Staffordshire Local Flood Risk Management Strategy

Habitat Regulations Assessment

Draft Screening Report

February 2023

Produced by the County Environment Specialist (Ecology), Staffordshire County Council

1.0 Introduction

Background

1 This Habitat Regulations Assessment has been produced by the County Environment Specialist (Ecology), Staffordshire County Council, for the Staffordshire Local Flood Risk Management Strategy. The purpose of the screening report is to identify any potential impacts of the strategy on international sites, as required under Article 6 of the Habitats Directive.

Local Flood Risk Management Strategies

2 The Flood and Water Management Act 2010 requires Lead Local Flood Authorities to produce a Local Flood Risk Management Strategy, which must be maintained, applied and monitored. Local flood risk is defined as that derived from surface run-off, groundwater and ordinary watercourses. Flood risk from main rivers, the sea and reservoirs are the responsibility of the Environment Agency; however, the potential interactions of these flood risks with local risks do need to be considered to ensure that all joint risks of flooding are assessed at the local scale.

Staffordshire Local Flood Risk Management Strategy

3 Our vision for managing local flood risk is rooted in 3 fundamental principles:

- To meet the statutory duties outlined in the Flood and Water Management Act 2010
- To work with others to ensure flood risk is not increased through future planning and to maximise opportunities to reduce and better manage flood risk
- To align our functions with national priorities and the Staffordshire County Council Strategic Plan

4 This Strategy aims to ensure that flood risk in Staffordshire is reduced by maximising opportunities through innovative, ambitious, and sustainable means.

5 This Local Flood Risk Management Strategy (LFRMS) offers the first opportunity to formalise a longer term vision and shape individual priorities that deliver the greatest benefit to the people, property and environment of Staffordshire.

6 The risks of flooding that affect Staffordshire come from a range of sources including main rivers (including the River Severn and River Trent), ordinary watercourses, surface water runoff, groundwater, sewers and reservoirs. Local records indicate numerous sources of flooding for past flood events, which highlights the interactions between different flood mechanisms such as fluvial and surface water flooding. Climate change and continued urbanisation can increase flood risk in the future unless action is taken to mitigate or adapt to that risk.

Objectives and Policies

7 The Local Flood Risk Management Strategy explains how we will manage flood risk through a detailed action plan that summarises the actions of five main Strategy objectives:

- Improve our understanding of flood risk and be prepared for flood events
- Manage flood risk and new development in a sustainable manner
- Seek and secure funding for flood alleviation schemes and work with partners
- Work with others to ensure communities are more aware, informed, and resilient to flooding
- Promote effective management of drainage and flood defence assets

The Need for Habitat Regulations Assessment

8 The European Habitats Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna provides legal protection for habitats and species of European importance (Natura 2000 sites). The Conservation of Habitats and Species Regulations 2010 (usually referred to as the 2010 Habitats Regulations) implement the Directive into national legislation.

9 Article 6(3) of the Habitats Directive1 requires that any plan or project, which is not directly connected with or necessary to the management of a European site, but would be likely to have a significant effect on such a site, either individually or in combination with other plans or projects, shall be subject to an 'appropriate assessment' of its implications for the European site in view of the site's conservation objectives. In the light of the conclusions of that assessment, and subject to the provisions of Article 6(4) of the Habitats Directive, the competent authority (i.e. in this context the plan-making body) shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, having obtained the opinion of the general public. Article 6(4) provides that if, in spite of a negative assessment of the implications for the site, and in the absence of alternative solutions, the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected.

What are Natura 2000 sites?

10 The Habitats Regulations Assessment refers to the assessment of the potential impacts of a development plan on one or more European Sites (collectively termed 'Natura 2000' [N2K] sites). Natura 2000 is a Europe-wide network of sites of international importance for nature conservation established under the European Council Directive 'on the conservation of natural habitats and of wild fauna and flora' (92/43/EEC; 'Habitats Directive').

11 The network comprises Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). SPAs are classified under the European Council Directive 'on the conservation of wild birds' (79/409/EEC; 'Birds Directive') for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species). SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance. The Government also expects candidate SACs (cSACs), potential SPAs (pSPAs), and Ramsar sites to be included within the assessment. Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).

The Habitat Regulations Assessment Process

12 Table 1 summarizes the key components of the process for undertaking a Habitat Regulations Assessment. This report sets out the screening part of the process, which is detailed further in the methodology.

Table 1 HRA Process

Stage 1: Screening This step is a simple assessment to check or screen if a proposal: • is directly connected with or necessary for the conservation management of a European site • risks having a significant effect on a European site on its own or in combination with other proposals You should consider the proposal's integral design features or characteristics, such as its layout, timing and location to inform your screening decision. These may mean that any risk to a European site is avoided and you do not need to do an appropriate assessment. At this stage, you should not consider any mitigation measures included by the proposer for the purpose of avoiding or minimising risk to a European site. These mitigation measures need to be considered at the appropriate assessment stage.
Stage 2: Appropriate assessment You must carry out an appropriate assessment if you: • decide there's a risk of a likely significant effect on a European site • do not have enough evidence to rule out a risk The assessment should be: • more detailed and thorough than the screening check

- appropriate for the nature and complexity of the proposal and allow you to carry out the integrity test

Your appropriate assessment should:

- assess the likely significant effects of a proposal on the integrity of the site and its conservation objectives
- consider ways to avoid or reduce (mitigate) any potential for an 'adverse effect on the integrity of the site'

Stage 3. Derogations: allow exceptions

In certain circumstances, you can allow a proposal that's failed the integrity test to go ahead. This is known as a derogation.

You should tell the proposer as soon as possible if you'll consider a derogation on a proposal that's failed the integrity test. It must pass all 3 legal tests for a derogation to be granted.

Derogations: 3 legal tests

To decide if the proposal qualifies for a derogation, you must apply the 3 legal tests in the following order:

1 There are no feasible alternative solutions that would be less damaging or avoid damage to the site.
2 The proposal needs to be carried out for imperative reasons of overriding public interest.
3 The necessary compensatory measures can be secured.

2.0 Stage 1 Screening: Methodology

Guidance

13 This report has been produced following guidance on the HRA process Habitats regulations assessments: protecting a European site - GOV.UK (www.gov.uk) *Habitats regulations assessments: protecting a European site* Defra, February 2021, (accessed 07-02-23). The guidance sets out the process for undertaking an HRA.

14 The Local Flood Risk Management Plan is a plan that is subject to Habitat Regulations Appraisal, that is, it might have an impact on a European site or sites.

15 Check if a proposal might affect a European site - Identification of the European sites to be considered requires consideration of potential direct and indirect impacts of the plan. In all cases sites within the plan area should be included and for plans affecting the aquatic environment the following should also be included:

- Sites upstream or downstream of the plan area in the case of river or estuary sites
- Peatland and other wetland sites with relevant hydrological links to land within the plan area, irrespective of distance from the plan area

The guidance states that if there is any doubt as to whether a European site may be affected, a precautionary approach should be adopted and the information for the site should be obtained.

16 All Natura 2000 and Ramsar sites wholly or partly within Staffordshire have been included in assessment, together with sites that have hydrological links to water bodies within the County through ground or surface waters. Sites, with a summary of their special interest and potential vulnerabilities, are listed in Table 2 and shown on Figure 1 with further details found in Appendix 1.

17 A large proportion of the Natura 2000 sites see Table 2, and all of the Ramsar sites, have water dependencies, in that one or more features for which they are designated relies on hydrological conditions, including surface water quality and hydrological regimes and ground water. Of 15 sites assessed, 14 are vulnerable to hydrological change and of these 14, 2 (Wybunbury Moss and Oakhanger Moss, Cheshire) have no clear hydrological connection to Staffordshire systems, although there could be a groundwater connection.

18 There is therefore potential for implementation of the FRMS, in the absence of mitigation, to impact on the 14 sites through alterations to local hydrological systems which could result in significant adverse impacts on the interest features – habitats and/or species – for which the sites are designated.

19 In order to assess risk of impacts, FRMS policies and actions have been assessed for their potential for impacts in Table 3.

Table 2: Screening: Natura 2000 and Ramsar sites and hydrological sensitivity

Red – sensitive

Amber – potential sensitivity/uncertainty

Green – not sensitive or no pathway for FRMS effects

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
Aqualate Mere Midland Meres and Mosses Phase 2 Ramsar	The Meres and Mosses form an internationally important series of open water and peatland sites. The largest mere with the most extensive reedbeds	Reductions in water levels from ground water and surface water abstractions, eutrophication from raised nitrogen and phosphorous and siltation entering the site via incoming water; the presence of invasive species, in particular fish	Reductions in water levels from ground water and surface water abstractions. Fed via nearby canal; Sedimentation is a major issue	Yes	Vulnerability high
Betley Mere Midland Meres and Mosses Phase 1 Ramsar	The Meres and Mosses form an internationally important series of open water and peatland sites.	Reductions in water levels from ground water and surface water abstractions, eutrophication from raised nitrogen and phosphorous and siltation entering the site via incoming water	Numerous surface water sources feed this Mere	Yes	Vulnerability high
Black Firs and Cranberry Bog Midland Meres and Mosses Phase 2 Ramsar	The Meres and Mosses form an internationally important series of open water and peatland sites.	Reductions in water levels from ground water and surface water abstractions, eutrophication from raised nitrogen and phosphorous and siltation entering the site via incoming water	Surface water from village and agricultural sources feed into this site	Yes	Vulnerability high

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
Cannock Chase SAC	European dry heaths Northern Atlantic wet heaths with *Erica tetralix*	The dry and wet heathland is dependent on management by cutting and burning, bracken control and on removal of invading birch and pine from surrounding plantations. Maintenance of hydrological conditions is required for wet heaths and there are questions related to impact of water abstraction. The heathland is adversely affected by recreational pressure and vulnerable to acid and nutrient deposition	Headwater streams found on the SAC, potential effects of downstream works	Yes	Vulnerable to local hydrological management
Cannock Extension Canal SAC	Floating water-plantain *Luronium natans*	Deterioration of water quality and clarity due to run off from land. Mobilisation of sediment and increase in turbidity due to boat traffic.	Management of highways run off; sedimentation from adjacent land	Yes	At risk from localised highways flood risk management
Chartley Moss SAC Meres and Mosses Phase 2 Ramsar	Natural dystrophic lakes and ponds Transition mires and quaking bogs The Meres & Mosses form an internationally important series of open water and peatland sites.	Colonisation of open schwingmoors or Sphagnum lawns and rafts by birch and pine results in drying as well as species loss. Several sources of nutrient enrichment, including agricultural run-off of nutrients, pose a potential threat. Modification of drainage. Changes to Stoney Brook and ditch management.	Local drainage modifications	Yes	Vulnerable to local hydrological management

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
Cop Mere Meres and Mosses Phase 2 Ramsar	Natural dystrophic lakes and ponds, Transition mires and quaking bogs	This site receives nitrogen, ammonia and acid deposition above its critical load. At risk from long term abstractions from River Sow, high N and P levels on site.	Differs from many of the meres in having a distinct inflow and outflow, the River Sow, which enters the mere at the western end and leaves at the eastern end.	Yes	Vulnerability high
Fens Pools SAC	Great crested newt population	Designated primarily for great crested newts. Vulnerable to fish introductions, human disturbance and alterations in water quality		None	
Mottey Meadows SAC	Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)	Nutrient run off from surrounding farm land. Dependant on high ground and surface water levels	Changes to ground and surface water levels.	Yes	Vulnerability high
Oakhanger Moss Midland Meres and Mosses Phase 2 Ramsar				No obvious, but consider groundwater connections	

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
Pasturefields Salt Marsh SAC	Inland salt meadows The only known remaining example in the UK of a natural salt spring with inland saltmarsh vegetation	Hydrogeology; Water abstraction; Grazing management; Water pollution -agriculture/run off; Water pollution –discharge.	Dependent upon the brine source being maintained. Whilst the hydrogeology of the site is not fully understood, it would be likely to be vulnerable to any abstractions of water from the underground aquifer. Nutrient enrichment is a significant issue	Yes	Vulnerability high

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
Peak District Dales SAC	Alkaline fens. Calaminarian grasslands Calcareous and calcshist Calcareous rocky slopes with chasmophytic vegetation. European dry heaths Semi-natural dry grasslands and scrubland facies: on calcareous substrates. Tilio-Acerion forests of slopes, screes and ravines. Brook lamprey *Lampetra planeri* Bullhead *Cottus gobio* White-clawed crayfish *Austropotamobius pallipes*	Physical damage – sedimentation and silting; Changes to hydrology – flooding/storm water; drying; ground water flow; Toxic contamination - air pollution; water pollution and contamination Non-toxic contamination changes in turbidity; changes in thermal regime; nutrient enrichment; air pollution; changes in salinity; Biological disturbance – introduction of new habitats/species; Recreational damage especially to screes; inappropriate grassland and woodland management, modification of water courses, abstraction, drainage and fertiliser application;	Changes to ground and surface water flows; modification of water courses. Important to consider the full extent of the underground Karst geology that this system relies on.	Yes	Vulnerability high for aquatic species

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
River Mease SAC	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. White-clawed crayfish *Austropotamobius pallipes* Spined loach *Cobitis taenia* Bullhead *Cottus gobio* Otter *Lutra lutra*	Physical damage to habitat – sedimentation / silting; habitat degradation (off-site); Changes to hydrology – drying; flooding/storm water; ground water flow; Toxic contamination - water pollution and contamination; Non-toxic contamination - nutrient enrichment; changes in thermal regime; changes in turbidity; changes in salinity; Biological disturbance – direct mortality (otter road kill); introduction of new habitats/species. The River Mease Water Quality Management Plan forms the basis for developer contributions in regard of activities covered by planning consent	Changes in hydrological regime; road and agricultural run-off, phosphate levels from sewerage works	Yes	Vulnerability high

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
South Pennine Moors SAC	Northern Atlantic wet heaths with Erica tetralix; European dry heaths Blanket bogs* Transition mires and quaking bogs; Old sessile oak woods with *Ilex* and *Blechnum*	Physical damage to habitat – sedimentation/silting; Changes to hydrology – flooding and stormwater; ground water flow; drying, Toxic contamination – air pollution; water pollution/ contamination; Non-toxic contamination – air pollution; nutrient enrichment; Biological disturbance – introduction of new habitats/species. Recreational pressure. Over-grazing and drainage of bog. Atmospheric pollution. Blanket bog erosion. Woodland damage by grazing and *Rhododendron* invasion.	Physical damage to habitat – sedimentation/silting; Changes to hydrology – flooding and stormwater; Changes to hydrology – ground water flow; Changes to hydrology - drying	Yes	Vulnerability of wet heaths, bogs and mires high

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
South Pennine Moors SPA	Merlin (Falco columbarius) Short-eared owl *(Asio flammeus*) Golden plover (*Pluvialis apricaria*)	Physical damage to habitat – habitat degradation (off-site foraging areas e.g. golden plover); Non-physical disturbance – noise and vibration; Non-physical disturbance – human presence; Changes to hydrology – flooding/stormwater; Changes to hydrology – drying; Changes to hydrology – ground water flow; Toxic contamination - air pollution; Toxic contamination – water pollution; Non-toxic contamination – air pollution; Non-toxic contamination – nutrient enrichment; Biological disturbance – introduction of new habitats/species	Changes to hydrology – flooding/stormwater; Changes to hydrology – drying; Changes to hydrology – ground water flow;	Yes	Dependency of golden plover on wet habitats

N2K site	Qualifying features	Site Vulnerability	Hydrological sensitivity	Potential effect pathways	Sensitivity
Wybunbury Moss	Natural dystrophic lakes and ponds Transition mires and quaking bogs The Meres & Mosses form an internationally important series of open water and peatland sites.	Colonisation of open schwingmoors or Sphagnum lawns and rafts in the West Midland Mosses by birch and pine which results in drying as well as species loss. Features have been historically impacted by, and remain vulnerable to, changes in water quality and nutrient enrichment from their surrounding catchment. The evidence suggests that activities within the small catchments (agriculture, forest nursery, residential etc) are the sources of excess nutrients	Local drainage modifications	No obvious, but consider groundwater connections	

Methodology for screening FRMS Objectives. Policies and Actions

20 The purpose of the screening stage is to:

a) Identify all aspects of the plan which would have no effect on a Natura 2000 or Ramsar site, so that that they can be eliminated from further consideration in respect of this and other plans;

b) identify all aspects of the plan which would not be likely to have a significant effect on a Natura 2000 or Ramsar site (i.e. would have some effect, but minor residual), either alone or in combination with other aspects of the same plan or other plans or projects, which therefore do not require 'appropriate assessment'; and

c) identify those aspects of the plan where it is not possible to rule out the risk of significant effects on a Natura 2000 or Ramsar site, either alone or in combination with other plans or projects. This provides a clear scope for the parts of the plan that will require appropriate assessment.

21 The likelihood of impacts occurring at Natura 2000 sites is considered in Table 3 below. Table 2 above identifies any potential effect pathways by which policies and actions in the FRMS for Staffordshire might impact upon Natura 2000 and Ramsar sites. Where the interest features of a Natura 2000 site are not likely to be impacted by development due to no pathway or no hydrological dependencies, this is made clear in Table 2.

22 It is important to note that in considering whether the FRMS is likely to have a significant effect on any European site. a precautionary approach must be taken

23 The Strategy should be considered 'likely' to have such an effect if it is not possible (on the basis of objective information) to exclude the possibility that the Strategy could have significant effects on any European site, either alone or in combination with other plans or projects. An effect will be 'significant' in this context if it could undermine the site's conservation objectives. The assessment of that risk must be made in the light of factors such as the characteristics and specific environmental conditions of the European site in question.

Screening step 1: Screening of FRMS Action Plan

24 The Action Plan is found in Appendix A of the FRMS for Staffordshire and Shropshire. Actions are are grouped by Objective. Screening of Actions is found in Table 3.

Table 3: Assessment of Actions to be taken to deliver Objectives

No	Objective	Summary of actions to be taken to deliver our objective	Screening Opinion	Next stage
1	Improve our understanding of flood risk and be prepared for flood events	Identify key communities at risk by mapping communities at various appropriate scales to their flood risk	Data gathering or management – no likely significant effect on any European or Ramsar site	None
		Investigate flooding incidents, working with all RMAs and local communities. Keep flood incident data up to date and share information	Data gathering or management – no likely significant effect on any European or Ramsar site	None
		Extend Section 19 investigations to include frequent internal property flooding to one or more properties	Data gathering or management – no likely significant effect on any European or Ramsar site	None
		Produce a refined procedure to allow a fairer approach to triage flood investigations	Data gathering or management – no likely significant effect on any European or Ramsar site	None
		Produce local flood risk management plans for high priority locations that identify the key partners, the levels of flood risk and what actions can be taken at a local level	These will require HRA process for each plan. It is not possible to tell at this stage what likely significant effects of any one plan might be.	Each plan to have its own HRA assessment
		Improve evidence, information, and mapping and modelling tools to better understand the risks of flooding and support improved decision-making and greater resilience.	Improved data will enable a better understanding of how any future schemes can be designed to minimise impact on the environment – positive impact	None
		Work with the Environment Agency to implement the Humber Flood Risk Management Plan and Severn Flood Risk Management Plan and update the Staffordshire Preliminary Flood Risk Assessment	Separate plans which will themselves be subject to HRA	None

		Work with the Staffordshire Local Flood Resilience Forum to increase flood preparedness, response and recovery planning, improved communications.	Communications strategy only – no likely significant impact on any European or Ramsar site	None
		Support the Local Resilience Forum to plan for, respond to, and recover from flood events.	Communications strategy only – no likely significant impact on any European or Ramsar site	None
		Work with local communities to develop Local Flood Action Plans, seeking community involvement in local monitoring and maintenance of assets.	Separate plans which will themselves be subject to HRA	Each plan to have its own HRA assessment
		Maintain, seek to improve accuracy of flood forecasting and warning. Investigate the feasibility of expanding forecasting	Communications strategy only – no likely significant impact on any European or Ramsar site	None
2	Manage Flood Risk and new development in a sustainable manner	Support the development of sustainable rural communities by helping to make businesses more resilient to flooding	Improving resilience is a site-based action which will have no likely significant impact on any European or Ramsar site	None
		Seek the inclusion of Sustainable Drainage Systems (SuDs) wherever possible within new developments, by developing resources, processes, systems, guidance	Correctly installed SuDs likely to have a positive beneficial effect on the water environment by increasing infiltration, reducing pollution and attenuating flows. Guidance will aid this objective. No likely significant impact on any European or Ramsar site	None
		Keep the SuDS handbook up-to-date and ensure developers and their agents comply with this. Link to this: Staffordshire SuDS Handbook	As above	None
		Regarding SuDS, respond to planning applications within 21 days as Statutory Consultee and encourage developers, statutory consultees and local planning teams to work closely with the LLFA	As above	None
		Regarding river flood risk, respond to planning applications within 21 days as	Environment Agency Action – not subject to this HRA process	None

		Statutory Consultee to avoid inappropriate development in areas of flood and coastal erosion risk		
		Work with Local Planning Authorities to assist with the development of planning policies, site allocations and identification of future infrastructure needs.	These plans will all be subject to HRA	None
		Work with local communities to support the development of Neighbourhood Plans	As above	None
		Work with developers and Local Planning Authorities to secure appropriate connections to the sewer network, taking account of sewer flooding issues	No likely significant negative impact or possible positive impact on any European or Ramsar site	None
		Respond as a non-statutory consultee to planning applications where relevant and where resources allow	Where necessary, planning applications should have HRA	None
		Work with Highways Partners through the Strategic Infrastructure Plan to ensure flood risk and sustainable development are incorporated and integrated	Separate plan which will itself be subject to HRA	None
3		Work in partnership with other RMAs to deliver flood alleviation schemes on a six-year rolling programme	Separate plans which will themselves be subject to HRA	Each plan to have its own HRA assessment
		Maximise external fundraising opportunities for all projects allowing for more flood risk management projects to be delivered in the long term.	Funding strategy only - no likely significant impact on any European or Ramsar site	None
		Work with local communities to develop Flood Alleviation Schemes, where feasible, that meet local needs and integrate wider benefits where possible for the community e.g. environmental enhancements	Separate plans which will themselves be subject to HRA	None
		Work with other RMAs in partnership where there are interactions with the sewer network to deliver schemes on a five-year rolling programme through the Asset	Separate plan which will itself be subject to HRA	None

		Management Plan cycle (currently AMP7 2020-2025)		
		Raise awareness of the roles of all RMAs Authorities and work in partnership with others to take a joined up and risk-based approach to flood risk management	Communications strategy only – no likely significant negative impact or possible positive impact on any European or Ramsar site	None
		Support the delivery of the County Council's Climate Change Strategy and work with other RMAs to support the delivery of their climate change objectives	Separate plans which will themselves be subject to HRA	None
		Work with Infrastructure Plus, the Councils Highways Delivery Partnership to integrate programmes of work	Programmes of work should have their own HRA	None
		Work with landowners, communities, Parish Councils, Wildlife Trusts, etc. to promote changes in agricultural land management to improve water quality, reduce flooding, and incorporate ecological benefits. This can be undertaken on a case-by-case basis, through specific RMAs work programmes and seeking to deliver a Staffordshire Natural Flood Management (NFM) Project.	Correctly installed Natural Flood Management likely to have a positive beneficial effect on the water environment by increasing infiltration, reducing pollution and attenuating flows. Guidance will aid this objective. No likely significant impact on any European or Ramsar site	Any plans or projects arising from this work to have its own HRA assessment
4	**Work with others to ensure communities are more aware, informed, and resilient to flooding**	Support communities at risk in fast responding catchments prone to flash flooding through identification of Rapid Response High Risk Surface Water Catchments and Rapid Response Catchments for River Flooding and follow up actions	Communications strategy only – no likely significant impact on any European or Ramsar site	None
		Support the development of sustainable rural communities by helping to make businesses more resilient to flooding and supporting the Staffordshire Rural Strategy	Improving resilience is a site-based action which will have no likely significant impact on any European or Ramsar site	None
		Engage with communities to raise awareness of the drainage assets in their	Communications strategy only – no likely significant impact on any European or Ramsar site	None

		area to be better prepared for future flood events. Encourage communities to take a more pro-active role in flood monitoring and maintenance works		
		Work with flood risk partners to engage local communities on sewer misuse (which causes many sewer flooding issues)	Communications strategy only – no likely significant negative impact or possible positive impact on any European or Ramsar site	None
		Work with partners to deliver a joined-up programme of Property Level Resilience measures where viable	Improving resilience is a site-based action which will have no likely significant impact on any European or Ramsar site	None
		Trial rainfall alerts in certain areas linked to community plans that enable communities to be better able to prepare and respond to flooding	Communications strategy only – no likely significant impact on any European or Ramsar site	None
		Secure central government funding for FAIR innovation project	FAIR is a project that seeks to increase community resilience to flooding. No likely significant impact on any European or Ramsar site	None
		Agree and implement the board structure for FAIR Project (Strategic and Operational Board)	As above	None
		Develop a web interface for all sources of flood risk that covers Staffordshire	Communications strategy only – no likely significant impact on any European or Ramsar site	None
		Scope options to improve communications for flooding from all sources	As above	None
		Actively engage with key communities at risk in Staffordshire to bring about innovative solutions working with communities and relevant organisations to make them more resilient	As above	None
		Trial surface water forecasting in certain areas	As above	None

		Expand Community Flood Plans working particularly with the CCU	As above	None
		Install Machine Learning linked to forecasting to improve automation of flood risk activities linked to debris screens	Technology solution to maintenance– no likely significant impact on any European or Ramsar site	None
		Recruit new Flood risk Engagement and Delivery team	Staffing action only – no likely significant impact on any European or Ramsar site	None
5	**Promote effective management of drainage and flood defence assets**	Use permissive powers to manage the watercourse network, by consenting to works, taking a risk-based approach to enforcing landowner responsibilities, and raising awareness about these responsibilities	Potential impact on European or Ramsar sites, however each action here will effectively be a separate plan (e.g. programme of works) or project that itself will require HRA screening and potentially appropriate assessment / mitigation.	Any plans or projects arising from this work to have its own HRA assessment
		Update and improve the Asset Register, establish regimes to share information with other RMAs. Gain an improved understanding of the interactions between the various drainage systems and the condition and location of historic assets, particularly culverted watercourses.	Improved data will enable a better understanding of how any future schemes can be designed to minimise impact on the environment – positive impact	None
		Minimise the risk of flooding to properties by maintaining current levels of flood risk management within areas at risk of flooding from Main Rivers	Environment Agency Action – not subject to this HRA process	None
		Maintain the public sewer network. The water companies maintain their system on a planned and cyclical basis and also respond reactively where there are issues, such as blocked sewers	Water companies' action - not subject to this HRA process	None
		Maintain the Ordinary Watercourse network in the Sow and Penk IDB area around Stafford as appropriate	Internal Drainage Board Action - not subject to this HRA process	None

		Work with the Staffordshire Local Flood Resilience Forum to inform flood preparedness, response, and recovery planning	Communications strategy only – no likely significant impact on any European or Ramsar site	None

25 There are five actions that have potential to result in adverse effects on the integrity of Natura 2000 sites in the absence of mitigation. These are the Objective 1 Actions:

- Produce local flood risk management plans for high priority locations that identify the key partners, the levels of flood risk and what actions can be taken at a local level,
- Work with local communities to develop Local Flood Action Plans, seeking community involvement in local monitoring and maintenance of assets

and the Objective 3 Actions:

- Work in partnership with other RMAs to deliver flood alleviation schemes on a six-year rolling programme.
- Work with landowners, communities, Parish Councils, Wildlife Trusts, etc. to promote changes in agricultural land management to improve water quality, reduce flooding, and incorporate ecological benefits. This can be undertaken on a case-by-case basis, through specific RMAs work programmes and seeking to deliver a Staffordshire Natural Flood Management (NFM) Project.

and the objective 5 action:

- Use permissive powers to manage the watercourse network, by consenting to works, taking a risk-based approach to enforcing landowner responsibilities, and raising awareness about these responsibilities

None of the above actions is detailed within the LFRMS, and each action will have several or many component actions which in themselves will qualify as plans or projects under the meaning of Habitats Regulations Assessment.

26 Watercourse management measures, new drainage schemes and flood alleviation projects will all come under the remit of the FRMS. It is not the role of the FRMS to identify these. In terms of determining likely significant effects of specific proposals it is not possible to determine effects at this stage as site specific data, including surface and groundwater flow direction, levels and volumes and details of the proposed activity and its effect on these where they influence a Natura 2000 site, and potential for mitigation are required in order to determine significance of any impact. This data is unlikely to be available until an application for the proposed activity is submitted and fully assessed and supporting data is provided. There is the potential for significant effects where changes to ordinary watercourses or drainage features are found within the catchment of Natura 2000 sites. The likelihood or significance of impacts will be determined by the specifics of the proposed activity and the ability to implement appropriate mitigation or enhancement as part of the work.

27 It is reasonable to conclude at this stage that the LFRMS is not a 'Plan' in the context of the Habitats Regulations because it does not contain detailed proposals and is therefore a 'statement of general aspiration, or political will or general intentions'. As such Habitats Regulations Assessment is not required, however in the interests of transparency, it is important to record the decision making process above, and to include safeguards for future work to comply with the Habitats Regulations..

28 The LFRMS should therefore set a framework that demonstrates that measures consented by Staffordshire County Council will not significantly affect the integrity of a European site, through changes in hydrology or water quality. The LFRMS needs to provide assurance that HRA will be carried out at the project stage. This Screening Assessment indicates that there are no measures incorporated into the LFMRS that give certainty that this assessment will be carried out and that adverse impacts on Natura 2000 sites will be avoided. Wording amendment is recommended to provide the certainty required by the Habitats Regulations.

29 It is suggested that the following words are added to the introductory pages of the LFRMS, possibly in the section headed 'Our Role in Managing Local Flood Risk':

- During the development of any specific measures or actions emanating from this Local Flood Risk Management Strategy (LFRMS) further appropriate environmental appraisal work will be undertaken at project level and environmental impacts will, therefore, be considered as part of any flood risk

management activities. For any activity that might affect a site listed in table 2 above, this will include Habitats Regulations Assessment. We will not pursue any activities which could result in a negative environmental impact within Staffordshire or in neighbouring Lead Local Flood Authority (LLFA) areas.

30 It is recommended additional wording be included in Objective 2 to make clear that environmental objectives are integral to the strategy and apply to all Objectives and Actions covered by the LFRMS. The following addition is recommended:

- The following environmental objectives apply to all Objectives and Actions and to Staffordshire County Council exercise of flood risk management functions including approval of Sustainable Drainage Systems (SuDs), designation of features, consent of works and use of permissive land drainage powers to manage the ordinary watercourse network:
    - use of source control measures (such as SuDs),
    - enhancing biodiversity and habitat networks,
    - sympathy to local landscape character,
    - preserving cultural and historical assets for the future,
    - enabling adaptation to future changes in climate and land use

Environmental impacts will be considered as part of any flood risk management activity. An appropriate level of assessment will be made at every stage, starting with a strategic level of assessment for the Strategy through to environmental considerations during scheme design and whilst considering sustainable drainage systems proposed for new developments.

Conclusions

31 It is concluded that, with the additional wording proposed above, the Staffordshire Local Flood Risk Management Strategy is not likely to have any significant negative effects on any European sites, alone or in combination with other plans or projects. Given this conclusion, should the recommended amendment be made, there would be no requirement to progress to the next stage of the Habitats Regulations Assessment.

32 The Wider Environmental Objectives of the FRMS are appropriate but these are not clearly adopted as over-arching objectives. Adoption of these as clear objectives/policy would provide the assurance required regarding protection of the Staffordshire Natura 200s sites identified as vulnerable to hydrological change.