City of Bradford MBC Local Flood Risk Management Strategy - Strategic Environmental Assessment

Statement of Environmental Particulars

FINAL Report

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Revision History

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Draft report v1.0		Kirsty Breaks
Final Report v1.1	District references and amendments to Table 3.1 and Table 5.1	Kirsty Breaks

Contract

This report describes work commissioned by City of Bradford Metropolitan District Council and Matthew Williams and Charlotte Beattie of JBA Consulting carried out this work.

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Purpose

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Abbreviations

HRA	Habitats Regulations Assessment
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
ODPM	Office of the Deputy Prime Minister
SEA	Strategic Environmental Assessment

1 Introduction

1.1 Introduction

Bradford Council has developed a Local Flood Risk Management Strategy (LFRMS). As a Lead Local Flood Authority (LLFA) under the Floods and Water Management Act 2010 they are responsible for the management of local flood risk, including from surface runoff, groundwater and flooding from ordinary watercourses (smaller rivers and streams). JBA Consulting was commissioned by City of Bradford Metropolitan District Council (MDC) to undertake a Strategic Environmental Assessment (SEA) for the proposed LFRMS.

1.2 Strategic Environmental Assessment

1.2.1 Purpose of SEA

The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on issues such as “biodiversity, population, human health, fauna, flora, soil, water, air, climate, material assets including architectural and archaeological heritage, landscape and the interrelationship between the above factors” (Annex 1(f), European Directive 2001/42/EC).

1.2.2 Legislative Regime

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

The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the ‘SEA Regulations’). The SEA Regulations form the basis by which all SEAs are carried out to assess the effects and impacts of certain plans and programmes on the environment. In conjunction with the SEA Regulations, an ODPM publication, *A Practical Guide to the Strategic Environmental Assessment Directive* (ODPM, 2005) was issued.

1.3 Purpose of the Statement of Environmental Particulars

This Statement of Environmental Particulars is a statutory requirement under the 'SEA Regulations'. This document has been prepared in compliance with these regulations and demonstrates how the LFRMS SEA Environmental Report and consultation responses have been considered and taken into account in the finalised and approved LFRMS.

2 Integration of Environmental Considerations into the Strategy

Environmental considerations have been taken into account have fed into the final preparations of the strategy, as follows:

- ***Strategy Preparation -*** The Strategy is focussed on providing a framework for the District with regards to flood risk management, with environmental (including ecological, social, cultural and economic) receptors taking focal consideration in its development.
- ***SEA -*** Through the SEA process the LFRMS objectives were assessed against SEA objectives to identify potential impacts (positive, negative, or neutral) on the identified environmental receptors within the District. LFRMS actions to be implemented under the LFRMS objectives were also scrutinised to identify potential environmental impacts.
- ***Habitat Regulations Assessment -*** A Habitats Regulations Assessment (HRA) was undertaken. Through this process the potential impacts on European sites from the LFRMS, alone and in-combination with other plans and programmes, were identified.
- ***Stakeholder Consultation -*** at all relevant stages of the strategy preparation, SEA and HRA consultation has been undertaken with other risk management authorities, the required statutory consultees and also the general public.

3 Environmental Report

The LFRMS aims to promote objectives and measures that reduce flood risk within the District, while understanding the costs and resources available. The LFRMS objectives aim to provide a mechanism through which appropriate Flood Risk Management (FRM) activities can be delivered, such as enabling people and public bodies to work together. The LFRMS is an important tool to protect vulnerable communities and help deliver sustainable regeneration and growth.

This SEA has been undertaken to identify the likely significant environmental effects of implementation of the LFRMS. A proportionate approach was adopted towards establishing the scope of the SEA, reflecting the high-level nature of the LFRMS.

A range of different strategy options for delivering the LFRMS have been assessed at a strategic level against the SEA objectives. These alternatives include the 'do nothing' scenario, where no action is taken and existing assets and ordinary watercourses are abandoned, and the 'maintain current flood risk' scenario, where existing assets and watercourses are maintained as present in line with current levels of flood risk.

The assessment indicates that the 'do nothing' approach is likely to result in a number of significant adverse effects, particularly due to increased flood risk to people and property, and effects on other environmental assets including water quality, historic assets and biodiversity, where increased flooding may create new pathways for the spread of invasive non-native species. These impacts would be likely to increase over time, as responsible bodies will be unable to incorporate precautionary measures in existing or new developments in a response to climate change pressures. Conversely, increased flood risk may result in greater connectivity between watercourses and their floodplains, offering opportunities for habitat creation/enhancement of benefit to a range of protected and notable species.

The option to 'maintain current flood risk' is likely to result in little or no additional impact on the environment in the short to medium term as the existing FRM regime continues to maintain existing levels of flood protection. However, in the future, as a result of climate change, flood risk will increase, resulting in many of the impacts identified under the 'do nothing' scenario, although potentially to a lesser extent and significance.

Therefore, the SEA identifies that implementation of the LFRMS to 'understand and manage flood risk from localised sources' is the only realistic approach to be employed by Bradford Council as it has the potential to provide a range of environmental benefits and offers a pro-active approach to managing flood risk.

Table 3-1 presents a summary of the effects of the LFRMS objectives and associated actions on the SEA Objectives which encompass ecological, social, cultural, and economic environmental receptors.

Table 3-1: Summary of Effects of LFRMS objectives/measures on SEA objectives

Receptor	SEA Objective		Summary of impacts	Timescale, probability and permanence of effects
Landscape	1	Protect the integrity of the District's urban and rural landscapes, and promote the key characteristics of the National Character Areas (NCA's), Landscape Character Areas (LCA's), the Green Belt, open spaces, public rights of way access land and the World Heritage Site in Saltaire.	The majority of LFRMS actions are focused upon gaining increased understanding of costs and better management for local flood risk issues, with balance towards sustainable development objectives. Measure BD10 has the potential to provide soil and water quality benefits by ensuring that the waterways are being maintained regularly, as this will reduce the likelihood of soil erosion,	There is a general lack of information at this stage to identify the types of effects that are likely to occur. Therefore, it is not possible to make a judgement as to the timescale over which they might occur, or their likely probability or permanence. It is reasonable to assume that any environmental effects might occur over a range of timescales and will comprise both temporary and permanent effects. It
Biodiversity, flora and	2	Protect and enhance designated and BAP habitats and species in		

fauna		the District.	pollution, and water contamination. Given the broad scale of the measures and lack of information at this stage regarding the type or scale of FRM interventions that might take place, these actions have been scored as neutral for most of the SEA objectives, and those associated with the natural environment. However, these actions could have a range of environmental effects, both positive and negative, depending upon the FRM measures they deliver, and they should be subject to thorough environmental assessment at a project stage to ensure they are sustainable and are delivered in accordance with the wider objectives of the LFRMS. It is particularly important that any potential effects are considered cumulatively across the programme of LFRMS actions as the strategy proposes many actions which together could combine to cause significant effects, particularly if a series of actions affect an individual or connected group of environmental features.	is important that individual actions are assessed at the project stage to determine their potential environmental impacts and that due regard is made to the LFRMS objectives that seek to protect and enhance the environment.
	3	Maintain and enhance habitat connectivity and wildlife corridors within the District.		
	4	Maintain existing, and where possible create new, riverine and wetland habitat to benefit migratory and aquatic species and fisheries, and maintain upstream access.		
Water environment	5	Improve the quality and quantity of the water in the District's rivers.		
	6	Do not inhibit achievement of the WFD objectives and contribute to their achievement where possible.		
Soils and geology	7	Reduce the risk of soil erosion and pollution.		
Historic environment	8	Preserve and, where appropriate enhance historic, environment and cultural sites in the District.		
Population	9	Minimise the risk of flooding to communities and social infrastructure.	The LFRMS measures seek to reduce flood risk through maintaining a variety of assets and minimise flood damage. These will improve local flood risk, and by understanding costs, provide a mechanism through which appropriate solutions can be developed. These actions are primarily focused on delivering benefits to people and property and each has the potential to contribute positively to these SEA objectives. Measure BD11 aims to reduce climate change vulnerability by utilising all available flood risk climate change information to deliver sustainable drainage outcomes, and	
Material assets	10	Increase the use of SuDS, particularly in new developments.		
	11	Minimise the impacts of flooding to the District's transport network and key critical infrastructure.		
Climate	12	Reduce vulnerability to climate change impacts and promote measures to enable adaptation to climate change impacts.		

			therefore has positive effects on both SEA objectives 10 and 12 (to increase the use of SuDS and reduce climate change vulnerability). At this stage, there is a general lack of information regarding how these actions may be delivered and what effects they might have, and therefore it is difficult to determine the scale or significance of any environmental benefits that might be achieved. Further assessment is required for each action as it is delivered so that the environmental effects, both positive and negative, in relation to the receptors encompassed by these SEA objectives, can be identified.	

4 SEA Recommendations

The assessment of the LFRMS objectives and measures has identified a number of areas where the LFRMS could be strengthened to ensure delivery of a sustainable approach. These areas are associated with social and financial aspects to managing flood risk within the District, and not directly aiming to implement FRM measures. Specifically, these apply to the following LFRMS objectives:

- Objective 1 – Improve Understanding of Flood Risk within Bradford Metropolitan District
- Objective 3 – Communicate Flood Risk to Partners and Stakeholders
- Objective 6 – Improve Flood Response and Post Flood Recovery

The LFRMS primarily benefits SEA objectives 9 and 11, but could also include a wider environmental focus that could help to deliver multiple benefits including improvements to the natural and historic environment, which may also help secure FRM funding.

In order to ensure that the LFRMS does not result in adverse effects, all strategy objectives should be integrated so that delivery of individual actions does not conflict with achievement of the wider strategy objectives. In addition, development and implementation of these actions should be effectively managed by ensuring that, where necessary, proposals are assessed to determine their potential environmental effects (positive and negative) in advance of their implementation and that appropriate mitigation measures are built into their delivery as required.

The LFRMS should seek to maximise the potential environmental benefits associated with delivery of these objectives and measures. This can be best achieved through the integration of LFRMS objectives and through close partnership working, so that appropriate resources and funding are effectively allocated.

Table 4-1 How the environmental report has been taken into account in the LFRMS

SEA recommendation	Final decision
LFRMS to be strengthened by considering the SEA objectives as a whole to ensure delivery of a sustainable approach.	The LFRMS has been updated to take account of the SEA objectives to ensure that LFRMS actions will be delivered in a sustainable way.

SEA recommendation	Final decision
LFRMS objectives should be integrated so that delivery of individual measures do not conflict with achievement of the wider strategy objectives.	LFRMS actions will be undertaken with consideration of the wider Strategy objectives.
Proposals should be assessed to determine their potential effects on natural and historic environment (positive and negative) in advance of implementation and appropriate mitigation measures are built into their delivery as required.	As actions identified in the strategy are investigated in more detail, further environmental assessment will be undertaken during the feasibility stages to identify what appropriate mitigation measures may be required for their delivery.
LFRMS should seek to maximise the potential environmental benefits associated with delivery of the objectives and actions.	LFRMS has been updated to include more explicit reference to WFD and the environment and how the Strategy will seek to maximise environmental benefits during deliver of the objectives and actions.

5 Consultation

At all stages during the SEA and HRA the relevant statutory consultees have been consulted and their comments incorporated into the strategies development.

The Environmental report received five responses in total and a summary of these are provided below.

Table 5-1 Summary of consultation responses on Environmental Report

Consultee	Response (Yes/No)	Summary of response and changes required
Airedale Internal Drainage Board	No	N/A
Aire Rivers Trust	Yes	Thanks for acknowledgement and changes derived from earlier comments. I found the final document both complete and helpful, especially the references/recommendations to seek wider benefits from flood schemes. This is a theme we are working on with both the EA and local authorities and the recent Local Levy Funding clearly recognises the need for such additionality. No changes required.
Environment Agency	No	N/A
Historic England	Yes	Pleased to see previous comments and recommendations have been incorporated into latest assessment. Table 5-2 Objective 2 and SEA objective effect should be uncertain, because whilst there will be positive impacts there could be harm caused to historic character areas or assets including archaeological remains or conservation areas. Comment: No Changes required: This recommendation felt that the identification of potential adverse flood risk impacts on historic character was positive and would add more certainty to inclusion of this impact, assessment, and mitigation at subsequent project stages.
Natural England	Yes	Advised that SEA is broadly compliant and supports recommendations and conclusions. Recommends that public rights of way, public open land and access land are included within the assessment. Changes required: Amend assessment to include some key facts/analysis.
Pennine Prospects	No	N/A
Yorkshire Water	No	N/A

Consultee	Response (Yes/No)	Summary of response and changes required
Yorkshire Wildlife Trust	No	N/A
Ilkley Civic Society	Yes	Comments on Environmental Report (ER) and LFRMS (Only ER comments listed here a) Page VII -DCLG not ODPM, b) Amend industrial context and agriculture land grading unsuitable. c) Sun Lane site -not aware of any recent evaluations of effectiveness of anti-pollution. d) section 2.6.5 (second para) - check wording. Forth para-Not all historical flooding events have been recorded and the available evidence and/or data about events is limited. It would be instructive to compare records of the heights of floods in the last two decades with the highest incised mark on Ilkley Bridge dated 14th Dec 1938.-Information no amendments. Surface Water Add after Bradford City Centre Ilkley. Backstone Beck This is prone to blocking and has previously caused several floods mainly affecting the Industrial area near Ilkley Cemetery. 2.8 The temporary Roman camp at Burley in Wharfedale and the Roman Roads (Tadcaster –Ilkley – Ribchester, Ilkley to and south toward Manchester) are omitted-Add. 2.8 There are three conservation areas in Ilkley, the central town, Ben Rhydding and Middleton-Amend. 2.8 & Figure 2-12 This map does not accurately represent all the scheduled/registered places in Ilkley, e.g. the Heathcote garden is graded 2 and is not identified. We can only go off data provided, so will refer in text if suitable. 2.10.2 In the second line it may be read that there is rail access to LBIA. It should be made clear that all access is by road. Figure 2-15 The three new railway stations are not shown. -not amended Page 19: Under nature reserves, it should be noted that Middleton Woods at Ilkley is a SSSI. Pages 60-62 appear in a scrambled format on our screens-this has been amended Changes required: Abbreviation for DCLG added Industrial context of mills added No change to Agriculture Land Classification map No change/details of anti-pollution available Some text added re: low lying areas and historical flooding incidents. Bullet added to surface water section Temporary Roman fort and roman roads added There is one conservation area for Ilkley shown on website and 59 conservation areas in total across District. Heathcote garden reference added to text. Amended access reference to LBIA Our mapping data does not specifically show Middleton Woods as SSSI is this not South Pennine Moors and NE flag no changes required. No amendments Text pages 60-62 amended earlier
West Yorkshire Advisory Service (WYAAS)	Yes	Fig 2-12 factually incorrect as this does not include non-scheduled archaeological sites. Amend title to state historic assets (excluding non-scheduled), or as suggested Designated Heritage assets in Bradford. Table 6-1 recommendations point 3 should be amended to state "proposals should be assessed to determine their potential effects on natural and historic environment (positive and negative) in advance of implementation and appropriate mitigation measures are built into their delivery as required." This will ensure impacts on historic impact are not forgotten, and practically this should mean that there should be consultation in advance with WYAAS to determine the impacts on the historic environment and agree appropriate

Consultee	Response (Yes/No)	Summary of response and changes required
		mitigation measures. Amended fig title Text amended.

6 Adoption of Strategy

In order to adopt the final LFRMS, Bradford Council have taken account of:

- the consultation response to the Strategy and made changes in reaction to these responses
- the findings of the SEA Environmental Report conclusions and recommendations and responses from consultation
- the acceptance of the findings of the HRA by appropriate consultation bodies

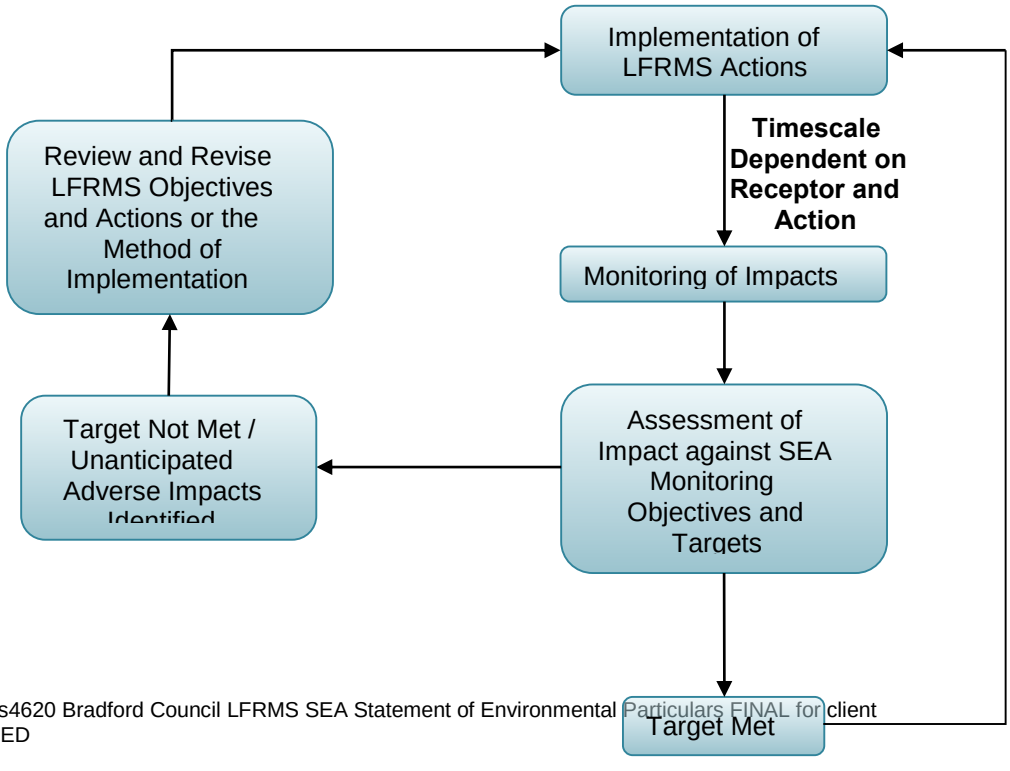
7 Monitoring

The SEA Regulations require Bradford Council to monitor the significant environmental effects of the implementation of the LFRMS. The monitoring indicators and associated targets which relate to each LFRMS objective will enable it to be monitored and any problems or shortfalls to be highlighted and remedied at an early stage.

If failings are evident, it will be necessary for the LFRMS to be revised so that the achievement of the SEA objectives is not compromised. Of note, it is unlikely that any effects negative or otherwise will be seen immediately and that the relative time scale for monitoring will vary for each indicator/target.

The figure below illustrates the summary of the process that will occur to trigger action when adverse effects of the LFRMS implementation are identified. A series of monitoring indicators and targets have been developed in relation to the SEA objectives and these are detailed in Table 6-2 of the Environmental Report.

Figure 6-1: Process for ensuring adverse impacts of LFRMS identified through SEA monitoring framework are mitigated/rectified.



References

OPDM (2005). A practical guide to the Strategic Environmental Assessment Directive. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf

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