

WORCESTERSHIRE COUNTY COUNCIL

**WORCESTERSHIRE LOCAL FLOOD RISK
MANAGEMENT STRATEGY**

**STRATEGIC ENVIRONMENTAL ASSESSMENT
POST-ADOPTION STATEMENT**

September 2016

I. Introduction

- 1.1 This post-adoption statement has been produced to satisfy regulation 16(3)(iii) of the Environmental Assessment of Plans and Programmes Regulations 2004. It provides information on how the Worcestershire Local Flood Risk Management Strategy and its accompanying Strategic Environmental Assessment have been developed, and the relationship between the two documents.
- 1.2 The Worcestershire Local Flood Risk Management Strategy (LFRMS) has been produced by Worcestershire County Council (WCC) in its role as Lead Local Flood Authority under the Flood and Water Management Act 2010. The LFRMS sets out how local flood risk will be managed in Worcestershire in the period 2015-2010.
- 1.3 The LFRMS aims to:
- Understand and appropriately prioritise flood risk;
 - Manage and minimise the likely impact of flooding;
 - Develop and manage effective partnerships;
 - Inform, develop and implement relevant plans, policies and strategies;
 - Secure, maximise and prioritise the appropriate allocation of funding and other resources;
 - Deliver sustainable environmental and economic benefits and contribute to the well-being of Worcestershire's communities and residents; and
 - Develop, maintain and implement the LFRMS action plan.
- 1.4 An 'informal draft' LFRMS was subject to a targeted consultation with partners in June/July 2015. Following this, feedback was considered and a revised, formal draft was published for consultation in December 2015. Responses from this formal stage of consultation were taken into account in producing the final, adopted version of the LFRMS in July 2016.
- 1.5 Each stage of LFRMS production has been accompanied by an SEA document (in the form of a Scoping Report at the evidence-gathering stage, an informal draft SEA Report at the early targeted consultation stage, an SEA Environmental Report at full draft consultation stage, and this Adoption Statement to accompany the adopted LFRMS).

2. How environmental considerations have been integrated into the LFRMS

- 2.1 The LFRMS has been produced in accordance with the Flood and Water Management Act (the Act). The Act requires the LFRMS to set out how it will "contribute to the achievement of wider environmental objectives and sustainable development".
- 2.2 The LFRMS includes a dedicated chapter on environmental objectives and promotes partnership working to increase the likelihood of flood risk measures also contributing to the county's multi-functional green infrastructure network.
- 2.3 The Strategy seeks to contribute to the achievement of wider environmental objectives by:
- Encouraging upstream catchment management measures where appropriate;

- Encouraging the use of source control measures (such as sustainable drainage), which can help improve water quality through reducing runoff and therefore reducing diffuse pollution entering watercourses and drainage systems;
- Promoting Water Framework Directive targets and River Basin Management Plan actions, to ensure no deterioration of surface water and groundwater and the protection of water bodies and communities as new flood risk management schemes are implemented;
- Seeking to ensure that opportunities from new development and redevelopment are planned in conjunction with green and blue infrastructure principles;
- Enhancing biodiversity and habitat creation within any future capital schemes, such as SuDS or flood storage areas; and
- Assessing the positive, neutral and negative impacts of flooding on historic and environmental assets. This will allow for potential improvements to be identified for these assets in relation to flood risk management works.

2.4 One of the LFRMS's seven high-level aims is to "Deliver sustainable environmental and economic benefits and contribute to the well being of Worcestershire's communities and residents". This aim is supported by four objectives:

- To protect, enhance and conserve Worcestershire's built and natural environment.
- Adapt to future projected climate change.
- Work with the Worcestershire and Birmingham and Solihull LEP to maximise the benefits to Worcestershire's economy and infrastructure from FRM.
- Reduce the negative impact of flooding on health and wellbeing.

2.5 The LFRMS seeks to enable a green infrastructure approach to flood risk, recognising the value of multi-functionality, and promoting more natural management methods. It calls for flood risk management schemes to explore opportunities to enhance the environment wherever possible.

2.6 In determining which flood events to investigate, the LFRMS recognises that one of the potential triggers for such an investigation, as set out in the Act, is "significant environmental impact". The LFRMS also notes that future Lead Local Flood Authority funding will be based on criteria to be set out in a Flood Risk Funding Management Plan, and that these criteria will facilitate and consider "economic, social and environmental benefits that reflect Worcestershire priorities".

3. How the environmental report has been taken into account

3.1 The Environmental Report was published alongside the draft LFRMS, and has helped to inform its development. The Environmental Report recognised that "the strategy is high-level, with insufficient detail to allow for a full, in-depth assessment of likely environmental effects". As such, it cautioned that "more detailed analysis may only be possible once the strategic direction of the LFRMS has been translated through more locally-specific plans and projects".

3.2 Notwithstanding this, the Environmental Report did make a series of recommendations to ensure that the LFRMS maximised environmental benefits, and these recommendations have been largely incorporated into the final LFRMS. A summary of these changes is given below:

- Objective 2.1 has been amended to make clear that flood risk management should be taken into account at the earliest possible stage, to help ensure it is integrated into designs from the outset. The word 'design' is now included, which removes any ambiguity over exactly when consideration should begin to be given to these issues, and should help to ensure that important issues are not overlooked. The objective has now been revised to read "Ensure that FRM is fully integrated into the design and planning of new infrastructure and developments at the earliest possible stage".
- Objective 2.4 has been revised to make specific reference to a green infrastructure approach. This should encourage the consideration of how flood risk management can not only address flood risk, but also achieve multi-functional benefits for people and for the natural and historic environment. The revised objective reads "Work with landowners, NGOs and other public bodies to reduce surface water run-off and to prioritise a green infrastructure approach".
- Objective 4.2 has been amended to better reflect the need to engage with local communities. It now commits the Lead Local Flood Authority to "Work with Local Planning Authorities and local communities to ensure surface water flooding is taken into account in Local Plans, Neighbourhood Plans, and supporting evidence".
- The remaining recommendations from the Environmental Report were more procedural in nature, and did not have significant bearing on the environmental performance of the LFRMS.

4. How opinions expressed in response to consultation on the draft LFRMS and its accompanying Environmental Report have been taken into account

- 4.1 The full draft LFRMS and accompanying SEA Environmental Report were subject to public consultation between 07 December 2015 and 29 February 2016. A total of 26 responses were received, from: the NHS; Highways England; Network Rail; Historic England; organisations representing geodiversity, woodlands, catchments, farming, and wildlife; businesses; parish councils; councillors; private householders; and farmers.
- 4.2 A consultation response document is available which summarises each comment and how it is being addressed. Almost all of the comments received related to the LFRMS itself; only one resposdee suggested amendments to the SEA.
- 4.3 The following summary sets out how opinions expressed in response to consultation on the draft LFRMS have been taken into account:
- The LFRMS now includes information on Rapid Response Catchments.
 - The Multi-Agency Flood Plan for Pershore is now referenced in the LFRMS, as a case study.
 - The LFRMS notes that flood risk management and highway drainage are now part of the same team, which will assist in integrating these two operations.
 - A greater emphasis on communication is now provided.

- Text on the role of trees has been clarified, and the Woodland Trust publications *Trees in our towns - The role of trees and woodland in managing urban water quality and quantity* and *Planting trees to protect water: The role of trees and woods on farms in managing water quality and quantity* are now referenced.
- LFRMS amended to clarify that Worcestershire requires additional allowances to reflect urban creep (the incremental conversion of permeable surfaces to impermeable).
- LFRMS now recognises the complexities of upstream catchment management, including that schemes will require consideration of, inter alia, the need to actively and fully consult, engage and seek agreement with land managers and farmers. The important role of landowners, funding and partnerships is also recognised.
- The positive contribution to the environment that can be made by farmers and land owners, contributing positively to flood risk management and environmental quality, is now recognised more fully.
- The importance of understanding agriculture is now included.
- A concise executive summary is now included, along with a short summary section at the beginning of each chapter, setting out the key messages.
- Wording had now been amended to avoid inconsistencies over the term 'main river' to avoid confusion.
- The LFRMS now states that its actions will need to integrate closely with catchment-wide strategies led by the Environment Agency.
- The fact that the LFRMS applies to all flood risk mitigation, large or small, is now stated.
- The LFRMS now states that, subject to designation, flood risk assets will be included on an Asset Register available for the public to view.

4.4 The following is a summary of how opinions expressed in response to consultation on the SEA Environmental Report have been taken into account:

- All references to "undesigned heritage assets" have been changed to "non-designated heritage assets", in line with NPPF wording.
- All references to "English Heritage" have been replaced with "Historic England".
- The 2015 edition of the Historic England document 'Flooding and Historic Buildings' is now referred to, rather than the 2010 edition.
- The ER now refers to the potential for flooding and flood management to have "significant" positive and negative impacts on the historic environment, rather than "serious" impacts, as the role of the SEA is to assess possible "significant effects".
- Reference is now made to potential opportunities to link objectives in a synergistic way, such that "New and revised flood management schemes have the potential to offer opportunities for improved public access to the historic environment". This links with the stated intentions of the health, landscape and biodiversity objectives.
- Typing error on page 60 "stretched sot" has been corrected to "stretches to".
- References to access to the natural environment helping to reduce stress levels and encourage people to become more active now refer to the natural and historic environment.
- Historic landscape character has been added to the list of potential synergies between flood alleviation schemes and the historic environment.

- Additional sentence added to the consideration of impacts from surface water management schemes: "Surface water run off management schemes have the potential to offer opportunities for recreation in, and better understanding and appreciation of, the historic environment and heritage assets and their settings".
- References to "heritage interests" in the 'material assets' SEA objective has been removed, to avoid any duplication or conflict with the 'historic environment' objective.

4.5 None of the changes to the SEA have led to any revisions to the assessment made in the Environmental Report.

5. How any additional consultation responses from the document's public availability have been taken into account

5.1 No additional comments beyond those summarised above were received on either the LFRMS or the SEA Environmental Report.

5.2 There has not yet been an opportunity for people to respond to the final adopted LFRMS, but opportunities for periodic review mean that any issues raised after publication can be considered in any future review(s).

6. The reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with

6.1 In order to identify the most environmentally-sustainable options for incorporation within the LFRMS, the SEA would ideally compare the relative environmental performance of a range of options either put forward as part of strategy preparation, or proposed separately through the SEA. This comparison of alternatives is an essential part of the SEA process; where no clear alternatives are set out in the strategy, the SEA is free to propose them. Because the LFRMS does not propose alternatives, the SEA sought to draw conclusions based on the comparison (stated or implicit) of that option against a business-as-usual 'baseline'. This helped to identify whether it would be better, in environmental terms, to not have the LFRMS in place.

6.2 Government guidance states that "Only reasonable, realistic and relevant alternatives need to be put forward". As such, the assessment avoided considering alternatives which would clearly not happen for technical, political or other reasons. A proposal which would clearly be contrary to national policy, for instance, would not be considered acceptable. In some cases, the core elements of the LFRMS do not have a reasonable alternative, because they are required by legislation. Even here, however, it is recognised that there may be different ways of satisfying the legal requirements, which could have different environmental consequences.

6.3 Where alternative approaches to the LFRMS's aims and objectives were identified, these were considered in section 6.4 of the Environmental Report. None of the alternatives would have led to significantly better environmental outcomes than those of the draft LFRMS.

7. The measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme

7.1 The environmental impacts arising from implementation of the LFRMS will be monitored through existing processes. This SEA does not recommend the introduction of any additional monitoring, as this may not be deliverable without additional resources and would be likely to duplicate existing regimes.

7.2 The following indicators are set out in the SEA as being likely to be available through existing agencies' monitoring:

- Percentage of Total New Homes Built on Brownfield Land
- Condition of the Landscape
- Planted ancient woodland sites restored to native woodland
- Status of European nature conservation sites
- Condition of SSSIs
- Management Status of Local Sites
- Key Breeding Birds Population Numbers
- Proportion of undesignated heritage assets at risk
- Number of Grade I and II* listed buildings at risk
- Amount of land falling within Agricultural Land Classifications (hectares)
- Hectares of Green Belt land
- Number of Air Quality Management Areas (AQMAs) in Worcestershire
- Water quality
- Water resource availability
- Contaminated Land
- Annual production of land-won aggregates (sand and gravel)
- Annual production of land-won aggregates (crushed rock)
- CO₂ emissions per head
- Ecological Footprint (Global Hectares per Person)
- Properties at risk of flooding
- Access to information: Satisfaction rates regarding Minerals & Waste planning policy
- Accessibility to Worcestershire acute hospitals
- Health ACORN categories
- Female life expectancy at birth
- Male life expectancy at birth
- Household waste produced per capita

7.3 The LFRMS also includes three additional potential indicators, and these should; be monitored as part of the ongoing delivery and review of the LFRMS and relate documents:

- Level of grant funding to deliver Flood & Water Management Act
- Proportion of floodspots investigated
- Number of Surface Water Management Plans produced