SCREENING REPORT

Habitat Regulations Assessment (HRA)

for

Warwickshire Local Flood Risk Management Strategy (LFRMS)



A Report for Warwickshire County Council

March 2016

Produced by

Ecological Services Warwickshire County Council Barrack Street Warwick CV34 4TH (01926 418060) **Report Version Control**

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Non-Technical Summary

A stage one screening of the Habitat Regulations Assessment process was undertaken in February 2015 of the December 2014 version of the Draft Local Flood Risk Management Strategy (LFRMS) and the initial stages of the Surface Water Management Plan (SWMP) by Ecology Services at Warwickshire County Council (WCC) for the Flood Risk and Water Management Team at Warwickshire County Council. This initial assessment made a number of recommendations that were then discussed with the Flood Risk and Water Management Team at Warwickshire of incorporated mitigation measures including additions and changes in the wording of the LFRMS were discussed, and the HRA report was updated in April 2015. A further version of the LFRMS was produced in August 2015 and a subsequent rescreening of this version of the LFRMS, ahead of publication for public consultation was undertaken and the report updated again in August 2015.

An official response from Natural England was received on 05.01.16 highlighting concerns with some of the conclusions made in Version 3 of the HRA report and accompanying LFRMS. A series of meetings and telephone consultations were undertaken with Natural England throughout January and early February 2016. A number of further changes to the LFRMS were agreed with Natural England. This final report (Version 4) of the HRA outlines the further changes made to the LFRMS during this final consultation process with Natural England.

Warwickshire County Council is now the Lead Local Flood Authority for managing local flood risk from surface water, ground water, ordinary watercourses and flooding from highways (the latter excludes flooding associated with motorways and trunk roads).

The screening exercise is required under Article 6 (3) of the European Commission's Habitats Directive (92/43/EEC). The exercise was undertaken following best practice guidance, principally using the Habitat Regulations Assessment Handbook (2016) produced by David Tyldesley Associates. A total of five European Sites (or Natura 2000 sites) were selected for consideration due to their location within or close to Warwickshire. These were then further refined following an assessment of the likely impacts of the Local Flood Risk Management Strategy to two key sites: Ensor's Pool Special Area of Conservation in Nuneaton, Warwickshire and the River Mease Special Area of Conservation in the neighbouring counties of Derbyshire, Leicestershire and Staffordshire.

Ensor's Pool is designated for its population of white-clawed crayfish, and the potential vulnerabilities from the plans are considered to be: pollution from surface water flooding, an increase in water levels and potential to introduce non-native species.

The River Mease qualifies as being of European importance due to the presence of white-clawed crayfish (*Austropotamobius pallipes*), spined loach (*Cobitis taenia*), bullhead (*Cottus gobio*) and otter (*Lutra lutra*). It is also an important example in the European context of a water course supporting the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation community. Key vulnerabilities of this site from the plans, are from: pollution (especially increased nutrient levels, particularly phosphorous), sedimentation and the introduction of non-native species. A small part of the Natural England River Mease Catchment Risk Zone lies within the north of Warwickshire. Hence pollution events here have the potential to impact the qualifying features of the River Mease SAC outside of Warwickshire.

After the initial screening of the LFRMS in February 2015 three measures in the LFMRS (Measure 2B, 5A and 5C) were identified as potentially triggering an Appropriate Assessment. Subsequently, additional text and new wording was added to the LFRMS in August 2015 in the form of Incorporated Mitigation Measures.

Following further consultation with Natural England in January and February 2016, further amendments were made to the LFRMS and associated appendices to address the specific concerns raised by Natural England.

Natural England and the Environment Agency were also initially consulted on the plan specifically in relation to which plans and projects should be scoped into the In-combination Assessment. The In-combination Assessment aims to consider any cumulative impacts that other plans and projects in the area could have on the Local Flood Risk Management Strategy. No in-combination effects from these other plans have been identified in this HRA.

The re-screening of the final March 2016 LFRMS now anticipates that the LFRMS will not have any Likely Significant Effects on any European Sites / Natura 2000 sites due to the amended wording and new commitments made in the final version of the LFRMS. The LFRMS makes a number of project level HRA commitments summarised below.

The HRA has identified the following key requirements / commitments:

- A full Habitat Regulation Assessment of the associated Surface Water Management Plan (in Appendix C of the LFRMS) will be required once this has been finalised. At the time of writing, this still needs to be completed.
- WCC as the Lead Local Flood Authority (LLFA) will work with Natural England to produce a leaflet for riparian landowners residing in the Natural England River Mease Catchment Risk Zone regarding their rights and responsibilities with respect to ditches, watercourses, culverts and hedges (*new action for Measure 2B in Appendix D of the LFRMS*).
- WCC to work collaboratively with partners, including those in the Warwickshire Strategic Flood Forum (WSFF), to encourage flood schemes by third parties, riparian landowners and stakeholders and to ensure that Natura 2000 sites and Sites of Special Scientific Interest (SSSIs) are not adversely affected by flood risk management activities (*newly worded Measure 2C*).
- Wherever reasonably practicable prevent flood related plans or projects that will have an adverse effect on the integrity of a qualifying feature of a Natura 2000 site to be taken forward (*New action for Measure 2C*).
- All WCC flood related plans or projects proposed within the 1:200 year surface water flood risk zone around Ensor's Pool SAC or within the Natural England River Mease Catchment Risk Zone will be screened separately for the HRA unless those works are part of wider plans or projects for which a full HRA has already been undertaken (*action for Measure 2C*).

Acknowledgements

We are grateful to Ben Wood of Warwickshire County Council for his help with the Habitat Regulations Assessment in particular the creation of the Geographical Information Systems (GIS) project and associated maps; to Catherine Coton for the collation of baseline data on European Sites; and for professional support on the Habitat Regulations Assessment from Cody Levine of Worcestershire County Council.

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Glossary of Acronyms

AA	Appropriate Assessment
CIEEM	Chartered Institute of Ecology and Environmental Management
CLG	Department for Communities and Local Government
DCS	Developer Contribution Scheme
DTA	David Tyldesley Associates (Publishing)
ECJ	European Court Judgement
GIS	Geographical Information Systems
HRA	Habitat Regulations Assessment
IROIT	Imperative Reasons of Overriding Interest Test
JNCC	Joint Nature Conservancy Council
LFRMS	Local Flood Risk Management Strategy
LLFA	Lead Local Flood Authority
LSE	Likely Significant Effect
LUC	Land Use Consultants
MCIEEM	Full Member of the Chartered Institute of Ecology and Environmental Management
NPPF	National Planning Policy Framework
OLDSIS	Operations Likely to Damage the Special Interest of the Site
PINS	The Planning Inspectorate
SA	Sustainability Appraisal
SACs	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SPAs	Special Protection Areas
SNH	Scottish Natural Heritage
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Urban Drainage Systems
SWMP	Surface Water Management Plan
WCC	Warwickshire County Council
WFD	Water Framework Directive
WQMP	Water Quality Management Plan
WRMP	Water Resources Management Plan
WSFF	Warwickshire Strategic Flood Forum

1. Introduction

1.1. Background and Report Aim

Warwickshire Ecology Services at Warwickshire County Council (WCC) were contacted by the Flood Risk and Water Management Team at Warwickshire County Council to undertake a 'Habitat Regulations Assessment' (HRA) of the emerging Local Flood Risk Management Strategy (LFRMS) dated December 2014. Appendix C of the current LFRMS also contains the initial report of the Surface Water Management Plan (SWMP). Under the Flood and Water Management Act 2010, WCC are now the Lead Local Flood Authority (LLFA) responsible for managing local flood risk from surface water, groundwater and ordinary watercourses in Warwickshire. WCC are also responsible for flood risk from highways (with the exception of flooding associated with motorways and trunk roads; the responsibility of Highways England). WCC as the 'competent authority' is required to undertake a HRA of the LFRMS.

An initial screening assessment was undertaken in February 2015 of the policies in the December 2014 version of the LFRMS and the initial SWMP to consider if the plan or policies within the plan could have a 'likely significant effect' (LSE) (as defined in Article 6(3) of the Habitats Directive and subsequent case law), 'either individually or in combination with other plans and projects' on the integrity of any European Sites (also known as Natura 2000 sites) of nature conservation importance (i.e. Special Protection Areas (SPAs), Special Areas of Conservation (SACs) or Ramsar sites).

A report (Version 1) with recommendations for suggested changes in wording to the LFRMS was sent to the Flood Risk and Water Management Team at WCC by the Ecological Services Team at WCC in February 2015. These recommendations were discussed with the Flood Risk and Water Management Team and the HRA report was updated (Version 2) in April 2015. A final draft of the LFRMS prior to public consultation was provided to the Ecological Services Team in August 2015. This updated document was re-screened again and this HRA report updated again (Version 3) to reflect these changes.

The following changes to the wording of the LFRMS prior to the second round of public and statutory consultation (14.09.15 to 04.12.15) were outlined in Version 3 of the HRA report included:

- Additional text under <u>Section 1.1.</u>
- New wording added to justification text under Objective 2
- Addition of two new measures and new actions under each measure in Appendix D of the LFRMS.

On 05.01.16 Natural England sent an official consultation response to the HRA and the LFRMS following the end of the second round of consultation. This letter outlined a number of concerns from Natural England on the conclusions and recommendations in Version 3 of the HRA report. Subsequent to the receipt of Natural England's letter, a number of meetings, telephone consultations and further written correspondence was undertaken between WCC and Natural England to enable Natural England's concerns to be addressed within the LFRMS. Key correspondence from Natural England is provided in <u>Appendix 1.1.</u>

The following changes to the LFRMS have been made:

- Additional text regarding the vulnerabilities of Ensor's Pool SAC and River Mease SAC with associated maps under Section 3.3 of the LFRMS.
- Further information on an on-going project in the Trent catchment in the north of Warwickshire and Staffordshire to identify natural flood measures added to Section 3.6.5.

- Measure 2B has been updated as follows:
 - 'Warwickshire County Council to work with partners to encourage flood management and maintenance activities by riparian landowners on ordinary watercourses, and flood defence and drainage structures as well as limiting the development of constrictions on ordinary watercourses through consenting and, if necessary, enforcement'.
 - A new action under Measure 2B has been created as follows:
 - 'WCC as the LLFA will work with Natural England to produce a leaflet for riparian landowners residing in the Natural England River Mease Catchment Risk Zone regarding their rights and responsibilities with respect to ditches, watercourses, culverts and hedges'.
- Measure 2C has been updated as follows:
 - 'WCC to work collaboratively with partners, including those in the Warwickshire Strategic Flood Forum (WSFF), to encourage flood schemes by third parties, riparian landowners and stakeholders and to ensure that Natura 2000 sites and Sites of Special Scientific Interest (SSSIs) are not adversely affected by flood risk management activities'.
 - \circ $\;$ Two new actions have been created under Measure 2C as follows:
 - 'Wherever reasonably practicable prevent flood related plans or projects that will have an adverse effect on the integrity of a qualifying feature of a Natura 2000 site to be taken forward'.
 - 'All WCC flood related plans or projects proposed within the 1:200 year surface water flood risk zone around Ensor's Pool SAC or within the Natural England River Mease Catchment Risk Zone will be screened separately for HRA unless those works are part of wider plans or projects for which a full HRA has already been undertaken'.
- A new action under Measure 2E as follows:
 - 'Undertake a feasibility study to seek opportunities for implementation of natural catchment management techniques'.
- Measure 2F has been updated as follows:
 - 'Aim to ensure a no net loss of biodiversity, particularly at Local Wildlife Sites, and where possible look to provide a net gain through habitat creation and enhancement, contributing to wider environmental objectives'.
 - An updated action under Measure 2F as follows:
 - 'To conform to Warwickshire County Council's remit under the 'biodiversity duty', particularly at Local Wildlife Sites, as per Section 40 of the Natural Environment and Rural Communities Act 2006 and the Warwickshire, Coventry and Solihull Green Infrastructure Strategy'.
- Created a new Measure 2G as follows:
 - 'To ensure no deterioration in WFD waterbody status as a result of flood risk management activities, and where possible look to enhance status through implementation of the recommendations of the River Basin Management Plans'.
- Addition of the Terms of Reference for the Warwickshire Strategic Flood Forum (WSFF) to Appendix H of the March 2016 LFRMS.

It is also noted at this stage that the SWMP (Surface Water Management Plan) (current initial version in Appendix C of the LFRMS) will still need a full and separate HRA once the SWMP

document is finalised, as currently there is insufficient information within the existing draft plan to undertake the assessment.

The Environment Agency provided a consultation response to the second round of consultation of the LFRMS on 07.12.15 (Lucy Freeman, Partnerships and Strategic Overview Advisor for the Environment Agency) and did not raise any concerns regarding the HRA.

Prior to the production of the HRA, a first round of public and statutory consultation on the contents of the LFRMS was undertaken. Natural England provided a response on 26.03.15, a copy of which is provided in <u>Appendix 1.1.5</u>.

1.2. Likely Significant Effects (LSE)

As highlighted in the Planning Inspectorate's Guidance Note on HRA (August 2013), 'HRA is an *iterative process and the emphasis should be on avoiding likely significant effects (LSE)*' (hereafter known as the PINS Advice Note 10).

The interpretation of a 'likely significant effect' or LSE, is set out in case law and guidance. The Habitats Directive highlights that an Appropriate Assessment should be triggered if any plan or project could have a LSE either '*individually or in combination with other plans or projects*'. In the European Court Judgement (ECJ) Ruling C-127/02, Waddenzee, the Habitat Regulations Assessment Handbook (hereafter known as the HRA Handbook 2016) states that '*irrespective of the normal English meaning of 'likely'*, *in this statutory context 'a likely significant effect' is a 'possible significant effect'; one whose occurrence cannot be excluded on the basis of objective information'*. The handbook continues that '*However, to be excluded on the basis of objective information, the probability of a significant effect does not necessarily have to be zero. An effect could be excluded from assessment if the risk of it occurring would be an extremely low probability'. 'A significant effect is any effect that would undermine the conservation objectives for a European site. There must be a causal connection or link between the subject plan or project and the qualifying features of the site which could result in possible significant effects on the site. These effects may be direct or indirect and the existence and scope of possible effects must be judged on a case-by-case basis' (HRA handbook 2016).*

If a LSE is anticipated from any aspect of the plan or in-combination with other plans and projects, then a more detailed Appropriate Assessment (AA) will be required to be undertaken with the appropriate consideration of mitigation measures and alternative solutions prior to any decision to adopt the plan. This further work if required will be *'carried forward in a focussed and tightly scoped AA'* (PINS Advice Note 10).

Figure 1 below from the HRA Handbook outlines '*How the Habitats Regulations Assessment process influences decisions*'.

How the Habitats Regulations Assessment process influences decisions



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Figure 1: How the Habitat Regulations Assessment process influences decisions (HRA Handbook 2013)

1.3. Habitats Regulation Assessments (HRA)

HRAs are required under Article 6 of the European Habitats Directive (92/43/EEC on the conservation of natural habitats and of wild fauna and flora). Article 6 also covers the requirements for HRA under the Birds Directive (on conservation of wild birds 79/409/EC, now codified directive 2009/147/EC) to the effect that only one assessment is required for all European Sites covered by both directives.

Paragraphs 109, 113, 118 and 119 of the National Planning Policy Framework (NPPF) are relevant to HRAs. Specifically, paragraph 118 states that any *'sites identified, or required as compensatory measures for adverse effects on European sites, potential SPAs, possible SACs and listed or proposed Ramsar sites... should be given the same protection as European sites'.*

Article 6 (1) and 6 (2) of the Habitats Directive 92/43/EEC set out the obligations of Member States on European sites:

Article 6 (1)

'For special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites'.

Article 6 (2)

'Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive'.

Article 6 (3) outlines when an HRA should be undertaken:

'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having obtained the opinion of the general public'

Article 6 (4) discusses alternative solutions and the Imperative Reasons of Overriding Interest Test (IROIT)

'If, in spite of a negative assessment of the implications for the site in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest'.

In England, all European Sites are designated by Defra and will have at least one 'qualifying feature' (either a habitat, species or both) to be designated as European Sites. These designations are underpinned by the national level designation of Sites of Special Scientific Interest (SSSI). SSSI designations cover broader conservation issues than just the qualifying features of a European Site and can have different site boundaries.

A HRA deals only with negative effects on the qualifying features of European Sites. This HRA deals only with SACs, as there are no SPAs or Ramsars within a reasonable proximity (15km, see <u>Section</u> <u>3.1</u>) to Warwickshire that could be impacted by the LFRMS and SWMP. The SSSI data for the European Sites selected, in addition to direct consultation with Natural England has been used in order to determine the current conservation status and condition assessment of European Sites.

The HRA for the LFRMS and SWMP come under the remit of Regulations 61 to 66 of the Conservation of Habitats and Species Regulations 2010 (as amended).

The HRA Handbook 2016 and other guidance, divides the HRA process into 4 distinct stages. This is illustrated in Figure 2 below.



Outline of the four stage approach to the Habitats Regulations Assessment of projects

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Figure 2: Outline of the four stage approach to Habitat Regulations Assessment (HRA Handbook 2013)

This report relates only to stage one of the process which involves the screening for any LSE to ascertain if an AA will be triggered. The HRA Handbook 2016 does however confirm that if appropriate mitigation measures can be incorporated into the plan or project at the screening stage (known as 'incorporated mitigation measures' in the Habitat Regulations Handbook 2016), that result in no LSE when the plan is re-screened with these new measures, an AA will not be required. Figure 3

below, also from the HRA Handbook, highlights the steps in stage one screening for LSE covered in this report.



Outline of the screening steps

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Figure 3: Outline of screening steps for stage one of an HRA (from HRA Handbook 2013)

An In-combination Assessment of other plans and projects in the area is also required as part of the HRA process at both the screening and appropriate assessment stage. As stated in the draft 2013 Habitat Regulations Assessment Guidance produced by Defra and highlighted in the HRA handbook 2016 'the effects of a plan or project must be considered both individually and in-combination with other relevant plans and projects. This is a requirement of the Habitats Directive which helps ensure that European Sites are not damaged by the additive effects of multiple plans or projects'. As with the screening of the LFRMS, the HRA also needs to ensure that any potential impacts from other plans or projects in the area on a European Site (that could increase the impacts already identified for the

LFRMS or SWMP on a cumulative basis) are identified and measures are put in place to protect European Sites from these cumulative effects. An In-combination Assessment of the LFRMS is provided in <u>Section 4</u>.

Figure 4 below outlines the ten steps in the In-combination Screening Assessment methodology as stated in the HRA handbook 2016.



Outline of the in-combination screening assessment methodology

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Figure 4: Ten steps in the screening assessment of in-combination effects (from HRA Handbook 2013)

1.4. Strategic Environmental Assessment (SEA) and the LFRMS

In parallel with this HRA, a report for the Strategic Environmental Assessment (SEA) has also been produced for the LFRMS following the requirements of the SEA Directive (2001/42/EC) and has been circulated for public consultation. Similarly to HRA, SEA is a process that should be embedded into plan making and be iterative. Whilst it may be possible to combine early stages of both assessments they cannot be fully integrated and require separate reporting. One key difference is that SEA covers all environmental effects likely to be significant, not just those that could negatively affect the

integrity of European Sites. Table 1 below from David Tyldesley Associates (DTA) 2014 highlights the key differences between the two processes. A fully updated 2016 SEA has been produced by Atkins in March 2016 to accompany the LFRMS following the second round of consultation.

SEA	HRA
Informs decisions on plans	Informs but can also determine decisions on
	plans
Precautionary principle used with care as	Precautionary principle embedded in process
good practice	as a matter of law
All environmental effects likely to be	Limited to likely significant effects on
significant	qualifying features of European Sites
Statutory public consultation	Discretionary public consultation
Specified timing scoping and content of an	No duty to report or specification for the
environmental report	record
Good understanding and experience, lots [of]	Less understanding and experience, fewer
examples	examples
environmental report Good understanding and experience, lots [of] examples	record Less understanding and experience, fewer examples

Table 1: From DTA December 2014, notes from Chartered Institute of Ecology and Environmental Management (CIEEM) course on the HRA of plans

2. Methodology

2.1. HRA Screening Guidance

The methodology used for the screening of Warwickshire's LFRMS (dated December 2014) and the re-screening of the initial changes made in April and August 2015 and subsequent changes in March 2016, is primarily based on the recommendations outlined in The Habitat Regulations Assessment Handbook 2016 by DTA publishing. Key guidance used in this screening assessment is highlighted below and in <u>Section 7</u>.

- The Habitats Regulations Assessment Handbook 2016 by DTA publications (hereafter, referred to as the HRA Handbook 2016) to which Warwickshire County Council is a current subscriber. The screening categories used in <u>Section 3.5</u> are directly from the HRA handbook 2016;
- The Planning Inspectorate (PINS) Advice Note 10, Habitat Regulations Assessment for nationally significant infrastructure projects August 2013 (Version 5) (hereafter, known as PINS Advice Note 10); and
- Scottish Natural Heritage (SNH) Habitats Regulations Appraisal of Plans. Guidance for Plan-Making Bodies in Scotland (Version 2.0) August 2012 (hereafter, known as the SNH guidance).

Reference is also made to the adjacent county of Worcestershire's screening report for their LFRMS (dated July 2013) and Warwickshire's HRA of the local transport plan dated May 2010 (both with author permission).

2.2. Site Selection of European Sites

Table 2 below from the HRA Handbook was used to help select which European Sites to consider at the screening stage. Information required for assessment on each European Site selected was obtained from Natural England's website and through direct consultation. Initial consultation was also undertaken with the Environment Agency (09.12.14 and 29.01.15) and Natural England (on 18.12.14) by telephone and email. These authorities were consulted on the scope of the assessment and the nature of any other plans and projects that would need to be considered as part of the Incombination Assessment.

2.3. Limitations and Assumptions

This HRA is based on the latest available information on the European Sites selected, provided by Natural England at the time of writing. It is likely that in the future the conservation status and condition of European Sites may change. Natural England are also developing new and more detailed conservation objectives but these are not available at the time of writing. Future HRAs will need to use this new information, as it becomes available.

Since the first draft of this HRA, the Ribble case in the UK courts¹ has suggested the need to consider older more detailed Conservation Objectives for European Sites which are currently not published on Natural England's website. We have obtained the 2008 Conservation Objectives for Ensor's Pool SSSI and the 2012 Conservation Objectives for the River Mease SAC from Natural England which have been summarised in <u>Appendix 3</u> of this report. We have also received correspondence from Natural England (dated 24.08.15, extract provided in <u>Appendix 1</u>), that our 'primary focus' should be on the

¹ RSPB v Secretary of State for the Environment Food and Rural Affairs, BAE Systems (Operations) Ltd and Natural England, 18th March 2015, [2015] EWHC Civ 227, referred to as the *<u>Ribble</u>* Case.

European Site Conservation Objectives for the relevant European Site which are provided in Table 3 of this report.

It should also be noted that in September 2014, surveys for the population of white-clawed crayfish at the only European Site in Warwickshire (Ensor's Pool SAC) did not locate any white-clawed crayfish. The surveyor's report, published by Natural England in October 2015 states the survey in September 2014 indicates the 'once abundant population of white-clawed crayfish appears to have disappeared. The pool still appears to provide suitable habitat for crayfish and there is no indication that any other animal or plant species has been affected.' The report goes on to suggest that crayfish plague 'seems likely to be the cause of mortality' and recommends further surveys 'to verify the absence of whiteclawed crayfish and determine whether signal crayfish are present' (Natural England 2015).

Subsequent further surveys were undertaken in 2015, comprising a bioassay between June and September and a trapping survey in September. Natural England confirmed to Ecological Services at WCC on 02.12.15 that 'We conclude that the population of native white-clawed crayfish is no longer present at Ensor's Pool. Natural England is now considering these results and their implications in conjunction with our national specialists and the ecologists who undertook the surveys' (see correspondence from Antony Muller in Section 1.1.1, Appendix 1).

Ecological Services at WCC also received correspondence from Natural England on 03.07.15 and 14.01.15 in relation to the current designation of Ensor's Pool SAC / SSSI given the results of the above surveys (See <u>Appendix 1</u>). On 03.07.15 Natural England confirmed that Habitat Regulations Assessment (HRA) of plans and projects with the potential to affect the site should therefore be carried out on a 'business as usual' basis. This was further confirmed in relation to other HRA work undertaken by WCC in December 2015 and recent correspondence with Natural England has not highlighted any change to this advice.

The European Site selection for this HRA is based on the most recent GIS data on flooding risk and watercourses as provided to Ecological Services at WCC by the Flood Risk and Water Management Team at WCC, the Environment Agency and Natural England at the time of monitoring.

3. The Screening Assessment

3.1. Scanning and Site Selection of European Sites

A total of five European Sites have been chosen to assess based on their geographic location (within Warwickshire or a 15km buffer) and their potential to be impacted by the plan. Table 2 below from the HRA Handbook 2016 has also been used to aid in the selection process.

Types of plan	Sites to scan for and check	Names of sites selected
1. All plans (terrestrial, coastal and marine)	Sites within the geographic area covered by or intended to be relevant to the plan	Ensor's Pool Bredon Hill Cannock Extension Canal Lyppard Grange Ponds River Mease (above sites are within 15km of Warwickshire county boundary)
2. Plans that could affect the aquatic environment	Sites upstream or downstream of the plan area in the case of river or estuary sites	River Mease
	Open water, peat land, fen, marsh and other wetland sites with relevant hydrological links to land within the plan area, irrespective of distance from the plan area	None Neither Cannock Extension Canal or Lyppard Grange pond have a direct connection with any rivers flowing from Warwickshire.
3. Plans that could affect the marine environment	Sites that could be affected by changes in water quality, currents or flows; or effects on the inter-tidal or sub-tidal areas or the sea bed, or marine species	N/A
4. Plans that could affect the coast	Sites in the same coastal 'cell', or part of the same coastal ecosystem, or where there are interrelationships with or between different physical coastal processes	N/A
5. Plans that could affect mobile species	Sites whose qualifying features include mobile species which may be affected by the plan irrespective of the location of the plan's proposals or whether the species would be in or out of the site when they might be affected	Mobile species present in the River Mease and Ensor's Pool
6. Plans that could increase	Such European sites in the plan area	N/A
recreational pressure on European sites potentially vulnerable or sensitive to such pressure	Such European sites within an agreed zone of influence or other reasonable and evidence-based travel distance of the plan area boundaries that may be affected by local recreational or other visitor pressure from within the plan area	N/A
	Such European sites within an agreed zone of influence or other evidence-based longer travel distance of the plan area, which are major (regional or national) visitor attractions such as European sites which are National Nature Reserves where public visiting is promoted, sites in National Parks, coastal sites and sites in other major tourist or visitor destinations	N/A

Scanning and site selection list for sites that could potentially be affected by the plan

7. Plans that would increase the amount of development	Sites in the plan area or beyond that are used for, or could be affected by, water abstraction irrespective of distance from the plan area	N/A to this plan
	Sites used for, or could be affected by, discharge of effluent from waste water treatment works or other waste management streams serving the plan area, irrespective of distance from the plan area	N/A to this plan, Sewer flooding is the remit of Severn Trent Water and not WCC
	Sites that could be affected by the provision of new or extended transport or other infrastructure	N/A
	Sites that could be affected by increased deposition of air pollutants arising from the proposals, including emissions from significant increases in traffic	N/A
8. Plans for linear developments or infrastructure	Sites within a specified distance from the centre line of the proposed route (or alternative routes), the distance may be varied for differing types of site / qualifying features and in the absence of established good practice standards, distance(s) to be agreed by the statutory nature conservation body	N/A
9. Plans that introduce new activities or new uses into the marine, coastal or terrestrial environment	Sites considered to have qualifying features potentially vulnerable or sensitive to the effects of the new activities proposed by the plan	N/A
10. Plans that could change the nature, area, extent, intensity, density, timing or scale of existing activities or uses	Sites considered to have qualifying features potentially vulnerable or sensitive to the effects of the changes to existing activities proposed by the plan	N/A
11. Plans that could change the quantity, quality, timing, treatment or mitigation of emissions or discharges to air, water or soil	Sites considered to have qualifying features potentially vulnerable or sensitive to the changes in emissions or discharges that could arise as a result of the plan	River Mease and Ensor's Pool
12. Plans that could change the quantity, volume, timing, rate, or other characteristics of biological resources harvested, extracted or consumed	Sites whose qualifying features include the biological resources which the plan may affect, or whose qualifying features depend on the biological resources which the plan may affect, for example as prey species or supporting habitat or which may be disturbed by the harvesting, extraction or consumption	N/A
13. Plans that could change the quantity, volume, timing, rate, or other characteristics of physical resources extracted or consumed	Sites whose qualifying features rely on the non- biological resources which the plan may affect, for example, as habitat or a physical environment on which habitat may develop or which may be disturbed by the extraction or consumption	N/A
14. Plans which could introduce or increase, or alter the timing, nature or location of disturbance to species	Sites whose qualifying features are considered to be potentially sensitive to disturbance, for example as a result of noise, activity or movement, or the presence of disturbing features that could be brought about by the plan	Ensor's Pool
15. Plans which could introduce or increase or change the timing, nature or	Sites whose qualifying features are considered to be potentially sensitive to the effects of changes in light or noise that could be brought about by the plan	N/A

location of light or noise pollution				
16. Plans which could introduce or increase a potential cause of mortality of species	Sites whose qualifying features are considered to be potentially sensitive to the source of new or increased mortality that could be brought about by the plan	Ensor's Pool and River Mease – could be impacted by an introduction of non- native species or a pollution event		
Extract from <i>The Habitats Regulations Assessment Handbook</i> , <u>www.dtapublications.co.uk</u> © DTA Publications Limited (September) 2013 all rights reserved				

 Table 2: Table used for scanning and site selection from HRA Handbook 2013

The following five sites have been selected for consideration in this HRA. They are all Special Areas of Conservation (SACs):

- Ensor's Pool SAC
- Bredon Hill SAC
- Lyppard Grange Ponds SAC
- Cannock Extension Canal SAC
- River Mease SAC

The location of each of these European Sites in relation to Warwickshire's boundary, a 15km buffer and the three river basin districts that fall in Warwickshire (the Humber, Severn and Thames) are provided by Figure 5.



Figure 5: Plan showing location of river basin districts and SACs within 15km of Warwickshire's county boundary

3.2. Site Descriptions

The following section provides descriptions of the selected sites using information sourced from Natural England, Joint Nature Conservancy Council (JNCC) and WCC 2010. Table 3 provides the following key information for each SAC:

- Qualifying features;
- Latest conservation objectives;
- Favourable conservation status; and
- Condition of features.

3.2.1. Ensor's Pool SAC

Ensor's Pool was formed from an abandoned clay pit around fifty years ago. It was notified as a SSSI in 1995, designated a Local Nature Reserve in 1997 and designated a SAC in April 2005. It is located on the south-west fringe of Nuneaton's urban area (grid reference SP 348903) and covers an area of approximately 3.8ha. It comprises an elongated (220m by 50m) isolated water body with an average depth of 8m. The pool is lined by an impervious layer of clay and is therefore it is assumed that it is reliant on rainwater as the predominant supply of water. The Environment Agency has undertaken work to ascertain how the pool is fed and this has still not been quantified and remains an unknown factor.

Ensor's Pool is designated a European Site as it provides the habitat for one of the largest populations of healthy white-clawed crayfish (*Austropotamobius pallipes*) in England. The white-clawed crayfish flourished in both Britain and Europe until the commercial introduction of the signal crayfish (*Pacifastacus leniusculus*) from America in the 1970s. As well as preying on its smaller cousin, the signal crayfish carries a fungal disease to which the white-clawed crayfish has no immunity. Unfortunately, the signal crayfish and other non-native crayfish have since escaped the confines of the fisheries and entered the river systems of Britain and Europe, causing the dramatic decline of white-clawed crayfish. The isolation of Ensor's Pool from rivers creates a refuge for the white-clawed crayfish to flourish and that is why it is of both national and European importance.

In November 2014, Natural England reported that 'two recent surveys of Ensor's Pool in Warwickshire, noted for its populations of native white-clawed crayfish, have found no sign of the aquatic invertebrates' (Natural England press release 08.11.14). There is now a Natural England Site Improvement Plan for Ensor's Pool where a key action is to 'further investigate the cause of the apparent collapse of the whiteclawed crayfish population' (Natural England 2014). Given this finding, WCC Ecological Services contacted Natural England for an official view on how Ensor's Pool should be considered for the purposes of this HRA. Their official consultation response dated 14.01.14 and provided in <u>Appendix 1</u>, stated 'Natural England confirms there is no change to the SSSI/SAC designation. We advise that Habitats Regulations Assessment (HRA) of plans and projects with the potential to affect the site should therefore be carried out on a 'business as usual' basis'.

An official response was provided in a letter dated 03.07.15 provided in <u>Appendix 1, Section 1.1</u> stated 'Natural England confirms there is no change to the SSSI/SAC designation. We advise that Habitats Regulations Assessment (HRA) of plans and projects with the potential to affect the site should therefore be carried out on a 'business as usual' basis.' This advice was reconfirmed by Natural England in July and August 2015. This HRA is based on the SSSI/SAC data supplied prior to 2014 as currently recommended by Natural England.

3.2.2. Bredon Hill SAC

The violet click beetle (*Limoniscus violaceus*) was recorded at Bredon Hill in 1989, although there is a 1939 record from 'Tewkesbury', which may refer to Bredon Hill. It has been found in each of several years since. It is a very important site for fauna associated with decaying timber on ancient trees, including many Red Data Book and Nationally Scarce invertebrate species. The violet click beetle is primarily associated with ancient trees, as it develops in undisturbed wood-mould at the base of central cavities in these trees. At Windsor Forest it seems to develop exclusively in beech (*Fagus sylvatica*) but at Bredon Hill and Dixton Wood ash (*Fraxinus excelsior*) appears to be the main species used. It is probable that a large population of ancient trees is necessary for a site to support this species.

3.2.3. Cannock Extension Canal SAC

Cannock Extension Canal in central England is an example of anthropogenic, lowland habitat supporting floating water-plantain (*Luronium natans*) at the eastern limit of the plant's natural distribution in

England. A very large population of the species occurs in the canal, which has a diverse aquatic flora and rich dragonfly fauna, indicative of good water quality. The low volume of boat traffic on this terminal branch of the Wyrley and Essington Canal has allowed open-water plants, including floating water-plantain to flourish, while depressing the growth of emergents.

Floating water-plantain occurs in a range of freshwater situations, including nutrient-poor lakes in the uplands (mainly referable to 3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*) and slowly-flowing lowland rivers, pools, ditches and canals that are moderately nutrient-rich. It occurs as two forms: in shallow water with floating oval leaves, and in deep water with submerged rosettes of narrow leaves. The plant thrives best in open situations with a moderate degree of disturbance, where the growth of emergent vegetation is held in check. Populations fluctuate greatly in size, often increasing when water levels drop to expose the bottom of the water body and from year to year. At many sites records of floating water plantain have been infrequent, suggesting that only small populations occur, in some cases possibly as transitory colonists of the habitat. Populations tend to be more stable at natural sites than artificial ones, but approximately half of recent (post-1980) records are from canals and similar artificial habitats. Its habitat in rivers has been greatly reduced by channel straightening, dredging and pollution, especially in lowland situations.

3.2.4. Lyppard Grange Ponds SAC

This site, on the outskirts of Worcester, is set amongst a housing development on former pastoral farmland. The ponds are associated with good-quality terrestrial habitats, and are a remnant of a formerly more widespread newt habitat when large numbers of ponds were maintained for agricultural purposes.

The great crested newt (*Triturus cristatus*) is the largest native British newt, reaching up to around 17 cm length. It has a granular skin texture (caused by glands which contain toxins making it unpalatable to predators), and in the terrestrial phase is dark grey, brown or black over most of the body, with a bright yellow/orange and black belly pattern. Adult males have jagged crests running along the body and tail. Newts require aquatic habitats for breeding. Eggs are laid singly on pond vegetation in spring, and larvae develop over summer to emerge in August to October, normally taking two to four years to reach maturity. Juveniles spend most time on land, and all terrestrial phases may range a considerable distance from breeding sites.

Breeding sites are mainly medium-sized ponds, though ditches and other water body types may also be used less frequently. Ponds with ample aquatic vegetation (which is used for egg-laying) seem to be favoured. Great crested newts do not require very high water quality, but are normally found in ponds with a circum-neutral pH. Broad habitat type varies greatly, the most frequent being pastoral and arable farmland, woodland, scrub, and grassland. There are also populations in coastal dunes and shingle structures. Great crested newts can be found in rural, urban and post-industrial settings, with populations less able to thrive where there are high degrees of fragmentation. The connectivity of the landscape is important, since great crested newts often occur in metapopulations that encompass a cluster of several or many ponds. This helps ensure the survival of populations even if sub-populations are affected by, for example, pond desiccation or fish introductions. Climate may influence the range edge at the north of its distribution in Scotland, but other ecological or landscape factors such as pond density are probably more important in determining distribution across the main part of its British range.

3.2.5. River Mease SAC

The River Mease is a small tributary of the River Trent. It is a relatively unmodified lowland river providing conditions for populations of spined loach (*Cobitis taenia*), bullhead (*Cottus gobio*), white-clawed crayfish and otter (*Lutra lutra*). It has a retained a reasonable degree of channel diversity compared to other

similar rivers containing spined loach populations. It has extensive beds of submerged plants along much of its length which, together with its relatively sandy sediments (as opposed to cohesive mud) provide good habitat opportunities for the species.

The spined loach is a small bottom-living fish that has a restricted microhabitat associated with a specialised feeding mechanism. They use a complex branchial apparatus to filter-feed in fine but well-oxygenated sediments. Optimal habitat comprises a patchy cover of submerged (and possibly emergent) macrophytes, which are important for spawning, and a sandy (also silty) substrate, into which juvenile fish tend to bury themselves.

The River Mease is an example of bullhead (*Cottus gobio*) populations in the rivers of central England. Bed sediments are generally not as coarse as other sites selected for the species, reflecting the nature of many rivers in this geographical area, but are suitable in patches due to the river's retained sinuosity. The patchy cover from submerged macrophytes is also important for the species. The bullhead is a small bottom-living fish that inhabits a variety of rivers, streams and stony lakes. It appears to favour fast-flowing, clear shallow water with a hard substrate (gravel/cobble/pebble) and is frequently found in the headwaters of upland streams. However, it also occurs in lowland situations on softer substrates so long as the water is well-oxygenated and there is sufficient cover. It is not found in badly polluted rivers.

As well as its importance for species, the River Mease has also been selected as a SAC on the presence of the qualifying habitat: water courses of plain to montane levels with the habitat community *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation (rivers with floating vegetation often dominated by water-crowfoot).

3.3. Key Information on European Sites for the HRA.

Table 3 below provides the latest information that is available via Natural England's website (as of March 2016) on the current conservation objectives, favourable conservation status and condition of features. <u>Appendix 1</u> also provides consultation responses received from Natural England to date. The key vulnerability of each SAC have been taken directly from the citation for the SAC. The relevant '*Operations Likely to Damage the Special Interest of the Site*' (OLDSIS) considered relevant to the LFRMS and SWMP are listed in Table 3, with a full explanation from the SSSI citation in <u>Appendix 2</u>.

In addition to the current Conservation Objectives published by Natural England on their website, Ecological Services have also obtained the previous more detailed Conservation Objectives for Ensor's Pool SAC (dated 2008) and the River Mease SAC (dated 2012) , which are also considered as part of this initial screening in line with recent HRA case law². A summary of these more detailed Conservation Objectives and Targets and provided in <u>Appendix 3</u> (Natural England 2008, 2012). On 29 February 2016, Natural England published Draft Supplementary Advice on Conserving and Restoring Site Features for the River Mease SAC (Natural England 2016). The document provides supplementary advice to the River Mease SAC's Site Conservation Objectives (provided in Table 3 below) and outlines a total of 67 targets for the River Mease SAC. Natural England state '*This advice is draft pending comments from the site's stakeholders*' (Natural England 2016).

² RSPB v Secretary of State for the Environment Food and Rural Affairs, BAE Systems (Operations) Ltd and Natural England, 18th March 2015, [2015] EWHC Civ 227, referred to as the *<u>Ribble</u>* Case.

Name, site reference and location	Designation status, area and date of designation	Qualifying features	Conservation objectives published by Natural England	General site character ³	Conservation status	Condition assessment	Key vulnerability / Operations Likely to Damage the Special Interest of the Site (OLDSIS) (see <u>Appendix 2</u>) potentially relevant to the LFRMS & SWMP
Ensor's Pool,	SAC (Ensor's	S1092: White-	As per Natural England's	Habitat Class	In 2012 the	2012 Condition	Need to protect the
warwicksnire	P001 5551)	Austropotamobius	conservation objectives of this	grassland	white-clawed	Assessment of	from direct or diffuse
Grid reference:	3.86 ha	pallipes	SAC are currently under review'	Mesophile	crayfish were	the single unit	pollution.
SP348903				grassland) 30%	found to be	of the SSSI is	
Ett. a.d.	01.04.05			and N06	favourable at	described as	Avoid changing the
EU code:				(Inland water	the site level	favourable	amount of water in
0K0012040				(Standing	population at	condition	abstracting water
Further				water, Running	the site	threat risk'.	from inflowing
information				water) 70%.	'remains at a	For current	streams or raising the
provided by				Total Habitat	reasonably	status see	water level).
Natural England				Cover 100%	high	Appendix 1	
in a letter dated					abundance'		Avoid increasing the
14.01.15					For current		sediment
(<u>Appendix 1 &</u>					status see		
<u>3</u>) and Natural					Natural		Avoid introduction of
England October 2015					England		non-native species
October 2015					responses in		cravfish species
					Appendix 1		city isn'species.

³ General Habitat Classification codes as per Eionet European Topic Centre on Biological Diversity <u>http://bd.eionet.europa.eu/activities/Natura 2000/reference portal</u> accessed on 21.03.16

							Avoid control or removal of natural aquatic vegetation. Avoid intentional or accidental introduction of species such as bottom feeding coarse fish. OLDSIS: 13b, 13c, 14, 15, 23
Bredon Hill,	SAC	S1079: Violet click	30 th June 2014	General site	95.45%	Site Assessed	Main threats are lack
Worcestershire	(component	beetle <i>Limoniscus</i>	Ensure that the integrity of the	character:	considered to	23.03.15	of replacement
Grid references	of Bredon	violaceus	site is maintained or restored as	N21 (Non-	be Favourable	Of the 17 SSSI	generation of trees
SO965406			the site contributes to	cultivated with	- 4.55% -	Units that	ancient trees over
30903400	384.20 ha		achieving the Favourable	woody plants	recovering	make up this	much of the hill as
EU Code:	50 1120 114		Conservation Status of its	(including		SAC. 16 are	many of the younger
UK0012587	01.04.05		Qualifying Features, by	Orchards,		considered to	trees have been
			maintaining or restoring;	groves,		be	removed to increase
			The extent and	Vineyards,		'favourable'	stock grazing areas,
			distribution of the	Dehesas) 80%,		and one	the overall number of
			habitats of qualifying	N08 (Heath,		'unfavourable	ancient trees suitable
			species	Scrub, Maquis		recovering'	for the violet click
			The structure and function of the hebitate	and Garrigue,		15 of the SSSI	beetle is relatively
			function of the habitats	10% NO9 (Dry		15 OI LITE SSSI	Management
			The supporting	grassland.		considered to	agreements are being
			processes on which the	Steppes) 10%.		have a 'high'	used to preserve
			habitats of qualifying	Total Habitat		Condition	existing tree stocks
			species rely	Cover: 100%		Threat Risk	and to provide
			,			with the	replacement planting

			 The populations of qualifying species, and, The distribution of qualifying species within the site. 			remaining 2 having ' <i>medium</i> ' Condition Threat Risk	OLDSIS :13a, 13b, 13c, 14, 15
Cannock Extension Canal, Staffordshire, West Midlands Grid reference: SK020058 EU code: UK0012672	SAC (Cannock Extension Canal SSSI) 5.15 ha 01.04.05	S1831: Floating water-plantain <i>Luronium natans</i>	 30th June 2014 Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of the habitats of qualifying species The structure and function of the habitats of qualifying species The supporting processes on the habitats of qualifying species rely The populations of qualifying species, and, The distribution of qualifying species within the site. 	General site character: N16 (Broad- leaved deciduous woodland) 4.9% N06 (Inland water bodies (Standing water, Running water) 75% N10 (Humid grassland, Mesophile grassland, 10% N23 (Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial Sites) 10.1% Total Habitat Cover: 100%	2010: 41.10% of the site is considered to be 'favourable' and 58.90% considered to be 'unfavourable recovering'	2010 Condition assessment of two SSSI units: One is considered to be 'unfavourable - recovering' and the second considered to be 'favourable' Condition threat risk is considered to be high for the entire site	Appropriate management to ensure a careful balance of boat traffic in the canal is key to the population of floating water- plantain. Discharges of surface water run- off (principally from roads) can lead to some reduction in water quality. OLDSIS :13a, 13b, 13c, 14, 15, 23

crested newt Triturus cristatus	Ensure that the integrity of the	character:	concidered to		
Triturus cristatus	0,	character.	considered to	assessment of	pressure and
	site is maintained or restored as	N08 (Heath,	be in	two units of	introduction of fish.
	appropriate, and ensure that	Scrub, Maquis	favourable	the	
	the site contributes to	and Garrigue,	condition but	component	Need to ensure
	achieving the Favourable	Phygrana) 22%	7.97% in	SSSI	continued
	Conservation Status of its	N06 (Inland	unfavourable	Unit 1	appropriate pond
	 maintaining or restoring; The extent and distribution of the habitats of qualifying species The structure and function of the habitats of qualifying species The supporting 	(Standing water, Running water) 8% N14 (Improved grassland) 70% Total Habitat Cover 100%	condition	ponds deemed 'unfavourable - recovering' and Unit 2 comprising parkland– deemed 'favourable'	that of surrounding terrestrial habitats is maintained. Avoid new barriers to newt movements between breeding ponds.
	 processes on which the habitats of qualifying species rely The populations of qualifying species, and, The distribution of qualifying species within the site. 			The unfavourable condition assessment for Unit 1 was due to failing of suitable egg laying substrate, but a remedy for this has now been agreed. Both units	Avoid use of inappropriate pesticides in vicinity of ponds supporting great crested newts. OLDSIS: 13a, 13b, 13c, 14, 15
		 appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of the habitats of qualifying species The structure and function of the habitats of qualifying species The supporting processes on which the habitats of qualifying species rely The populations of qualifying species, and, The distribution of qualifying species within the site. 	 appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; The extent and distribution of the habitats of qualifying species The structure and function of the habitats of qualifying species The supporting processes on which the habitats of qualifying species rely The oppulations of qualifying species within the site. Scrub, Maquis and Garrigue, Phygrana) 22% N06 (Inland water bodies (Standing water, Running water, Running water) 8% N14 (Improved grassland) 70% Total Habitat Cover 100% 	appropriate, and ensure that the site contributes to achieving the Favourable Qualifying Features, by maintaining or restoring; • The extent and distribution of the habitats of qualifying speciesScrub, Maquis and Garrigue, N06 (Inland unfavourable - recovering condition• The extent and distribution of the habitats of qualifying speciesWater bodies water, Running water) 8%- recovering condition• The extent and distribution of the habitats of qualifying speciesWater, Running water) 8%- recovering condition• The structure and function of the habitats of qualifying speciesTotal Habitat Cover 100%- recovering condition• The bound qualifying species within the site recovering condition- recovering condition	appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;Scrub, Maquis and Garrigue, Phygrana) 22%favourable condition but Conservation Status of its NO6 (Inland water bodies (Standing water, Running distribution of the habitats of qualifying species of qualifying species, and function of the habitats of qualifying species, and processes on which the habitats of qualifying species, and qualifying species, and, The distribution of qualifying species within the site.Scrub, Maquis and Garrigue, 7.97% in water bodies (Standing water, Running water, Running of qualifying species of qualifying species, and, The distribution of qualifying species within the site.favourable condition but unfavourable and Unit 1 component species Conservationthe component SSSI Unit 1 unfavourable unfavourable componsite parkland- deemed (favourable' The unfavourable conditionthe component SSSI Unit 1 unfavourable componsite and Unit 2 componsite parkland- deemed (favourable'• The supporting processes on which the habitats of qualifying species, and, qualifying species within the site.Scrub Maquis superial species and conditionThe unfavourable for Unit 1 was due to failing of suitable egg laying substrate, but a remedy for this has now been agreed.

						have 'no identified	
						condition threat'	
River Mease,	SAC (River	H3260: Water	30 th June 2014	General site	In 2010 the	2010 condition	Need to avoid any
Derbyshire,	Mease SSSI)	courses of plain to	Ensure that the integrity of the	character:	whole site was	assessment all	deterioration in water
Leicestershire,		montane levels	site is maintained or restored as	Habitat Class	considered to	four SSSI units	quality and quantity
Staffordshire	23.03 ha	with the	appropriate, and ensure that	N06 Inland	be	considered to	Diffuse pollution and
		Ranunculion	the site contributes to	waterbodies	'Unfavourable	be	excessive
Grid reference:	01.04.05	<i>fluitantis</i> and	achieving the Favourable	(Standing	– no change'	unfavourable	sedimentation are
SK260114		Callitricho-	Conservation Status of its	water, Running	because of	– no change.	catchment-wide and
		Batrachion	Qualifying Features, by	water) 100%.	drainage,		have the potential to
EU code:		vegetation	maintaining or restoring;	Total Habitat	inappropriate	Key reasons	affect the site.
UK0030258			 The extent and 	Cover 100%	weirs dams	for	
		S1092: White-	distribution of		and other	unfavourable	Avoid introduction of
See <u>Appendix 3</u>		clawed crayfish	qualifying natural		structures,	condition due	non-native species
		Austropotamobius	habitats and habitats of		invasive	to point	
Recent draft		pallipes	qualifying species		freshwater	source and	Minimise pollution of
supplementary			 The structure and 		species,	diffuse	river from point and
advice on this		S1149: Spined	function (including		siltation,	phosphorus	diffuse sources,
European Site's		loach <i>Cobitis</i>	typical species) of		water	pollution,	including discharges
Conservation		taenia	qualifying natural		abstraction,	physical	of domestic and
Objectives			habitats		freshwater	modifications	industrial effluent,
including a		S1163: Bullhead	 The structure and 		pollution and	via over	run-off from
number of new		Cottus gobio	function of the habitats		pollution from	dredging,	agriculture, forestry
targets has was			of qualifying species		agriculture /	weir, other	and urban land and
published on		S1355: Otter Lutra	 The supporting 		run off	impoundment	accidental pollution
29.02.16		lutra	processes on which			s. None native	from industry and
(Natural			qualifying natural			species, lack of	agriculture.
England 2016).			habitats and the			river bank	
			habitats of qualifying			vegetation,	Avoid / reduce
			species rely			IACK OT	siltation of river bed.
						macrophyte	

 The populations of qualifying species, and, The distribution of qualifying species within the site. 	species density and composition. Over abstraction lack of fresh water entering the river, density of designated fish species All units have a 'High' Condition Threat Risk	Riparian areas and the wider catchment need to be managed sensitively to avoid excessive run-off of soil particles and nutrients into the river. Effluents entering the rivershould be treated to reduce the levels of phosphorus contained within them OLDSIS: 7, 13a, 13b, 13c, 14, 15, 21, 24
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Table 3: Information required to undertake an HRA for each selected European site as per Table 2

3.4. Screening of SACs

The LFMS states that the Lead Local Flood Authority, WCC is responsible for:

- 1) **Ordinary watercourse flooding** (an ordinary watercourse is one not designated as a main river; main rivers come under the remit of the Environment Agency) when 'a watercourse... cannot accommodate the volume of water flowing in it or the channel becomes blocked, causing water to come out of the channel and flow over the surrounding land'.
- 2) **Groundwater flooding** when 'water in the ground rises up above the ground surface due from within permeable rocks often as a result of prolonged or heavy rainfall'
- 3) **Pluvial (surface water) flooding** when '*high intensity rainfall causes surface water runoff which flows over the ground and accumulates in low-lying areas*'
- 4) **Highways flooding** (excluding motorways and trunk roads) when *'heavy rainfall or overflow from blocked drains and gullies causes water to pond on the carriageway'*.
- Flooding from main rivers and reservoirs is the responsibility of the Environment Agency
- Flooding from motorways and trunk roads is the responsibility of Highways England (formerly the Highways Authority).
- Sewer flooding is the responsibility of Seven Trent Water.

Zone	Name	Definition (as per CLG March 2012)
Zone 1	Low probability	Land assessed as having less than 1 in 1000 annual probability of river or sea flooding (<0.1%)
Zone 2	Medium probability	Land assessed as having between 1 in 100 and 1 in 1000 annual probability of river flooding (1% to 0.1%)
Zone 3a	High probability	Land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%)
Zone 3b	The functional flood plain	Land where water has to flow or be stored in times of flood. Area is agreed between local planning authorities and the Environment Agency although land which would flood with an annual probability of 1 in 20 (5%) or greater in a year, or is designed to flood in extreme (0.1%) flood, should provide a starting point for discussions to identify the functional floodplain

The Environment Agency flood risk zones can be defined as follows (CLG March 2012):

Table 4: Definition of flood zones

The SACs for consideration as part of this HRA have been further scoped and refined by an assessment exercise that has identified if there could be any causal connection or link between the types of flooding that are covered by the LFRMS and SWMP and any potential (however hypothetical at this stage) impact to the qualifying features of each SAC as described in <u>Section 1.1</u>. The results of this assessment are provided in Table 4 below and a series of maps extracted from a GIS project produced for the HRA, help provide justification for sites screened in or out of this HRA.

The two sites that have been screened in for further consideration in this HRA are:

- 1) Ensor's Pool. This site is vulnerable to:
 - pollution from surface water flooding in Warwickshire,
 - any increase in water levels and potential to introduce non-native species to the Pool.
 - Figure 6 shows that Ensor's Pool lies within the surface water flooding zone for both 30 year and 200 year events.

2) River Mease. There is potential that any ordinary water course flooding within the Natural England River Mease Catchment Risk Zone (see Figure 7) to impact the River Mease SAC. Impacts include: pollution (especially from increased nutrient levels, particularly phosphorus), sedimentation and the introduction of non-native species. In February 2016, Natural England confirmed that for the purposes of HRA, the Natural England River Mease Catchment Risk Zone as illustrated in Figure 7 should be used for HRA screening purposes rather than the Environment Agency's Mease Catchment Plan area. For illustrative purposes only, the Environment Agency Mease Catchment Risk Zone is used in Appendix 4, but only the Natural England River Mease Catchment Risk Zone is used in this HRA.

All other European Sites in Table 3 have been screened out as it has been concluded at this stage that the LFRMS and SWMP will not impact these sites. Justification is provided in Table 5.

SAC	Ordinary Watercourse flooding	Ground water flooding	Pluvial (surface water) flooding	Highways Flooding	Potential Impacts
Ensor's Pool Screened IN	Screened out: the pool is not in the flood plain or flood zone 2 or 3 (see Table 4).	Screened out: based on current information that the pool is clay lined and most likely rainwater fed (although this is currently unknown).	Screened in: the site is in the surface water flood zone for both 30 year and 200 year events (see Figure 6).	Screened out: there are no highways near Ensor's Pool.	Pollution from surface water run-off, increase in water levels and potential for the introduction of non-native species.
Bredon Hill	Screened out: the site is on a hill outside of Warwickshire and hence is not at risk of flooding so no impact to the violet click beetle is anticipated.	Screened out: the site is not hydrologically connected to Warwickshire.	Screened out: the site is on a hill so cannot be impacted by any surface water flooding from Warwickshire.	Screened out: the site is not in close proximity to any highways in Warwickshire.	None. Screened out of this assessment.
Cannock Extension Canal	Screened out: the only water courses flow away from the canal, no water courses flow into the canal from Warwickshire.	Screened out: there is no evidence to suggest that this site will be impacted by ground water flooding due to its proximity to Warwickshire.	Screened out: the site is not connected by any water courses flowing out of Warwickshire.	Screened out: due to proximity to Warwickshire.	None. Screened out of this assessment.
Lyppard Grange Ponds	Screened out: there is no direct connection with the ponds and a river that runs from Warwickshire hence there is no possibility of introducing fish.	Screened out: due to proximity to Warwickshire.	Screened out: there is no direct connection to water courses flowing from Warwickshire and this site, and there is a landform / ridge in between the nearest river and the site.	Screened out: due to the proximity to Warwickshire.	None. Screened out of the assessment.

River Mease Screened In	Screened in: a small part of North Warwickshire lies in the Natural England River Mease Catchment Risk Zone (see Figure 7) and contains tributaries that flow directly into the River Mease to the north.	Screened out: due to the proximity of the River Mease from Warwickshire.	Screened in: if polluted surface water flooding enters the Natural England River Mease Catchment Risk Zone (see Figure 7) it could potentially affect it.	Screened in: potential for highways flooding and any associated pollutants / nutrients to enter the Natural England River Mease Catchment Risk Zone (see Figure 7) and flow directly into the River Mease.	Diffuse or direct pollution and sedimentation (including nutrient run off). This could arise from the flooding of a tributary in Warwickshire that flows directly into the River Mease. Phosphorous is known to be a particular problem. Introduction of non-native species is also a potential impact.

Table 5: Screening of European Sites identified as per Table 2 for potential impacts of the flooding types covered by WCC in the LFRMS


Figure 6: Ensor's Pool and Surface Water Flooding predictions for 30 years and 200 years



Figure 7: Natural England River Mease Catchment Risk Zone with Location of Highways

3.5. Screening Assessment of Warwickshire's LFRMS and SWMP.

The screening of the LRFMS has been undertaken following guidance and specific 'screening categories' provided in the HRA Handbook 2016, listed in Table 6.

The results of the screening for the entire LFRMS including the edits made to the strategy in April and August 2015 and March 2016 (as outlined in <u>Section 1.1</u>. above) are provided in Table 7 including justification as to why these have been screened in or out of any further assessment.

Please note it is considered at this stage the SWMP is too generic in nature for a full HRA to be undertaken. A further HRA of this plan is required when the subsequent stages have been completed and the list of key surface water flood risk hotspots are identified.

The specific wording of the objectives and specific measures outlined in the LFRMS to aid the reader's comprehension are also provided below in Table 8. Table 8 should be read in conjunction with '*Appendix D: Warwickshire LFRMS Action Plan*' in the final March 2016 LFRMS.

Category	Justification	Screened In or Screened Out?
	Administrative Text – introductory text about the plan	Screened out
	The plan makers 'vision' or 'general aspiration'	Screened out
	General Statements of overall goals	Screened out
	General Statements of broad objectives (implications are assessed under policy xx below)	Screened out
Α	General statement of policy / general aspiration	Screened out
В	Policy listing general criteria for testing the acceptability / sustainability of proposals	Screened out
С	Proposal referred to but not proposed by the plan	Screened out
D	Environmental protection / site safeguard policy	Screened out
E	Policies or proposals which steer change in such a way as to protect European sites from adverse effects	Screened out
F	Policy that cannot lead to development or other change	Screened out
G	Policy or proposal that could not have any conceivable effect on a site	Screened out
H	Policy or proposal the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects)	Screened out
I	Policy or proposal with a likely significant effect on a site alone	Screened in
1	Policy or proposal with an effect on a site but not likely to be significant alone, so need to check for likely significant effects in combination	
К	Policy or proposal not likely to have a significant effect either alone or in combination	Screened out after in- combination test
L	Policy or proposal likely to have significant effect in combination	Screened in after the in-combination effect

Table 6: The HRAs Handbook 2016 Screening Categories

3.5.1. Screening of the LFRMS Table 7 below provides the screening matrix for **the final March 2016 version of the LFRMS.**

Content of	Screening	Justification
plan	Conclusion	Concerned Associations of the select
Preface Table of	Screened out	General Aspiration of the plan
Contents	Screened out	Administrative lext
Executive	Screened out and	General Aspiration of the plan and Administrative text.
Summary	implications are assessed under Objectives 1 -5 and their relevant Measures	SWMP will be subject to an individual HRA in the future. Category A - General statement of policy / general aspiration
Objective 1	Screened out	Category A - General statement of policy / general aspiration
Objective 2	Screened out	Category D – Environmental protection / site safeguard policy
Objective 3	Screened out	Category A - General statement of policy / general aspiration
Objective 4	Screened out	Category A - General statement of policy / general aspiration
Objective 5	Screened out	Category B - Policy listing general criteria for testing the acceptability / sustainability of proposals
Vision Statement	Screened out	Category A - General statement of policy / general aspiration
Chapter 1	Screened out	Administrative text
Section 1.1	Screened out	Category E – Policies or proposals which steer change in such a way as to protect European sites from adverse effects. The LFRMS includes wording to ensure the protection of Natura 2000 (i.e. European) Sites.
Section 1.2. to 1.4	Screened out	Administrative text
Section 1.5.	Screened out	Category B - Policy listing general criteria for testing the acceptability / sustainability of proposals
Section 2.1.	Screened out	Outlines the Objectives 1 to 5 that have already been screened out (see above for justification)
Section 2.1.1 Objective 1 & Box 1	Screened out	Category A - General statement of policy / general aspiration
Section 2.1.2 Objective 2	Screened out	Category E – Policies or proposals which steer change in such a way as to protect European sites from adverse effects
Section 2.1.3 Objective 3 & Box 2	Screened out	Category A - General statement of policy / general aspiration
Section 2.1.4 Objective 4 & Box 3	Screened out	Category A - General statement of policy / general aspiration
Section 2.1.5 Objective 5	Screened out	Category B - Policy listing general criteria for testing the acceptability / sustainability of proposals

1	1	1	
Section 2.2	Screened out	General Statement of Overall Goals	
Section 2.2.1	Screened out	Category C – Proposal referred to but not proposed by the plan	
Measure 1A	Screened out	Category C - Proposal referred to but not proposed by the plan. The SWMP will be subject to an individual HRA screening exercise when complete.	
Measure 1B	Screened out	Category B – Policy listing general criteria for testing the acceptability / sustainability of proposals.	
Measure 1C	Screened out	Category D – Environmental Protection / site safeguard policies	
Measure 1D	Screened out	Category C – Proposal referred to but not proposed by the plan	
Measure 2A	Screened out	Category C – Proposal referred to but not proposed by the plan. The SWMP will be subject to an individual HRA screening exercise when complete.	
Measure 2B	Screened Out	This policy is now screened out after re wording in liaison with Natural England and the addition of an action under this measure provided in Appendix D of the LFRMS as follows 'WCC as the LLFA will work with Natural England to produce a leaflet for riparian landowners residing in the Natural England River Mease Catchment Risk Zone regarding their rights and responsibilities with respect to ditches, watercourses, culverts and hedges' Category K – Policy or proposal not likely to have a significant effect either alone or in combination.	
Measure 2C	Screened out	New Measure Category E Policies or proposals which steer change in such a way as to protect European Sites.	
Measure 2D	Screened out	Category A - General statement of policy / general aspiration	
Measure 2E	Screened out	Category D – Environmental protection / site safeguard policy	
Measure 2F	Screened out	New Measure Category D – Environmental protection / site safeguard policy	
Measure 2G	Screened out	New Measure Category D - Environmental protection / site safeguard policy	
Measure 3A	Screened out	Category A - General statement of policy / general aspiration	
Measure 3B	Screened out	Category F – Policy that cannot lead to development or other change	
Measure 3C	Screened out	Category A - General statement of policy / general aspiration	
Measure 3D	Screened out	Category A - General statement of policy / general aspiration	
Measure 3E	Screened out	Category K – Policy or proposal not likely to have a significant effect either alone or in combination.	
Measure 4A	Screened out	Category A - General statement of policy / general aspiration	

Measure 4B	Screened out	Category A - General statement of policy / general aspiration
Measure 4C	Screened out	Category A - General statement of policy / general aspiration
Measure 4D	Screened out	Category A - General statement of policy / general aspiration
Measure 4E	Screened out	Category A - General statement of policy / general aspiration
Measure 5A	Screened out	This policy is now screened out after amended wording made to Measure 2C Category D – Environmental protection / site safeguard policy.
Measure 5B	Screened out	Category A - General statement of policy / general aspiration
Measure 5C	Screened out	This policy is now screened following modifications made to Measure 2B, 2C, 2E, 2F and 2G and associated actions. Category H – Policy or proposal (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in combination with other aspects of this or other plans or projects).
Measure 5D	Screened out	Category D - Environmental protection / site safeguard
Chapter 3	Administrative and background text – screened out	Introductory text about the local flood risk in Warwickshire and other issues that interact and impact flood risk such a new development land use planning, maintenance of flood risk management assets and existing flood risk management schemes in Warwickshire. These all provide a useful background including details of the two European Sites Ensor's Pool SAC and the River Mease SAC and their specific vulnerabilities from the LFRMS as well as detailed of an on- going project identifying opportunities for Natural Flood Management as requested by Natural England. However it is not anticipated that this chapter in itself will lead to a LSE on a European Site.
Chapter 4	Administrative and background text – screen out	Provides background on relevant legislation and policy relevant to the LFRMS but no direct link to any potential LSE on a European Site.
Chapter 5	Background information / Administrative text – screened out	Provides background on the various flood risk management roles and responsibilities for flood risk in Warwickshire, no direct link to any LSE on a European Site. This chapter includes reference to the Warwickshire Strategic Flood Forum (WSFF), the Terms of Reference for which are provided in Appendix H as requested by Natural England.
Chapter 6	Background information / administrative text – screened out	Provides information on how the strategy will be funded no direct link to any LSE on a European Site.
Chapter 7	Administrative text – screened out	Next steps in the process

Appendix A	Administrative text – screened	Glossary and abbreviations	
Appendix B	Administrative text – screened out	Legislation and policy	
Appendix C	The SWMP see Section 3.5.2.	Category C – Proposal referred to but not proposed by the plan. A full HRA screening of the SWMP will need to take place when it is finalised.	
		 February 2016, changes were made to the wording of some Measures and their associated actions provided in Appendix D of the final March 2016 LFMS. Category E – Policies or proposals which steer change in such a way as to protect European Sites from adverse effects. Further proposed actions including new text: Committing WCC as the LLFA to work with Natural England to produce a leaflet for riparian landowners residing in the Natural England River Mease Catchment Risk Zone (as per Figure 7), regarding their rights and responsibilities with respect to ditches, watercourses, culverts and hedges. Seek opportunities for de-culverting of watercourses wherever possible. Wherever reasonably practicable prevent flood related plans or projects that will have an adverse effect on the integrity of a qualifying feature of a Natura 2000 site to be taken forward. All WCC flood related plans or projects proposed within the 1:200 year surface water flood risk zone around Ensor's Pool SAC or within the Natural England River Mease Catchment Risk Zone will be screened separately for HRA unless those works are part of wider plans or projects for which a full HRA has already been undertaken. Undertake a feasibility study to seek opportunities for implementation of natural catchment management techniques. To conform to Warwickshire County Council's remit under the 'biodiversity duty', particularly at Local Wildlife Sites, as per Section 40 of the Natural Environment and Rural Communities Act 2006 and the Warwickshire, Coventry and Solihull Green Infrastructure Strategy. 	

		 Ensure WFD assessments are undertaken where required for all local flood risk management schemes. Actively seek inclusion of measures to enhance WFD waterbody status in all new local flood risk management schemes.
Appendix E	Screened out general statement	Category A - General statement of policy / general aspiration
Appendix F	Screened out general statement / policy	Category A - General statement of policy / general aspiration
Appendix G	Screened out	Category B – Policy listing general criteria for testing the acceptability / sustainability of proposals.
Appendix H	Screened out	Background information, administrative text regarding the Terms of Reference for the Warwickshire Strategic Flood Forum, added on the request of Natural England and referred to in the new action under Measure 2B in Appendix D of the 'LFRMS: Warwickshire LFRMS Action Plan.'

Table 7: Screening matrix for the edited version of the LFRMS March 2016

Table 8 below highlights the wording of the key objectives and measures for the LFRMS and if these have been screened in or out for further assessment.

Text	Screened in or out?
Warwickshire Flood Risk Management Vision Statement: To reduce and mitigate flood risk to communities within Warwickshire through partnership working, by adopting a prioritised, economic and environmentally sustainable approach	OUT
Objective 1: To develop a better understanding of local flood risk in Warwickshire to better manage flood risk to people, property, infrastructure and the natural environment	OUT
Measure 1A: Further develop the Surface Water Management Plan for the county to gain a better understanding of key flooding hotspots, risks and associated economic, social and environmental consequences.	OUT
Measure 1B: Work with partners to investigate locally significant flooding incidents and identify sources, pathways and receptors of flooding.	OUT
Measure 1C: Further develop and continue to maintain a register of flood risk management assets with a record of the significant structures with respect to flood risk.	OUT
Measure 1D: Review the Preliminary Flood Risk Assessment as required by the EU Floods Directive and Flood Risk Regulations 2009 and contribute to the other requirements	OUT
Objective 2 – Seek to reduce local flood risk in Warwickshire in an economically, socially and environmentally sustainable way.	OUT

Measure 2A: The actions of the emerging SWMP to be progressed and where suitable flood risk management schemes are identified funding to be sought.	OUT
Measure 2B: Warwickshire County Council to work with partners to encourage flood management and maintenance activities by riparian landowners on ordinary watercourses, and flood defence and drainage structures as well as limiting the development of constrictions on ordinary watercourses through consenting and, if necessary, enforcement.	OUT
Measure 2C: WCC To work collaboratively with partners, including those in the Warwickshire Strategic Flood Forum (WSFF), to encourage flood schemes by third parties, riparian landowners and stakeholders and to ensure that Natura 2000 sites and Sites of Special Scientific Interest (SSSIs) are not adversely affected by flood risk management activities.	OUT
Measure 2D: To lead on the implementation of local flood risk management schemes and work with partners to best utilise funding streams through a prioritised risk-based approach and through promoting schemes with the most multiple benefits.	OUT
Measure 2E: To ensure environmentally sustainable solutions will be fully considered in WCC led and in all other flood risk management measures, using a catchment based approach where applicable.	OUT
Measure 2F: Aim to ensure a no net loss of biodiversity, particularly at Local Wildlife Sites, and where possible look to provide a net gain through habitat creation and enhancement, contributing to wider environmental objectives.	OUT
Measure 2G: To ensure no deterioration in Water Framework Directive (WFD) waterbody status as a result of flood risk management activities, and where possible look to enhance status through implementation of the recommendations of the River Basin Management Plans.	
Objective 3 - Adopt a collaborative approach to local flood risk management	OUT
Measure 3A: To continue to develop the Warwickshire Strategic Flood Forum (WSFF) and relations with other partners.	OUT
Measure 3B: To share knowledge and training opportunities with partners.	OUT
Measure 3C: Continue to work with and support community flood action groups, town and parish councils and other community groups.	OUT
Measure 3D: Continue to engage local communities building on the progress made by the Community Flood Resilience Pathfinder Project.	OUT
Measure 3E: To work with neighbouring Lead Local Flood Authorities to ensure a catchment based approach to local flood risk management.	OUT
Objective 4 - Promote community preparedness and resilience to local flood risk	OUT
Measure 4A: To work with partners to reduce the impacts of flooding by enabling an efficient response to flooding incidents from partners and stakeholders.	OUT
Measure 4B: To work with partners to reduce the harmful consequences of local flooding to communities and human health through pro-active actions, community activities and education programmes that enhance preparedness and resilience to local flood	OUT

risk, thereby promoting community cohesion and minimising community disruption.	
Measure 4C: Continue the work of the Warwickshire Flood Resilience Pathfinder project in supporting local groups to increase the resilience of their communities to flooding.	OUT
Measure 4D: Continue to work with partners to improve communications and advice given during flood events.	OUT
Measure 4E: To work with partners to establish a co-ordinated approach to the provision of temporary flood risk management measures.	OUT
Objective 5: Enable planning decisions to take full account of flood risk and seek to reduce flood risk through development	OUT
Measure 5A: To work with partners to produce local policies and guidance, and set standards to promote a positive impact on flood risk from new development, and to prevent any increase in flood risk, including the possible impacts of climate change.	OUT
Measure 5B: To maximise opportunities for contributions towards existing flood risk management from new development to address existing local flood risk.	OUT
Measure 5C: Develop byelaws, where beneficial, to control development.	OUT
Measure 5D: Work with relevant partners to promote SuDS measures for new developments through the role as a statutory consultee on major applications.	OUT

Table 8: Summary of the March 2016 LFRMS Vision, Objectives and Measures

3.5.2. The Surface Water Management Plan (SWMP)

Currently the SWMP (in Appendix C) is at an early stage of development and only two of the four phases have been completed. Once the SWMP is further developed it will be possible to undertake a full screening of the SWMP in line with stage 1 of Figure 2, which has been conducted for the current version of the LFRMS. Figure 6 clearly shows that Ensor's Pool lies within the surface water flooding zone. Given it has been identified that an increase in water levels could negatively impact this SAC, there is a chance that any changes to the management of surface water flooding in this area could lead to a LSE on Ensor's Pool.

At this stage it is not advised that the entire SWMP can be screened out of having any LSE on European Sites until more detail is provided, as subsequent more detailed recommendations from this plan do have potential to have a LSE on Ensor's Pool SAC and the River Mease SAC.

4. In-combination Assessment

In order to determine the nature of any other plans and projects that could have an in-combination effect with the SWMP and LFRMS on the River Mease and Ensor's Pool SAC, Natural England was consulted on 17.12.14 and 09.01.15 and the Environment Agency on 09.12.14 and 29.01.15 (see <u>Appendix 1</u> for key consultation emails).

The following plans were identified as needing to be considered in the In-combination Assessment.

- Nuneaton and Bedworth Borough Development Plan with associated HRAs (dated May 2009 and February 2013)
- North Warwickshire Borough Council Core Strategy with associated HRA (dated July 2014)
- River Mease Special Area of Conservation Water Quality Management Plan
- The River Mease Diffuse Water Pollution Plan
- A number of plans produced by the Environment Agency
- The current draft of the Warwickshire Minerals Plan

Prior to the incorporated mitigation measures suggested by the additional wording now in the final LFRMS March 2016 (as per <u>Section 1.1</u>), this HRA had identified the following three key potential impacts on European sites by the implementation of the LFRMS as the document currently stands:

For Ensor's Pool SAC:

• Pollution from surface water run-off, increase in water levels and introduction of non-native species

For the River Mease SAC:

- Diffuse or direction pollution and sedimentation (including nutrient run off). This could arise from the flooding of a tributary in Warwickshire that flows directly into the River Mease. Phosphorous is known to be a particular problem.
- Introduction of non-native species is also a potential impact.

Following the steps identified in Figure 4, each of the above plans has been assessed for cumulative impacts.

4.1. North Warwickshire's Proposed Submission Core Strategy

An HRA Screening report for North Warwickshire's Proposed Submission Core Strategy was produced by Land Use Consultants (LUC) in October 2012. In July 2014, an addendum to this report was also prepared by LUC to further assess subsequent proposals to make modifications to the Core Strategy.

Ensor's Pool SAC was noted to be approximately 3km to the east of the North Warwickshire Borough boundary. The site was not considered to be impacted by the North Warwickshire's Proposed Core Strategy or via any of its subsequent proposed main modifications. Given the SAC is considered to be rain-water fed this plan should not have an impact on water levels within Ensor's Pool. The plan goes on to conclude that 'water quality effects and the risk of introduction of invasive species are not likely to have a significant effect from proposals in the Core Strategy, as the scale of development proposed within North Warwickshire is relatively small, the nearest focus for development, Atherstone is approximately 6.7km from the site'.

The River Mease is noted to be located approximately 1.3km from the North Warwickshire Borough boundary. The HRA for North Warwickshire's Proposed Submission Core Strategy highlights that

'water qualify is a particular concern since phosphate targets are already exceeded at the site and any additional load on the sewage treatment works in the catchment could exacerbate this. However the HRA for the North Warwickshire Proposed Core Strategy considered that most of the new housing and employment proposed lies within the catchment of the River Anker rather than the River Mease hence the HRA concludes that the plan will not impact the water quality of the River Mease'.

It is therefore concluded that **North Warwickshire's Proposed Submission Core Strategy will not have any in-combination effects with the current draft of the LFRMS** on either the River Mease or Ensor's Pool.

4.2. Nuneaton and Bedworth Borough Plan

The preferred options for the Nuneaton and Bedworth Borough Plan were published for public consultation between July and August 2013. A shadow HRA was also submitted with the plan by Mott MacDonald on February 2013, all available on their website. Ensor's Pool lies within '*Locality 2* – *Arbury and Stockingford*' and it is noted that a large new '*Arbury Strategic Housing Site* – *SHS2*' is proposed immediately adjacent to Ensor's Pool. The site is to support approximately 1000 homes with secondary and primary schools and other associated infrastructure.

The HRA for the Nuneaton and Bedworth Borough Plan states that this strategic housing site is 'adjacent to Ensor's Pool SAC. Given the proximity to the SAC and the proposed numbers of residential properties, it is likely that the incidents of dogs, illicit fishing and general visitors to the site would increase. At this stage it is not possible to rule out a significant impact on the conservation objectives or management of the SAC'.

The HRA also identifies an additional three employment sites approximately 300m to the west, 684m to the north –west and 676m to the east of Ensor's Pool. The assessment for all of these sites is as follows 'the potential proximity of a new employment site is likely to mean the SAC is subject to increased visitors during the day, which in turn increases the potential for pollution events and contamination of the water body. Increased visitors could therefore produce an adverse cumulative effect however without further information on the type of employment site; it is not possible to say whether this would result in a significant impact on the conservation or management objectives of the SAC'.

It is however noted in the Nuneaton & Bedworth Borough Council Borough Plan Preferred Options summary that developments of these sites will include 'measures to protect Ensor's Pool, local wildlife sites and the landscape setting of Arbury Hall'.

Given the proximity of the new developments (in particular the adjacent Arbury Strategic Housing Site), it is considered likely that without appropriate mitigation this new development and adjacent new employment could lead to an increased:

- risk of pollution to Ensor's Pool by surface run-off,
- chance of introduction of non-native species; and
- chance of increasing the water levels if inadequate measures are put in place to ensure a reduction of surface water flooding as part of the design of any new development in the area.

It is noted that the borough plan confirms development will include measures to protect Ensor's Pool and hence at this stage there is no evidence to suggest the Nuneaton and Bedworth Borough Plan will result in an in-combination impact on the current draft LFRMS. It is recommended that any works as part of the LFRMS and or the SWMP within the surface water flooding 200 year event (as per Figure 6), should undergo a screening HRA unless these works are part of a wider development for which a full HRA has already been undertaken.

4.3. River Mease SAC Water Quality Management Plan

During initial consultation with Natural England and in relation to the In-combination Assessment, Ecological Services at WCC was asked to consider the *'River Mease Special Area of Conservation, Water Quality Management Plan (WQMP), Developer Contribution Scheme*' prepared by David Tyldesley and Associates (DTA) in October 2012.

The Developer Contribution Scheme (DCS) for the River Mease was developed following survey work by the Environment Agency that 'revealed the quality of the water in the river was poor, mainly due to high phosphorous levels.' The DCS 'currently applies to all development which contributes additional wastewater via the mains sewerage network to a sewage treatment works which discharges into the catchment of the River Mease SAC.'

The section of the River Mease catchment plan that lies within Warwickshire is included within the River Mease from Hooborough Brook to Trent area (see map in <u>Appendix 4</u>) and hence falls within the remit of this DCS. The DCS confirms that *'all new development which contributes additional wastewater to the foul water catchment areas of the above treatment works will be subject to a developer contribution'*.

As highlighted in <u>Section 3.4</u> WCC is the LLFA responsible for ordinary, ground water, surface water and highways flooding only. Flooding associated with sewerage is the responsibility of Seven Trent Water. However it should be noted that rural diffuse pollution into the River Mease and its tributaries (such as from the flooding of agricultural land within Warwickshire) could increase the level of phosphorous pollution into the River Mease and hence have a negative impact on the River Mease SAC. This potential impact has already been identified in this assessment.

The plan aims to improve and protect the River Mease SAC and will not lead to any negative impact on the SAC itself, so it therefore cannot lead to any cumulative in-combination impacts with the LFRMS. So for the purposes of the In-combination Assessment the plan can be excluded.

If however the LFRMS leads to any development within the section of Warwickshire that is included in the plan, it may be that the DCS could be relevant to these developments (which do not necessarily have to be residential as the plan states that non-residential development will 'be assessed on a case by case basis, with the contribution being calculated on the basis of the estimated volume of wastewater to mains associated with the nature and scale of the development being proposed').

The contributions made under the DCS are used to fund specific mitigation measures aimed to reduce the level of phosphorous and hence nutrient level in the River Mease, from both point and diffuse sources (in line with the Site Improvement Plan for the River Mease).

As per the new action under new Measure 2C and the final version of the LFRMS March 2016 'All WCC flood related plans or projects proposed within the 1:200 year surface water flood risk zone around Ensor's Pool SAC or within the Natural England River Mease Catchment Risk Zone will be screened separately for HRA unless those works are part of wider plans or projects for which a full HRA has already been undertaken'.

At the point that a further HRA is undertaken, these specific mitigation measures may be worth implementing to reduce any additional phosphorus input into the Warwickshire section of the River

Mease catchment. The DCS document states that 'on average, the River Mease is in flood nine time a year (EA Flood Event Data), these events last an average of four days each'. It is therefore estimated that 'river restoration projects would effectively remove phosphate for 10% of the time (i.e. 36 days of the year)'.

Mitigation measures include:

- installation of silt traps especially where roadsides are being eroded (and can lead to road runoff into rivers and tributaries), an important pathway of phosphate release in rivers
- River restoration projects including 'floodplain restoration, wetland and wet woodland creation, riparian planting and restoration, removal of modified bank structures and renaturalising bank profile and weir removal'. Appropriately managed and created woodland and wet grassland can slow down surface water and hence reduce the sediment and phosphorus loading into a river via surface water. Taking land out of agricultural production also reduces the use of phosphate-rich fertilisers and is another example of mitigation.

4.4. The River Mease Diffuse Water Pollution Plan

This plan, produced jointly by the Environment Agency and Natural England in 2011, identifies existing pressures and impacts on the River Mease and provides an action plan of measures required to combat these. There is a commitment from both Agencies 'to gather evidence and implement necessary remedy measures as guided by this plan, in order to maintain an improving trend in nutrients and sediment in the Mease catchment, so that SSSI condition targets are achieved in the future'. The plan's principle aim is to protect and enhance the River Mease SAC and hence no HRA and no Incombination effects are anticipated as the plan aims to conserve the River Mease and there are no negative impacts predicted.

4.5. Warwickshire Minerals Plan

The Warwickshire Minerals Plan (formerly the 'Minerals Core Strategy') is 'a Development Plan Document which sets out the spatial strategy, vision, objectives and policies for guiding minerals development in the County for a 15 year period' i.e. until 2032 (Warwickshire County Council 2015b). The latest plan was out for public and statutory consultation which finished on 04.12.15 and then extended into January 2016. The Minerals plan highlighted: a total of 9 of 30 identified sites that were 'preferred' mineral sites to come forward for development during the plan period; a number of Minerals Core Strategy Polices against which planning applications for a range of minerals resources in Warwickshire will be tested; and Development Management Policies to ensure any developments of the Minerals resource in Warwickshire is sustainable, and measures are in place to allow appropriate monitoring of the implementation of the Warwickshire Management Plan. An HRA was submitted with the Minerals Plan for consultation produced by Ecological Services at Warwickshire County Council in September 2015 (Warwickshire County Council 2015a). Correspondence from Natural England in relation to the Minerals Plan HRA was received in January 2016. Some further amendments to the policy wording are currently being agreed with Natural England (following a recent meeting). Once these have been agreed with Natural England it is fully anticipated that it will be possible to conclude that no Likely Significant Effects (LSE) are anticipated from the amended Warwickshire Minerals Plan. Therefore no In-combination effects are anticipated from the Warwickshire Minerals Plan to the LFRMS.

4.6. Other Plans

4.6.1. Severn Trent Water's Water Resources Management Plan (WRMP)

The LUC HRA for North Warwickshire's Proposed Submission Core Strategy makes reference to Seven Trent Water's Water Resources Management Plan (WRMP). It aims to set out how demand for water supply will be managed between 2010 to 2035. The LUC HRA states that 'the WRMP states that it has been subject to an HRA Screening exercise which found that it is unlikely that the plan will have any significant impact on a European Site.' It commits to ensuring 'all schemes with the potential to have a significant effect will be subject to further screening at the project design stage, taking into account the additional detail available at that stage. Any scheme that could have an adverse effect on the integrity of a European or International site will not be in accordance with the objectives of our WRMP and will not be taken forward'.

The HRA for the WRMP does not appear to be freely available on the website, so this document has not been reviewed directly. However, there is no reason to suggest the findings are not sound. It is concluded that this plan will not have any in-combination cumulative effects with the LFRMS.

4.6.2. Environment Agency's The Avon Warwickshire Management Catchment

The Environment Agency was consulted on the 09.12.14. WCC Ecology Services was sent a copy of a document entitled '*The Avon Warwickshire Management Catchment – A summary of information about the water environment in the Avon Warwickshire management catchment*' dated 2014. The document aims to provide an update on how the river basin management plan for the Severn River Basin District is having an impact on the local scale in the Warwickshire Avon. The document confirms that one of the Environment Agency's key objectives for managing flood risk in the catchment is to '*protect designated conservation and heritage sites*'. **Given this policy to protect nature conservation sites including European Sites and that the two sites that are considered to be potentially impacted by the LFRMS are not within this catchment, and rather in the catchment of the Humber Basin District, this plan has been scoped out of the In-combination Assessment for this LFRMS.**

4.6.3. The Environment Agency's River Basin Management Plan – Humber River Basin District

This plan covers the Humber River Basin District in which both Ensor's Pool and the River Mease are located. The plan was produced to help in the improvement in the water quality of the river basin under the European Commission's Water Framework Directive (WFD) (2000/60/EC). Ensor's Pool and the River Mease lie within the catchment known as 'Tame, Anker and Mease'. A key action for the catchment is to '*improve works at a number of locations in the River Mease catchment to reduce the levels of phosphate in the SAC site*'. The plan makes reference to a HRA that has been undertaken by the Environment Agency in consultation with Natural England which has concluded that '*the River Basin Management Plan is unlikely to have any significant negative effects on any Natura 2000 sites... This conclusion is reliant on the fact that before any measures in the plan are implemented they must be subject to the requirements of the Habitats Regulations. Any plans, project or permissions required to implement the measures must undergo an appropriate assessment if they are likely to have a significant effect'. A copy of this HRA is not readily available on the Environment Agency's website. However, given that the plan aims to protect any European Site and the HRA of the plan has concluded no LSE to any European Sites, it can be scoped out of needing consideration in the In-combination Assessment with the LFRMS.*

4.6.4. The Environment Agency's River Basin Management Plan – Thames River Basin District.

In the interests of completeness the Thames River Basin District Management Plan (dated 2009) has also been considered, given a small part of Warwickshire lies within this district (see Figure 5). A small part of Warwickshire lies within both the Cherwell and Cotswold catchment. Neither Ensor's Pool nor the River Mease SAC lie within the Thames River Basin Catchment. The plan outlines that a HRA of the plan has been undertaken and has concluded that the plan *'is unlikely to have any significant negative effects on any Natura 2000 sites. The plan itself does not require further assessment under the Habitat Regulations. Any plans, project or permissions required to implement the measures must undergo an appropriate assessment if they are likely to have a significant effect'.* For these reasons it can be scoped out of consideration in the In-combination Assessment of the LFRMS.

4.6.5. Environment Agency – Understanding the Risks, Empowering Communities, Plan

The Environment Agency sent WCC Ecological Services the following document on 09.12.14 'Understanding the risks, empowering communities, building resilience – the national flood and coastal erosion risk management strategy for England', dated 2011. The document is a strategic national document and will not lead to any cumulative impacts on European Sites with the LFRMS and can be scoped out of this In-combination Assessment.

4.6.6. Environment Agency's River Severn Catchment Flood Management Plan.

The Environment Agency also sent WCC Ecology Services this 2009 document that deals with managing flood risk within the River Severn Catchment (the main river catchment in Warwickshire, see Figure 5). Given that both the European Sites that could be impacted by the LFRMS are within the adjacent Humber catchment, it is considered that this plan cannot have any cumulative incombination impacts with the LFRMS.

4.7. Summary of In-combination Assessment

The In-combination Assessment of those plans highlighted through consultation with Natural England and the Environment Agency's has concluded that none will lead to in-combination impacts with the current draft of the LFRMS and there is only a need to consider steps one to three on Figure 4. Therefore no cumulative impacts are considered from the newly updated LFRMS.

5. Incorporated Mitigation and Recommendations

Following the initial screening of the December 2014 version of the LFRMS, three measures: Measure 2B, Measure 5A and Measure 5C were scoped in as having the potential to lead to a LSE to a European site as a result of the December 2014 draft of the LFRMS. No in-combination effects were anticipated from the other plans and projects identified through internet research and consultation with statutory bodies.

Following consultation with Michael Green of the Flood Risk and Water Management Team on 17.03.15 the findings of the initial Stage 1 of the HRA screening exercise of the LFRMS were discussed and a number of 'incorporated mitigation measures' were suggested as additional text to the LFRMS in April 2015 and the HRA report was updated accordingly (Version 2). In August 2015, an updated LFRMS was provided to Ecological Services by the Flood Risk and Water Management Team. This document was re-screened (Version 3 of the HRA report) following changes to wording. The conclusion of Version 3 of the HRA report was that no LSE were now anticipated either alone or incombination with other plans or projects from the updated version of the LFRMS and no Appropriate Assessment (stage 2 of the HRA process, Figure 2) was required of the updated LFRMS.

Between 14.09.15 and 04.12.15 the draft LFRMS and associated HRA report was subject to public and statutory consultation that included Natural England and the Environment Agency. Natural England responded on 05.01.16 outlining some concerns on the conclusions in Version 3 of the HRA report. Further to subsequent meetings and correspondence with Natural England in January and February 2016, a number of amendments were made to the final LFRMS March 2016 including new commitments, Measures and Actions and further information on the vulnerabilities of the SACs assessed in this HRA. The final conclusions of the final LFRMS are provided in this Version 4 of the HRA report (for further details see Section 1.1. and 3.5.1).

Whilst a HRA has now been conducted on the final LFRMS a full HRA is still required of the latest draft of the SWMP when it has been finalised.

6. Conclusions of the HRA

(Based on an extract from the HRA Handbook 2013)

RECORD FOR A PLAN WHICH WOULD NOT BE LIKELY TO HAVE A SIGNIFICANT EFFECT ON ANY EUROPEAN SITE, EITHER ALONE OR IN COMBINATION WITH ANY OTHER PLAN OR PROJECT

Introduction and conclusion of the assessment

The Local Flood Risk Management Strategy Warwickshire County Council March 2016 was considered in light of the assessment requirements of regulation 61 of the Conservation of Habitats and Species Regulations 2010 by Warwickshire County Council which is the competent authority responsible for adopting the plan and any assessment of it required by the Regulations.

Having carried out a 'screening' assessment of the plan, the competent authority has concluded that the plan would not be likely to have a significant effect on any European site, either alone or in combination with any other plans or projects (in light of the definition of these terms in the 'Waddenzee' ruling of the European Court of Justice Case C - 127/02) and an appropriate assessment is not therefore required.

Natural England was consulted on this conclusion and during the last telephone conversation between Steph Jones (Adviser from Natural England) and Emily Wells (Solicitor at Warwickshire County Council) on 03.02.16 and subsequent email correspondence (see <u>Appendix 1.1.4</u>) Natural England appeared to be satisfied with all changes made to the LFRMS. Any relevant written responses are appended in <u>Appendix 1.1</u> of this report

Information used for the assessment

A copy of the list used to scan for and select European Sites potentially affected by the plan is appended as Table 6 of this HRA (<u>Section 3.5</u>).

A summary of the information gathered for the assessment is presented in the Information Required for Assessment table, which is appended as Table 3 of this HRA with supporting information provided in <u>Section 3.2</u> and <u>Appendix 3</u>.

The screening of the plan

A summary of the outcomes of the screening process provided in <u>Tables 7 and 8 of this HRA (Section</u> <u>3.5.1</u>).

Mitigation measures

In reaching the conclusion of the assessment the competent authority took the following mitigation measures into account:

Details are provided in the Non-Technical Summary, Section 1.1 and Section 3.5.1. of this HRA.

Assumptions and limitations

The screening conclusion necessarily relies on some assumptions and it was inevitably subject to some limitations. Most of the assumptions and limitations would not affect the conclusion but the following points are recorded in order to ensure that the basis of the assessment is clear.

These are provided in <u>Section 2.3</u> of this HRA.

References and reports

In reaching the conclusion of the assessment the competent authority took the following documents into account (see <u>Section 7</u> and <u>Section 2.1</u>):

Further supplementary information is not required

Dated: 22/03/2016

Copy of this updated Version 4 of the report will be sent to Natural England in March / April 2016

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7. References

The Habitat Regulations Assessment (HRA) Handbook 2016 published by DTA David Tyldesley and Associates (DTA) Publishing accessed via http://www.dtapublications.co.uk/handbook/browse that WCC are a subscriber.

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Mott MacDonald. 2013. Shadow Habitat Regulations Assessment. Draft Submission for Nuneaton and Bedworth Borough Plan. February 2013.

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Nuneaton and Bedworth Borough Development Plan, Preferred Options – Summary and Proposals Map. (2013)

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River Mease Special Area of Conservation Water Quality Management Plan (undated)

Worcestershire County Council. 2013. Habitats Regulations Assessment (HRA) Screening Report. Worcestershire Local Flood Risk Management Strategy. July 2013.

Warwickshire County Council. 2010. Local Transport Plan Habitat Regulations Appropriate Assessment.

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Warwickshire County Council. 2015a. Draft Screening Report Habitat Regulations Assessment (HRA) for Warwickshire Minerals Plan Summer 2015. Ecology Services. September 2015.

Warwickshire County Council. 2015b. Minerals Plan. Preferred Options and Policies. October 2015.

Legislation, Other Policy and websites consulted.

Conservation of Habitats and Species Regulations 2010 (as amended)

European Birds Directive 79/409/EC

European Habitats Directive 92/43/EEC

European Codified Birds Directive 2009/147/EC

European Strategic Environmental Assessment (SEA) Directive 2001/42/EC

European Water Framework Directive 2000/60/EC

Flood and Water Management Act 2010

Natural Environment and Rural Communities (NERC) Act 2006

Natural England (NE) website

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47845888 – accessed December 2014.

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http://www.nwleics.gov.uk/pages/developments within the catchment area of the river m ease_special_area_of_conservation - accessed January 2015

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Appendix 1: Key Consultation Responses

1.1 Natural England Correspondence

1.1.1 Correspondence with Antony Muller, Lead Adviser, Natural England

Date: 14 January 2015 Our ref: 140335 Your ref: Email 17.12.14

Warwickshire Ecology Unit

For the attention of Louise Mapstone

BY EMAIL ONLY



Customer Services Hombeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

Dear Louise

Consultation: Request for advice regarding Habitats Regulations Assessment of plans or projects in relation to Ensor's Pool Special Area of Conservation (SAC)

Thank you for your consultation on the above dated 17 December 2014 which was received by Natural England on the same day. We are grateful for the extra time to reply.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Natural England confirms there is no change to the SSSI/SAC designation. We advise that Habitats Regulations Assessment (HRA) of plans and projects with the potential to affect the site should therefore be carried out on a 'business as usual' basis.

We are co-ordinating further investigations to confirm the presence of native crayfish in the Pool and further explore the reasons for the reduction or loss of the population. Depending on the outcome of our investigations we will be exploring options for restoration/reintroduction taking into account the practicalities of a site with public access. Any review of the designated site's condition will be carried out after this investigation work is complete.

I attach a copy of the media information about the SAC (released on 8.11.14).

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter <u>only</u> please contact me on 0300 060 1640. For any new consultations, or to provide further information on this consultation please send your correspondences to <u>consultations@naturalengland.org.uk</u>.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Antony Muller Lead Adviser – Sustainable Development and Wildlife Team – North Mercia Area Date: 03 July 2015 Our ref: 157743 Your ref: Email 24.6.15

Warwickshire Ecology Unit

FAO Louise Mapstone

BY EMAIL ONLY



Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

Dear Louise

Consultation: Request for advice regarding Habitats Regulations Assessment of plans or projects in relation to Ensor's Pool Special Area of Conservation (SAC)

Thank you for your phone call and email about the above on 24 June 2015.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Our advice letter of 14.1.15 still applies. Natural England confirms there is no change to the SSSI/SAC designation. We advise that Habitats Regulations Assessment (HRA) of plans and projects with the potential to affect the site should therefore be carried out on a 'business as usual' basis.

We continue to work with the Nuneaton and Bedworth Borough Council and the Environment Agency in order to decide what actions can be taken to address the loss of white clawed crayfish population at Ensors Pool.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter <u>only</u> please contact me on 0300 060 1640. For any new consultations, or to provide further information on this consultation please send your correspondences to <u>consultations@naturalengland.org.uk</u>.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Antony Muller Lead Adviser – Sustainable Development and Wildlife Team – North Mercia Area

Page 1 of 1

3/15/2016

Warwickshire County Council Mail - RE: HRA of Warks Minerals Plan - update



Louise Mapstone <louisemapstone@warwickshire.gov.uk>

RE: HRA of Warks Minerals Plan - update

Muller, Antony (NE) <Antony.Muller@naturalengland.org.uk> To: Louise Mapstone <louisemapstone@warwickshire.gov.uk> Cc: "Steer, Eric (NE)" <Eric.Steer@naturalengland.org.uk> 24 August 2015 at 17:10

Hi Louise

Our reference - 159832

Hope you had a good holiday. Some feedback following your email of 30.7.15:

HRA process

Happy to discuss this over the phone but in essence:

The favourable condition table document provides information based on using common standards monitoring. This is for use when assessing the condition of designated sites. Although to some extent you can use the FCT as part of your HRA thought process I would advise that your approach in the context of a development plan is very likely to need a wider consideration of potential impacts/ pathways that the FCT tables won't help with. Nonetheless I appreciate that in the context of the Ribble case it makes sense to ensure you take account of relevant information, such as the FCT document, as an interim measure.

The primary focus for your attention should be on the 'European site conservation objectives' for the relevant N2k site. Link to list of relevant docs here:

http://publications.naturalengland.org.uk/category/5134123047845888

As you may be aware work is in hand to supplement these updated conservation objectives with 'supplementary information'. Although this information has not yet been produced for Ensor's Pool SAC I attach a copy of our new operational standard which provides a full description of the revised approach.

In terms of the way forward, until such time as the supplementary information for relevant N2k sites is available we would encourage an iterative approach whereby you keep in touch with us as you carry out HRA of development plans. We propose that as you identify candidate impact 'pathways' that generate a need for environmental information to complete the thought process (and that might in the fullness of time be included in the forthcoming 'supplementary information' document) you can contact us to agree next steps. We envisage a 'light touch' here.

Ensor's Pool SAC w.c.crayfish population – risk assessment update

3/15/2016

Warwickshire County Council Mail - RE: HRA of Warks Minerals Plan - update

A 'bioassay' is under way and thus far the majority of the crayfish in question have survived. One has died of causes unconnected with plague and I understand that one of the crates has been vandalised (despite being concealed carefully). We will keep you updated as and when the bioassay is concluded.

Kind regards

Antony

Antony Muller

Lead Adviser

Sustainable Development & Wildlife Team - North Mercla Area Direct dial - 0300 060 1640 Mobile - 07971 294109

http://www.naturalengland.org.uk/

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

Natural England offers two chargeable services – The Discretionary Advice Service (DAS) provides pre-application, pre-determination and post-consent advice on proposals to developers and consultants as well as pre-licensing species advice and pre-assent and consent advice. The Pre-submission Screening Service (PSS) provides advice for protected species mitigation licence applications.

These services help applicants take appropriate account of environmental considerations at an early stage of project development, reduce uncertainty, reduce the risk of delay and added cost at a later stage, whilst securing good results for the natural environment.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

3/18/2016

Warwickshire County Council Mail - Ensor's Pool SAC update



Louise Mapstone <louisemapstone@warwickshire.gov.uk>

Ensor's Pool SAC update

 Muller, Antony (NE) <Antony.Muller@naturalengland.org.uk>
 2 December 2015 at 16:48

 To: "louisemapstone@warwickshire.gov.uk" <louisemapstone@warwickshire.gov.uk>

Dear Louise

Our reference 171168

Thank you for your email dated 10 November 2015. I've set out your questions below together with our responses:

We would be interested to know if:

1) There has been any change in SSSI/SAC designation of Ensor's Pool since our last correspondence (your email dated 24.08.15 and letter dated 03.07.15) in relation to a Habitats Regulation Assessment (HRA).

No change.

2) If the new anticipated 'supplementary information' for Ensor's Pool has been produced yet? If it has we would like to have a copy. If not, it would be helpful to have an indication of likely publication date, to ensure we can take any revisions into account when undertaking further HRA work over the next few months.

No, the 'supplementary information' for Ensor's Pool SAC has not been produced. The SAC is not on the priority list for the supplementary information package to be written.

3) Do you have any further information on the work you conducted on assessing the current status of the WCC population at Ensor's Pool this autumn? We assume the results of this study will be available shortly and would be good to have this information and an idea of when it might become available.

Surveys for white clawed crayfish were carried out in September 2014 (trapping survey), October 2014 (Dive survey), June – September 2015 (Bioassay) and September 2015 (trapping survey). Natural England has now received the results of the latest survey. We conclude that the population of native white-clawed crayfish is no longer present at Ensor's Pool. Natural England is now considering these results and their implications in conjunction with our national specialists and the ecologists who undertook the surveys.

Natural England is committed to ensuring that our advice is based on the best available information and we aim to keep you up to date with progress accordingly. Please get in touch if you have any further questions that arise from the information above.

Kind regards

Antony Antony Muller

Lead Adviser

Sustainable Development & Wildlife Team - North Mercia Area Direct dial - 0300 060 1640 Mobile - 07971 294109

1.1.2 Correspondence with Jamie Melvin, Natural England

3/15/2016

Warwickshire County Council Mail - Advice regarding HRA of Warwickshire's LFRMS



Louise Mapstone <louisemapstone@warwickshire.gov.uk>

Advice regarding HRA of Warwickshire's LFRMS

Louise Mapstone <louisemapstone@warwickshire.gov.uk> To: Hayley.Fleming@naturalengland.org.uk, Jamie.Melvin@naturalengland.org.uk 11 December 2014 at 16:59

Dear Hayley and Jamie

I'm writing in relation to the HRA of Warwickshire's Local Flood Risk Management Strategy (LFRMS) that I've been tasked to complete on behalf of Warwickshire County Council. I'm contacting you on the recommendation of my colleague David Lowe, as I understand you have previously provided comments on HRAs that he has produced for the county. We are currently in the process of undertaking the HRA of the plan, but would welcome your views on two specific aspects of of our assessment at this stage ahead of the first draft of the report being produced.

Firstly, we are interested to get your thoughts on the area outside of Warwickshire that you think we should be considering as part of this HRA. When undertaking the HRA of the Local transport plan in 2010 we agreed with you a 15km buffer from the Warwickshire County Council. We would like to discuss what might be appropriate in this instance given Warwickshire supports part of three River Basin districts but the county council is only responsible for some specific types of flood risk in Warwickshire.

Secondly we are also required to undertake an in-combination screening assessment in relation to other relevant plans and projects in the area that we should be considering as part of this work. We would like to identify with you any specific projects and plans that need considering in-combination specifically relating to this plan.

I appreciate you may need more information and I think it may be best for me to call and discuss our work with you. I would be grateful if you could let me know when would be convenient to call you on a Tuesday to Thursday and an appropriate number.

We shall also be contacting the Environment Agency on this matter, and we would like to thank you in advance for any information or help you can provide us with.

Kind Regards

Louise

Louise Mapstone MSc CEnv MCIEEM AIEMA Ecologist Warwickshire County Council 3/15/2016

Warwickshire County Council Mail - RE: Advice regarding HRA of Warwickshire's LFRMS



Louise Mapstone <louisemapstone@warwickshire.gov.uk>

RE: Advice regarding HRA of Warwickshire's LFRMS

Melvin, Jamie (NE) <Jamie.Melvin@naturalengland.org.uk> To: Louise Mapstone <louisemapstone@warwickshire.gov.uk> 13 January 2015 at 16:38

Hi Louise,

I have received a response from my colleague who advises that you are correct in consideration of the River Mease both because it falls within your 15km buffer zone and because a small part of the catchment is also within North Warwickshire (between Thorpe Constantine and No Man's Heath).

He advises that I should point you in the direction of North West Leicestershire District Council web page which includes details on the current issues and what is being done to tackle these. The main issues are from phosphate rich point source inputs into the River Mease SAC from the sewage treatment works and diffuse pollution from farms around the catchment. The aim is to reduce the amount of phosphate in line with the conservation objectives.

I hope that is of some use to you. If not let me know.

Jamie

1.1.3. Correspondence with Sadie Hobson responsible officer for the River Mease SAC

Record of a telephone conversation between Sadie Hobson of Natural England (responsible officer for the River Mease SAC) and Louise Mapstone on 26.08.15 13:30.

Sadie confirmed more supplementary and detailed information in relation to the River Mease SAC was in development and is due to be published by Natural England on the .gov.uk website by March 2016.

1.1.4 Correspondence with Steph Jones, Natural England Sustainable Development Team, South Mercia

Date: 05 January 2016 Our ref: 165537 Your ref: No ref

flooding@warwickshire.gov.uk

BY EMAIL ONLY



Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshite Cheshite CW1 6GJ

T 0300 050 3900

Dear Michael Green,

Planning consultation: Warwickshire County Council Local Flood Risk Management Strategy Second Phase of Consultation

Thank you for your consultation on the above dated 14 September 2015

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The Wildlife and Countryside Act 1981 (as amended) The Conservation of Habitats and Species Regulations 2010 (as amended)

Natural England does not agree with the conclusions and recommendations outlined in this Habitats Regulation Assessment Report in regards to the River Mease Special Area of Conservation (SAC). Please see detailed explanatory comments and feedback on the report outlined below:

Ensor's Pool SAC

Section 2.3 'Limitations and Assumptions' of the report states clearly the assessment has been based on the latest available information on the European sites selected. Recent updates have been provided to Warwickshire's Ecology unit and Natural England will continue to base our advice on the latest available information. Natural England is satisfied with the conclusions made at the time of this assessment in relation to Ensor's Pool SAC.

River Mease SAC

Natural England does not agree that the additional new measures of 2F and 2G are adequate to enable the screening out of a number of the original measures and actions in this strategy which were screened in on initial assessment. Natural England advises Warwickshire Flood Authority that as the competent authority the following should be considered:

Measure 2b

The action under Measure 2b to 'produce a leaflet' does not provide clarity as to how information will be provided in a manner that ensures the actions of the authority and stakeholders do not have an effect on the SAC. At this stage therefore this measure cannot be screened out and the action/project must undergo a separate HRA assessment.

Page 1 of 2

In addition to the above, Measure 2b also refers to consenting and enforcement actions. Please be advised all consenting and enforcement actions must be subject to separate HRA assessments as any decrease in water quality or increasing flow within ordinary watercourses has the potential to have a likely significant effect. This is due to the fact that these are the reasons for this designated site failing to achieve favourable conservation status. This is consistent with Article 6 (3) of the Habitats Directive 92/43/EEC and must be made clear for Measure 2b to be screened OUT.

Measure 2c and 5a – Natural England would like to see these measures strengthened by ensuring any work with partners or third parties is outlined as a project or plan. This is particularly important as the Authority proposes to provide advice on flood schemes.

In our previous response (14550) we made reference to local authority boundaries and the need to consider measures 'on a wider scale with adjoining authorities responsible for flood strategy preparation and management'. A strategic project/plan as a specific measure/action would strengthen and support an effective approach to meeting the Duty to Co-operate.

The above mentioned advice is also an important consideration towards the In-combination Assessment. Natural England also advises that since the last correspondence with the Warwickshire Flood Planning Authority the Warwickshire Draft Minerals Plan has been released for consultation. We advise that this plan will need to be considered in regards to an assessment of incombination assessments.

Measure 2f and 2g

Natural England is generally supportive of the additional measures but would advise these are strengthened to provide certainty of mitigation delivery form a project/ proposed action/s and evidence that these will be effective.

Other Feedback

We welcome the use of adopting and maintaining sustainable urban drainage systems (SuDS). Where measures are required to reduce surface water flooding we advise at retrofitting SuDS which focus not only on attenuation of surface water but also improve water quality of surface water generated from urban development and the roads network.

As the statutory body (S28g) under the Wildlife and Countryside Act (as amended) the Authority should be seeking opportunities to implement schemes which will improve the condition of the River Mease SAC by bringing schemes forward which address flooding issues but also improve water quality. Natural England would like to see a clearer steer towards this approach within the objectives and/or supporting actions for the strategy.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter <u>only</u> please contact Stephanie Jones on 07917 041195. For any new consultations, or to provide further information on this consultation please send your correspondences to <u>consultations@naturalengland.org.uk</u>.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours faithfully

Stephanie Jones Sustainable Development – South Mercia

Page 2 of 2



Date: 14 January 2016 Our ref: 176230



flooding@warwickshire.gov.uk

BY EMAIL ONLY

Customer Services Hornbeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 050 3900

Dear Michael Green

Warwickshire Flood Risk management Strategy - Further comment and advice

Thank you for inviting me to meet with you in regards to the above mentioned strategy. The advice and comments contained in this letter are formed as a result of the discussion at this meeting and the actions taken away in response to guestions raised.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The Wildlife and Countryside Act 1981 (as amended) The Conservation of Habitats and Species Regulations 2010 (as amended)

Measure 2f

Natural England advises that the wording of this measure should be amended to read:

'Prevent works, schemes or projects that will have an adverse effect on the integrity of qualifying features of a Natura 2000 site from being taken forward......'

We advise the following text is added to the measure:

All works, schemes or projects proposed within the River Mease catchment will be screened separately for Habitat Regulation Assessment

Supporting Comments:

- Datasets on all designated sites are provided by Natural England via the <u>GOV.UK</u> site. This
 information captures Natural England's Catchment Risk Zones for the River Mease and can
 be downloaded by Local Authorities to include in their own mapping systems.
- The additional text proposed for this measure (ref email from Louise Mapstone 07 January 2016) is supported by Natural England. However, we advise the relevant management structure is in place and it is clear within the strategy to ensure this action can be undertaken (please see further comments under Measure 2c).

Measure 2b

Natural England recognises working with partners as a key element of flood risk management. We advise however, that Measure 2b does not provide enough detailed information at this stage to enable screening of this measure out of appropriate assessment. We advise the following:



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Measure 2b cannot be screened out at this stage. A project level Habitat Regulations
Assessment will be undertaken at a later stage when the action is further developed. Natural
England will be invited to provide support and input to ensure adverse effects are avoided or
adequately mitigated for.

Measure 2c

Natural England advises that the measures stated as acting in counterbalance to measure 2cin the recent meeting (measures 2f and 3a), are not currently sufficient to screen this measure out of any likely significant effect. We advise the following to do this:

- Clarity is provided in both the measure and the supporting text as to how the Warwickshire Strategic Flood Forum (WSFF) will monitor and provide accountability for the outputs of the work undertaken collaboratively with partners, regardless on the organisation leading on the various projects that come forward.
- Explicit reference to measure 2f is included in this measure.

Measure 2H

Natural England welcomes this additional measure and supports its inclusion in the strategy moving forward.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter <u>only</u> please contact Stephanie Jones on 07917 041195. For any new consultations, or to provide further information on this consultation please send your correspondences to <u>consultations@naturalengland.org.uk</u>.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours Faithfully

Stephanie Jones Sustainable Development – South Mercia. c.c. Louise Mapstone – Warwickshire Ecology Unit Pam Neal – Warwickshire Flood Risk Management Authority

Sadie Hobson - Natural England



Page 2 of 2

From: Jones, Steph (NE) [mailto:Steph.Jones@naturalengland.org.uk] Sent: 03 February 2016 14:12 To: emilywells@warwickshire.gov.uk Cc: Steer, Eric (NE); Hoskin, Rachel (NE) Subject: Warwickshire Flood Risk Management Strategy - Summary of conversation

Emily

Thank you for the call earlier today.

Please find below a brief summary of the discussion in relation to moving forward to address issues raised by Natural England in response the Warwickshire LFRMS HRA.

 The proposed wording in relation measures 2f and 2c were agreed. We still advise that the Terms of Reference of the Warwickshire Strategic Flood Forum are included as an appendix to the report when possible as evidence of the role the forum will take to act as a responsible framework collaborative working on flood risk measures in the County.

Measure 2b – After further consultation Natural England advises that in regards to the production
of a leaflet – in order for this to be screened out at strategy level the following should be committed to
within the associated measures in addition to the commitment to undertake a project level HRA and
work with Natural England on the design and content of the leaflet:

 A measure to clearly confirm the FRMA as lead on the development of the leaflet. The role of lead, as the competent authority under the habitat regulations is important in removing risk at strategy level ensuring effects can be mitigated at project level.

As I mentioned on our call I am out of the office until the 15th of February. I have copied in colleagues who may be able to assist if you have any further questions in regards to wording etc. Please contact Eric Steer in the first instance, Senior Manager.

Kind Regards

3/15/2016

Warwickshire County Council Mail - Re: FW: Warwickshire Flood Risk Management Strategy - Summary of conversation

Steph Jones

Adviser - Sustainable Development South Mercla Team

Natural England

Mail Hub Block B

Whittington Rd, Worcester, WR5 2LQ

M: 07917 041195

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Natural England offers two chargeable services – The Discretionary Advice Service (DAS) provides pre-application, pre-determination and post-consent advice on proposals to developers and consultants as well as pre-licensing species advice and pre-assent and consent advice. The Presubmission Screening Service (PSS) provides advice for protected species mitigation licence applications.

These services help applicants take appropriate account of environmental considerations at an early stage of project development, reduce uncertainty, reduce the risk of delay and added cost at a later stage, whilst securing good results for the natural environment.

www.gov.uk/natural-england

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.
1.1.5 Natural England's response to first consultation on LFRMS from Kayleigh Cheese, Natural England, Sustainable Development Team

Date: 25 March 2015 Our ref: 145510 Your ref: SEA Scoping

Mr M Banning Flood Risk and Water Management Officer Economic Growth Communities Warwickshire County Council

BY EMAIL ONLY



Customer Services Hornbeam House Creve Business Park Electra Way Creve Cheshine CW1 6GJ

T 0300 060 3900

Dear Mr Banning

Strategic Environmental Assessment Scoping Report (SEA) for Warwickshire Local Flood Risk Management Strategy (LFRMS).

Thank you for your consultation on the above dated and received by Natural England on 18 February 2015.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

We have considered Warwickshire Local Flood Risk Management Strategy (LFRMS) Strategic Environmental Assessment Scoping Report (SEA) as requested and consider that in general the key environmental risks have been identified. However, Local Flood Risk Strategies must specify how the strategy contributes to the achievement of wider environmental objectives¹ and we have the following comments to make regarding both the SEA and the strategy itself.

Warwickshire Local Flood Risk Management Strategy

None of the 5 objectives identified for the LFRMS would appear to demonstrate a positive approach to contribution to wider environmental objectives. Objective 2 aspires to adopt an environmentally sustainable approach but further explanation of this objective makes little reference to environmental issues. We would draw your attention to Section 40 of the Natural Environment and Rural Communities Act (2006) which states that 'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. Section 40(3) of the same Act also states that 'conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'.

We would encourage the use of some flood risk management options, such as upstream flood storage, as these can have significant biodiversity enhancements and contribute to green infrastructure (GI).

We also welcome retrofitting sustainable urban drainage systems (SUDS), which can reduce or in some cases replace the need for a whole new scheme, in some built up areas.

The LFRMS is a "strategic matter" in that flooding doesn't respect local authority boundaries and as

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Flood and Water Management Act 2010 Section 9(4)(i)



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such would need to be considered on a wider scale with adjoining authorities responsible for flood strategy preparation and management. Liaison with other authorities in the area would be encouraged in order to ensure cross boundary consistency of approach and more efficient use of resources in times of budgetary constraint; thus ensuring the Duty to Co-operate was effectively met.

Strategic Environmental Assessment

Q1. Have there been any significant omissions of plans, programmes or environmental protection objectives relevant to the scoping of this report?

Countryside and Rights of way Act 2010

Additionally in appendix 4 there is no reference made to underlying legislation.

Q2. Do you agree with the selection of key environmental issues for Warwickshire?

Yes.

Q3. Do you agree that the baseline data that have been, or will be collected, are relevant and of sufficient detail to support the assessment?

Appendix 3 section 3.6.2 Wildlife Habitats, refers to data regarding the favourable conservation status of SSSI's in Warwickshire, from 1st June 2011. This information is updated regularly, therefore results may differ now.

Appendix 3 section A3.6.1states that 'there are <u>approximately</u> 62 nationally designated Sites of Special Scientific Interest (SSSIs) in Warwickshire'. There are 62 SSSI's in Warwickshire. The use of the word 'approximately' is unnecessary.

Section A3.6.2 identifies Ensor's Pool Special Area of Conservation (SAC) as a candidate SAC, which is incorrect. Ensor's pool has been formally designated as a SAC. However, on page 19 section 5.3 it is acknowledged that while the White-clawed crayfish of the SAC have been lost, it is still under designation. On page 71 section A3.6.1 it is also correctly identified as a site designated at European level.

Q4. Are there any key baseline data available that are or could be used in support of the issues that have not been identified? Are you aware of any appropriate targets that the report should cite?

NE has a range of data sources that may be useful in the production of an SA. Our datasets are now all downloadable and responsible authorities should be referred to the website at http://www.naturalengland.org.uk/publications/data/

Other useful sources of data include:

- MAGIC (Defra's GIS package for environmental assets)
- SSSI/European Sites condition assessments
- National Character Areas

Natural England does not hold locally specific information relating to:

- local sites (biodiversity and geodiversity)
- local landscape character
- local or national biodiversity priority habitats and species.

We recommend that you seek further information from the appropriate bodies (which may include the local records centre, your local wildlife trust, local geoconservation group or other recording



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society and a local landscape characterisation document). A more comprehensive list of local groups can be found at Wildlife and Countryside link.

Soil

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably. For guidance on how adverse impacts on soils can be minimised please refer to Defra's <u>Good practice guide for handling soils</u> and <u>Defra</u> <u>Construction Code of Practice for the Sustainable Use of Soil on Development Sites</u>.

Agricultural Land Classification and Best and most versatile (BMV) land

Copies of the <u>Provisional Agricultural Land Classification map</u> for your area are available on the Natural England Website or alternatively the data is available to view and download from the <u>'MAGIC' website</u>. Further information is also available in the <u>ALC Technical Information Note</u>.

Q5. Do the SEA objectives provide a sound framework against which to assess the environmental credentials of the emerging LFRMS?

We consider that the SEA objectives cover the key environmental issues that are relevant to the emerging LFRMS.

Q6. Do you agree with the decision-making criteria?

The report has identified the landscape importance of the Cotswold's Area of Outstanding Natural Beauty (AONB) located at the south of the county. However the Indicators and Decision Making Criteria, make no reference to the Cotswold's AONB.

Habitats Regulations Assessment (HRA)

Natural England notes that a HRA has been prepared and considers that this should be submitted to us for comment as soon as is practicable.

We would be happy to comment further should the need arise but if in the meantime you have any gueries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter <u>only</u> please contact Kayleigh Cheese on 0300 060 1411. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Miss Kayleigh Cheese Sustainable Development Team South Mercia Team



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1.2 Environment Agency Correspondence

1.2.1 Correspondence with Becky Clarke, Environment Agency, Planning Specialist, Sustainable Places, Midlands – Central Area

Warwicks	ire David Lowe <davidlowe@warwickshire.gov.ul< th=""></davidlowe@warwickshire.gov.ul<>
looding SEA	- Links to documents attached
larke, Becky <bec o: "davidlowe@wa</bec 	ky.clarke@environment-agency.gov.uk> 9 December 2014 at 16: wickshire.gov.uk* <davidlowe@warwickshire.gov.uk></davidlowe@warwickshire.gov.uk>
Good afternoon,	
I hope you find th	links below helpful,
One is for the nat recommendations Warwickshire, and	onal flood risk strategy, and the other is for our CFMP which briefly details to manage and reduce flood risk – there are three clusters in the CFMP that relate to Thames is not listed as a partner in the report.
Hopefully this will	help you locate other partners with plans that may be important in the area
National Flood Ris	k Strategy
https://www.gov.u	k/government/uploads/system/uploads/attachment_data/file/228898/9780108510366.pdf
Page 20 onwards	of the CFMP (specifically Coventry and Warwickshire)
https://www.gov.u River_Severn_Ca	k/govemment/uploads/system/uploads/attachment_data/file/289103/ chment_Management_Plan.pdf
Kindest regards	
Becky	
Becky Clarke	
Planning Spe	cialist
Sustainable F	faces
Staffordshire,	Warwickshire and West Midlands
c//mail.google.com/mail/t	442xd97xi=25ik=5055f90d95kview=pl5q=From%3A%20Backy%20Clarke5q=true5search=quary5msg=14e26d7b3dal



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Warwickshire County Council Mail - Re: Warwickshire - RBMP



David Lowe <davidlowe@warwickshire.gov.u

Re: Warwickshire - RBMP

David Lowe <davidlowe@warwickshire.gov.uk> To: "Clarke, Becky" <becky.clarke@environment-agency.gov.uk> 9 December 2014 at 15:

Becky

3/15/2016

Thanks fr for the telephone conversation and the attached.

As the attached covers the Avon (in the Severn RBD) and the Tame, Anker & Mease (in the Humber RBD) would cover the north ... would you suggest that the HRA and SEA for the Warwickshire FRMS covers similar geographical areas. Can you confirm that WCC doesn't need to go into great detail about the Thames area?

Thanks David Lowe B.Sc Hons MCIEEM BES Principal Ecologist Ecology Unit Regeneration & Special Projects PO Box 43 Warwick CV34 4SX

Tel: 01926 418076

On 9 December 2014 at 15:10, Clarke, Becky <becky.clarke@environment-agency.gov.uk> wrote:

FYI

Becky Clarke

Planning Specialist

Sustainable Places

Staffordshire, Warwickshire and West Midlands

01543 404945 (722 • 4945)

becky.clarke@environment-agency.gov.uk

A The Sustainable Places Team address is swwmplanning@environment-agency.gov.uk

Environment Agency, 9 Wellington Crescent, Fradley Park, Lichfield, Staffordshire, WS13 8RR

1.2.2 Chris Farmer, Environment Agency, Biodiversity Officer, Staffordshire, Warwickshire & West Midlands.

Record of a telephone conversation between Chris Farmer of the Environment Agency and Louise Mapstone of Warwickshire County Council 29.01.14 (PM).

Louise asked Chris for any advice on how to ensure we can mitigate for any impacts the LFRMS could have on the River Mease. Chris referred Louise to the Diffuse Water Pollution plan for the River Mease. He confirmed that in the section of Warwickshire that lies in the river Mease catchment the flood risk is limited as water courses are generally small so the main issue would be any impact on water quality from road run and other surface water run-off. The appropriate use of SUDS would be one measure to help reduce this.

Appendix 2: Key to Operations Likely to Damage the Special Interest of the Site (OLDSIS)

Operations Likely to Damage the Special Interest of the Site (OLDSIS) considered relevant to the LFRMS as per Table 3

Reference Number	Type of Operation	Relevant European Site
7	Dumping, storage, spreading or discharging of any materials or substances (including effluent disposal) (N.B Abstractions and discharges, and certain alterations of water levels, are subject to regulation by the Environment Agency through byelaws, licences and consents.)	River Mease
13a	Drainage (including the use of mole, tile, tunnel or other artificial drains	River Mease, Lyppard Grange Ponds, Bredon Hill, Cannock Extension Canal
13b	Modification of the structure of watercourse (e.g. streams, springs, ditches, dykes and drains), including their banks and beds, as by re-alignment, re-grading and dredging	River Mease, Lyppard Grange Ponds, Ensor's Pool, Bredon Hill, Cannock Extension Canal
13c	Management of aquatic and bank vegetation for drainage purposes	River Mease, Lyppard Grange Ponds, Ensor's Pool Bredon Hill, Cannock Extension Canal
14	The changing of water levels and tables and water utilisation (including irrigation, storage and abstraction from existing water bodies and through boreholes).	Ensor's Pool, River Mease, Bredon Hill, Cannock Extension Canal, Lyppard Grange Ponds
15	Infilling of ditches, drains or pools	Ensor's Pool, River Mease, Bredon Hill, Cannock Extension Canal, Lyppard Grange Ponds
21	Construction, re-routing, removal or destruction of roads, tracks, walls, fences, hardstands, banks, ditches or other	River Mease

	earthworks (other than the repair of existing ones), and the laying maintenance or removal of pipelines and cables, above or below ground	
23	Erection of permanent or temporary structures, or the undertaking of engineering works, including drilling	Ensor's Pool Cannock Extension canal
24	Modification of natural or man-made features, including clearance of boulders, large stones, loose rock and battering, buttressing or grading river and stream banks.	River Mease

Appendix 3: Summary of Former Detailed Conservation Objectives and Targets

Below is a summary of the former detailed Conservation Objectives and Targets for both Ensor's Pool SAC (dated 2008) and River Mease SAC (dated 2012) as provided by Natural England.

Ensor's Pool	– Summary of Detailed Conservation Objectives and Targets dated 2008
	To maintain the designated habitats in favourable condition, which is defined in part in relation to a balance of habitat extent (extent attribute). Favourable condition is defined at this site in terms of the following site-specific standards: On this site favourable condition requires the maintenance of the extent of each designated habitat type. Maintenance implies restoration if evidence from condition assessment suggests a reduction in extent. The estimated extent in 2008 was 1.89 ha of Standing Open Water. The site specific target is to have no artificial reduction in the wetted area.
	To maintain the native crayfish population at Ensor's Pool SSSI in favourable condition with reference to the following on-site specific standards. These include ensuring the population of native white-clawed crayfish is at least moderately high abundance, an absence of individuals infected with crayfish plaque and porcelain disease (Thelohaniasis) should not affect more than 10% of the population.
•	To maintain the standing open water habitat that supports the native crayfish at Ensor's Pool in favourable condition. Favourable condition of the supporting habitat is defined at this site in terms of the following site-specific standards. Biological Water Quality should be equivalent to Biological GQA Class b and should be equivalent to at least Chemical GQA Class: B. The extent and diversity of bankside refuges should be maintained. Overhanging vegetation should be present intermittently along the east, north and west banks throughout the year. This should cover 60% of the bank length, distributed in patches along the bank. The southern bank is open grassland. A fringe of marginal vegetation 1-4m wide should be present along at least 10% of the bank sides and submerged macrophytes should cover 10 to 20% of the pool from June to September. The extent and diversity of the site's substrates should be maintained and non-native crayfish species should be absent from the waterbody and their catchments.
River Mease	SAC – Summary of Detailed Conservation Objectives and Targets dated 2012
	To maintain the designated features in favourable condition, which is defined in part in relation to a balance of habitat extents. On this site favourable condition requires the maintenance of the extent of each habitat type. In this instance the habitat features is Rivers and streams and the estimated extent in 2012 was 22.87ha. The target is to have no reduction in area and any consequent fragmentation without prior consent.
-	To maintain the designated species in favourable condition. This is defined at this site in terms of requiring the maintenance of the population of each designated species or assemblage. Species or assemblage present include: bullhead, spined loach, otter, white-clawed crayfish.
-	Specific Targets of species are as follows:
	Bullhead
	 No reduction in densities from existing levels (no less than 0.5m -2 in lowland rivers)
	 Young –of-year fish should occur at densities equal to adulates
	 Four age classes with 0+ individuals at least 40% of population
	 Largest females attain a fork length > 75mm
	• Species should be present in all suitable reaches. As a minimum no decline in distribution from current.
	Spined loach
	 At least three year-classes should be present at significant densities. At least 50% of the population should consist of 0+ fish
	 Largest females attain a fork length of > 85mm
	Otter
	 Otters present on site and the population maintained or increasing
	White-clawed crayfish
	Population at least moderate abundance
	 Berried females should be present during the period November to April
	 Porcelain disease (Thelohaniasis) should not affect > 10% population
	Absence of individuals infected with crayfish plaque

1	To maintain Rivers and Streams in the River Mease in favourable condition. At this site favourable condition relates to site-specific standards and a number of targets have been set that apply to the river and marginal vegetation only. A summary of the targets are provided below
1	Siltation: No excessive siltation. Maximum silt content <20% in top 10cm of mid-channel gravels. Channel should be dominated by clean gravels. For spined loach sand fractions in finer substrates should reach at least 20% sand and no more than 40% silt. For bullhead no excessive siltation on the surfaces of coarse substrates
1	Channel Form: should be generally characteristic of river time with predominately unmodified planform and profile. In-channel natural features present at frequent intervals (such as riffle / pool sequences, pools, slacks and submerged tree root systems).
•	A sufficient proportion of all aquatic macrophytes should be allowed to reproduce in suitable habitat, unaffected by river management practices. <i>Ranunculus</i> should be able to flower and set seed.
•	Blanketweeed, epiphytic or other algae, <i>Potamogeton pectinatus</i> or <i>Zannichellia palustris</i> : cover values over 25% should be considered unfavourable and should trigger further investigation. Cover values should not increase significantly from an established baseline.
•	There should be no impact on native biota from alien or introduced macrophyte species and these species should not be present at levels likely to be detrimental to the characteristic biological community.
•	No artificial barriers should be installed that significantly impact migratory species from essential life-cycle movements
•	Species Composition: At least 60% of species with abundance V or IV in the constancy table should be present AND at least 25% of specie with abundance III should be present. Loss of Species: 60% of species with cover of over 1 in the baselines should be at least present along with dominant species in the baseline survey. Abundant species: At least 25-35% of species recorded as dominant in baseline survey should still be dominant.
1	There should be no artificial release of fish unless agreed this is in the interests of the population and only with local stock. Any fish introductions should not interfere with the river to support self-sustaining and healthy populations of characteristic species
1	Targets for EA standard protocols include the following: Biological GQA: Class A or B. Chemical GQA: Class A or B. Un-ionised ammonia ,0.021 mg L-1 as a 95-percentile. Suspended solids: No unnaturally high loads, Spined Loach and bullhead:, 25mg;/litre annually. Orthophosphate levels: ,0.06mg/litre as an annual mean.
1	Bank and Riparian zone vegetation structure should be near-natural. Woody debris removal should be minimised and restricted to essential activities such as flood defence. Weed cutting should be limited to nor more than half of the channel width.
•	Maintain the characteristic physical features of the river channel, banks and riparian zone
•	Non-native crayfish should be absent and if present, measures taken to control numbers
1	For otters: Fish biomass should stay within expected natural fluctuations. No increase in pollutants potentially toxic to otters. Otter populations not be significantly impacted by human induced kills. No significant change to river or bankside usage. No significant development. No overall permanent decrease
	Flow regime should be characteristic of the river. Levels of abstraction should not exceed the generic thresholds laid down for moderately sensitive SSSI rives by national guidance.

Appendix 4: Catchment Area / Catchment Risk Zone Maps of the River Mease.



4.1 Natural England River Mease Catchment Risk Zone

4.2 Environment Agency Central Area Mease Catchment Plan Map

Central Area - Tame and Anker Team Mease catchment Plan - WFD reasons for failure

Waterbody ID	Waterbody name	Reason for Failure
GB104028046550	River Mease from Source to Gilwiskaw Brook	Rural Diffuse Pollution
		Water Company Point Source Pollution
GB104028046560	River Mease from Hooborough Brook to Trent	Rural Diffuse Pollution
		Water Company Point Source Pollution
GB104028046570	River Mease from Gilwiskaw Bk to Hooborough Brook	Rural Diffuse Pollution
		Water Company Point Source Pollution
GB104028046580	Hooborough Brook from Source to River Mease	Rural Diffuse Pollution
		Water Company Point Source Pollution
GB104028046590	Gilwiskaw Brook from Source to River Mease	Rural Diffuse Pollution
		Water Company Point Source Pollution

