development, but will not themselves lead directly to new developments which could affect the historic environment.

**LFRMS Objective 5: To take a sustainable approach to flood risk management within the Borough, which balances economic, environmental and social benefits with flood risk policies and programmes**

Actions associated with this LFRMS objective:

- Undertake a Strategic Environmental Assessment, Habitats Regulations Assessment and Water Framework Directive compliance check of the LFRMS
- Work with the Environment Agency and Natural England to embed policies from River Basin Management Plans, local environmental

policies and designated protected sites into FRM procedures and programmes

- Encourage natural flood risk management
- Seek to provide blue and green infrastructure throughout the Borough.

SA Objectives	SEA Score	Justification
<p>To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.</p>	<p>++</p>	<p>Ensuring that the likely environmental implications of the LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), may have a positive effect on minimising the risk of flooding. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures.</p>
<p>To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features.</p>	<p>++</p>	<p>Ensuring that the likely environmental implications of the LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), will have a positive effect on biodiversity, flora and fauna, geological and geomorphological features as all measures in the LFRMS are being assessed for their potential impacts on this issue. In particular, the Strategy's objective of compliance with the Water Framework Directive will help to protect biodiversity and ensure green infrastructure and ecological enhancements will be delivered. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures. In addition, working with the Environment Agency to ensure that</p>

SA Objectives	SEA Score	Justification
		<p>flood risk management activities are undertaken in line with local environmental policies and policies from local river basin management plans and will require Environmental Impact Assessments where relevant (measure 5.2) will add further protection to the Borough's natural environment, including the Borough's SSI at Ash Clough. The measures associated with this LFRMS objective will not lead directly to new development which could affect biodiversity. For this reason, the Habitats Regulations Assessment that has been carried out in relation to the LFRMS concluded that the measures associated with this LFRMS objective would not have any significant effects on the integrity of European sites.</p>
<p>To conserve soil resources and reduce land contamination.</p>	<p>++</p>	<p>Ensuring that the likely environmental implications of the LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), may have a positive effect on soil resources, as all measures in the LFRMS are being assessed for their potential impacts on this issue. The Strategy will encourage flood risk management activities such as de-culverting and tree planting, all of which will provide opportunities to conserve soil resources and reduce land contamination. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures. In addition, ensuring that flood risk management activities within the Borough are undertaken in line with local environmental policies and policies from local River Basin Management Plans, and requiring</p>

SA Objectives	SEA Score	Justification
		Environmental Impact Assessments where relevant (measure 5.2) will add further protection to the Borough's natural environmental assets, including land and soils. The measures associated with this LFRMS objective will not lead directly to new development which could affect land use or soil quality.
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.	+ +	Ensuring that the likely environmental implications of the LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), may have a positive effect on water resources, as all measures in the LFRMS are being assessed for their potential impacts on this issue. The Strategy will promote the creation of sustainable drainage systems in new developments, such as ponds, swales and other green infrastructure, all of which can provide opportunities to manage water resources. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures. In addition, ensuring that flood risk management activities within the Borough are undertaken in line with local environmental policies and policies from local River Basin Management Plans, and requiring Environmental Impact Assessments where relevant (measure 5.2) will add further protection to the Borough's natural environmental assets, including water quality and water resources. The measures associated with this LFRMS objective will not lead directly to new development which could affect water quality or resources.
To reduce contributions to and promote adaptation to	+ +	Ensuring that the likely environmental implications of the

SA Objectives	SEA Score	Justification
the impacts of climate change.		LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), may have a positive effect on climate change, as all measures in the LFRMS are being assessed for their potential impacts on this issue. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures.
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.	+ +	Ensuring that the likely environmental implications of the LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), may have a positive effect on key infrastructure, land assets and properties, as all measures in the LFRMS are being assessed for their potential impacts on this issue. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures.



SA Objectives	SEA Score	Justification
To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.	++	<p>Ensuring that the likely environmental implications of the LFRMS are considered through a Strategic Environmental Assessment, which will be monitored as the Strategy is implemented (measure 5.1), may have a positive effect on landscapes, townscapes and the historic environment, as all measures in the LFRMS are being assessed for their potential impacts on this issue. The fact that the SEA is being undertaken iteratively allows for any potential negative impacts to be identified and addressed, either by amending the LFRMS measures as appropriate or by identifying appropriate mitigation measures.</p> <p>In addition, ensuring that flood risk management activities within the Borough are undertaken in line with local environmental policies and policies from local River Basin Management Plans, and requiring Environmental Impact Assessments where relevant (measure 5.2) will add further protection to the Borough's landscapes and historic environment. The measures associated with this LFRMS objective will not lead directly to new development which could affect the setting of heritage assets.</p>

### **LFRMS Objective 6: To improve flood preparation, warning and post flood recovery**

Actions associated with this LFRMS objective:

- Publish and distribute information explaining responsibilities, local flood risk, property protection/resilience
- Involve local communities in local initiatives and schemes

SA Objectives	SEA Score	Justification
To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.	+	While the measures associated with this LFRMS objective will not involve the Council undertaking direct physical works to manage the risk of flooding to the

SA Objectives	SEA Score	Justification
		<p>Borough's communities, the measures involve the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage overall flood risk. The two measures in combination should have further indirect positive effects on reducing overall flood risk as they will combine to improve local people's awareness and understanding of their responsibilities in relation to managing flood risk. In particular, encouraging local people to implement appropriate resilience measures to protect their property (measure 6.1) should have positive effects by helping to ensure that communities are as well protected as possible, thereby reducing the extent of damage in the event of flooding.</p>
<p>To protect, enhance and restore biodiversity, flora and fauna, geological and geomorphological features.</p>	<p>+/-?</p>	<p>By contributing to an overall reduction in flood risk (by improving local people's understanding of their responsibilities in relation to managing flood risk), the measures associated with this LFRMS objective should have an indirect positive effect on the protection of habitats and species from the potential adverse impacts of flood events (both direct impacts and indirect impacts e.g. those resulting from water pollution caused by flooding). None of the measures will result directly in physical works being carried out by the Council that could have an adverse impact on designated or undesignated biodiversity; however measure 6.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures and the locations at which they are implemented, there</p>

SA Objectives	SEA Score	Justification
		could potentially be impacts on biodiversity. As such, the potential positive effects associated with this SEA objective are currently uncertain.
To conserve soil resources and reduce land contamination.	+/-?	By contributing to an reduction in overall flood risk in Bury (by improving local people's understanding of their responsibilities in relation to managing flood risk), the measures associated with this LFRMS objective should have an indirect positive effect on the protection of land and soils by reducing the likelihood of their being adversely affected by flooding events (e.g. soil erosion caused by rapid surface water run-off). None of the measures will result directly in physical works being undertaken by the Council that could affect land use in the Borough; however, measure 6.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures, there could potentially be impacts on the prudent use of land and soil quality; therefore the likely positive effect associated with this objective is currently uncertain.
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.	+/-?	By contributing to an overall reduction in flood risk (by improving local people's understanding of their responsibilities in relation to managing flood risk), the measures associated with this LFRMS objective should have an indirect positive effect on the protection of water quality and water resources by reducing the likelihood of adverse impacts occurring from flooding events (e.g. as a result of soil erosion or run-off washing chemical fertilisers into watercourses). None of the measures will result directly in

SA Objectives	SEA Score	Justification
		physical works being carried out by the Council that could have an adverse impact on water quality or water resources; however measure 6.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures and the locations at which they are implemented, there could potentially be impacts on water quality or water resources. As such, the potential positive effect associated with this SEA objective is currently uncertain.
To reduce contributions to and promote adaptation to the impacts of climate change.	+	The measures associated with this objective seek to improve the level of understanding of flood risk. This could heighten people's awareness of localised problems and therefore increase the likelihood of providing suitable mitigation. This could help to provide a local response to climate change implications.
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.	+	While the measures associated with this LFRMS objective will not involve the Council undertaking direct physical works to manage the risk of flooding to key infrastructure, assets and properties in Bury, measure 6.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage overall flood risk (including that potentially affecting residential properties). The two measures in combination should have further indirect positive effects on reducing overall flood risk as they will combine to improve local people's awareness and understanding of their responsibilities in relation to managing flood risk. In particular, encouraging local people to implement appropriate resilience measures to protect their property

SA Objectives	SEA Score	Justification
		(measure 6.1) should have positive effects by helping to ensure that infrastructure, assets and properties are as well protected as possible, thereby reducing the extent of damage in the event of flooding.
To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.	+/-?	While neither of the measures associated with this LFRMS objective will result directly in physical works being undertaken by the Council that could affect land use in the Borough, measure 6.1 involves the Council distributing advice to landowners with regards to the type of measures that they could employ on their land to manage local flood risk. Depending on the nature of those measures, there could potentially be impacts on local character; however the potential effects are uncertain without more information about the nature of any such actions and the location. The measures associated with this LFRMS objective are not considered likely to have a direct effect on the historic environment.

**LFRMS Objective 7: To endeavour to direct flood risk funding to areas most at need or where solutions will be most effective**

Actions associated with this LFRMS objective:

- Continue to bid for relevant funding as and when the opportunity arises, to support future projects and flood alleviation schemes
- Ensure Community Infrastructure Plans and Transport Infrastructure Plans are influenced by this Strategy and developer funding is sought where considered appropriate and necessary.

SA Objectives	SEA Score	Justification
To minimise the risk of flooding and to promote awareness of flooding but to manage expectations.	+	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the risk of flooding in Bury, by ensuring that a realistic and financially deliverable programme of works to manage flood risk is developed
To protect, enhance and	+/-?	The measures associated with this

SA Objectives	SEA Score	Justification
restore biodiversity, flora and fauna, geological and geomorphological features.		LFRMS objective will combine to have a positive impact on reducing the overall risk of flooding in Bury by ensuring that a realistic and financially deliverable programme of works to manage flood risk is developed. In this way, a positive effect on biodiversity is predicted as the likelihood of adverse effects from flood events (both direct impacts and indirect impacts e.g. those resulting from water pollution caused by flooding) would be reduced. However the potential for this is uncertain without more detailed information about the nature and location of the works to be carried out. As such, the likely effect of these measures is positive, but with some uncertainties attached.
To conserve soil resources and reduce land contamination.	+/-?	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the risk of flooding in Bury by ensuring that a realistic and financially deliverable programme of works to manage flood risk is developed. In this way, a positive effect on soil quality is likely as the likelihood of adverse effects from flood events (e.g. as a result of rapid surface water runoff causing soil erosion) would be reduced. As such, the likely effect of these measures is positive, but with some uncertainties attached.
To protect and improve the quality of controlled waters in Bury and to sustainably manage water resources.	+/-?	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the overall risk of flooding in Bury by ensuring that a realistic and financially deliverable programme of works to manage flood risk is developed. In this way, a positive effect on water quality and water resources is likely as the likelihood of adverse effects from flood events (e.g. as a result of soil erosion or run-off washing chemical fertilisers into watercourses) would be reduced.

SA Objectives	SEA Score	Justification
		As such, the likely effect of these measures is positive, but with some uncertainties attached.
To reduce contributions to and promote adaptation to the impacts of climate change.	++	Identifying potential areas of flood risk and other mitigation measures could result in a positive effect over this objective. The Borough could be better prepared in dealing with climate change and the associated implications.
Minimise adverse impacts of local flood risk on key infrastructure, land assets and properties.	+	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the risk of flooding (including that facing key infrastructure, assets and properties) in Bury, by ensuring that a realistic and financially deliverable programme of works to manage flood risk is developed
To protect and enhance and make accessible for enjoyment, the diversity and distinctiveness of landscapes, townscapes, the countryside and the historic environment.	+	The measures associated with this LFRMS objective will combine to have a positive impact on reducing the risk of flooding in Bury by ensuring that a realistic and financially deliverable programme of works to manage flood risk is developed. In this way, a positive effect on the landscape and the historic environment is likely as the likelihood of adverse effects from flood events on both designated and undesignated assets would be reduced.



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3 Knowsley Place, Duke Street, Bury, BL9 0EJ  
(November 2013)